Abdolmohammad-Zadeh, H. and E. Rahimpour (2015). "A novel chemosensor for Ag(I) ion based on its inhibitory effect on the luminol-H2O2 chemiluminescence response improved by CoFe2O4 nano-particles." Sensors and Actuators B-Chemical **209**: 496-504.
Aditya, T., J. Jana, R. Sahoo, A. Roy, A. Pal and T. Pal (2017). "Silver Molybdates with Intriguing Morphology and as a Peroxidase Mimic with High Sulfide Sensing Capacity." Crystal Growth & Design **17**(1): 295-307.
Ahmed, S. R., J. Kim, T. Suzuki, J. Lee and E. Y. Park (2016). "Detection of Influenza Virus Using Peroxidase-Mimic of Gold Nanoparticles." Biotechnology and Bioengineering **113**(10): 2298-2303.
Ai, X., Y. Wang, X. D. Hou, L. Yang, C. B. Zheng and L. Wu (2013). "Advanced oxidation using Fe3O4 magnetic nanoparticles and its application in mercury speciation analysis by high performance liquid chromatography-cold vapor generation atomic fluorescence spectrometry." Analyst **138**(12): 3494-3501.
Ai, X., L. Wu, M. N. Zhang, X. D. Hou, L. Yang and C. B. Zheng (2014). "Analytical Method for the Determination of Trace Toxic Elements in Milk Based on Combining Fe3O4 Nanoparticles Accelerated UV Fenton-like Digestion and Solid Phase Extraction." Journal of Agricultural and Food Chemistry **62**(34): 8586-8593.
Akhtar, M. J., M. Ahamed, H. A. Alhadlaq, A. Alshamsan, M. A. M. Khan and S. A. Alrokayan (2015). "Antioxidative and cytoprotective response elicited by molybdenum nanoparticles in human cells." Journal of Colloid and Interface Science **457**: 370-377.
Akhtar, M. J., M. Ahamed, H. A. Alhadlaq, M. A. M. Khan and S. A. Alrokayan (2015). "Glutathione replenishing potential of CeO2 nanoparticles in human breast and fibrosarcoma cells." Journal of Colloid and Interface Science **453**: 21-27.
Ali, S. S., J. I. Hardt and L. L. Dugan (2008). "SOD Activity of carboxyfullerenes predicts their neuroprotective efficacy: a structure-activity study." Nanomedicine-Nanotechnology Biology and Medicine **4**(4): 283-294.
Ali, S. S., J. I. Hardt, K. L. Quick, J. S. Kim-Han, B. F. Erlanger, T. T. Huang, C. J. Epstein and L. L. Dugan (2004). "A biologically effective fullerene (C-60) derivative with superoxide dismutase mimetic properties." Free Radical Biology and Medicine **37**(8): 1191-1202.
Alili, L., M. Sack, A. S. Karakoti, S. Teuber, K. Puschmann, S. M. Hirst, C. M. Reilly, K. Zanger, W. Stahl, S. Das, S. Seal and P. Brenneisen (2011). "Combined cytotoxic and anti-invasive properties of redox-active nanoparticles in tumor-stroma interactions." Biomaterials **32**(11): 2918-2929.
Alili, L., M. Sack, C. von Montfort, S. Giri, S. Das, K. S. Carroll, K. Zanger, S. Seal and P. Brenneisen (2013). "Downregulation of Tumor Growth and Invasion by Redox-Active Nanoparticles." Antioxid. Redox Sign. **19**(8): 765-778.
Alpaslan, E., H. Yazici, N. H. Golshan, K. S. Ziemer and T. J. Webster (2015). "pH-Dependent Activity of Dextran-Coated Cerium Oxide Nanoparticles on Prohibiting Osteosarcoma Cell Proliferation." ACS Biomaterials Science & Engineering **1**(11): 1096-1103.
An, Q., C. Y. Sun, D. Li, K. Xu, J. Guo and C. C. Wang (2013). "Peroxidase-Like Activity of Fe_3O_4@Carbon Nanoparticles Enhances Ascorbic Acid-Induced Oxidative Stress and Selective Damage to PC-3 Prostate Cancer Cells." ACS Applied Materials & Interfaces **5**(24): 13248-13257.
Andre, R., F. Natalio, M. Humanes, J. Leppin, K. Heinze, R. Wever, H. C. Schroder, W. E. G. Muller and W. Tremel (2011). "V_2O_5 Nanowires with an Intrinsic Peroxidase-Like Activity." Advanced Functional Materials **21**(3): 501-509.
Aneesh, K., C. S. Vusa and S. Berchmans (2016). "Dual enzyme mimicry exhibited by ITO nanocubes and their application in spectrophotometric and electrochemical sensing." Analyst **141**(13): 4024-4028.
Antuna-Jimenez, D., M. C. Blanco-Lopez, A. J. Miranda-Ordieres and M. J. Lobo-Castanon (2014). "Artificial enzyme with magnetic properties and peroxidase activity on indoleamine metabolite tumor marker." Polymer **55**(5): 1113-1119.
Applerot, G., J. Lellouche, A. Lipovsky, Y. Nitzan, R. Lubart, A. Gedanken and E. Banin (2012). "Understanding the Antibacterial Mechanism of CuO Nanoparticles: Revealing the Route of Induced Oxidative Stress." Small **8**(21): 3326-3337.
Artiglia, L., S. Agnoli, M. C. Paganini, M. Cattelan and G. Granozzi (2014). "TiO2@CeOx core-shell nanoparticles as artificial enzymes with peroxidase-like activity." ACS Appl. Mater. Interfaces **6**(22): 20130-20136.
Asati, A., C. Kaittanis, S. Santra and J. M. Perez (2011). "pH-Tunable Oxidase-Like Activity of Cerium Oxide Nanoparticles Achieving Sensitive Fluorigenic Detection of Cancer Biomarkers at Neutral pH." Analytical Chemistry **83**(7): 2547-2553.
Asati, A., S. Santra, C. Kaittanis, S. Nath and J. M. Perez (2009). "Oxidase-Like Activity of Polymer-Coated Cerium Oxide Nanoparticles." Angew. Chem. Int. Ed. **48**(13): 2308-2312.
Asha, P., M. Sinha and S. Mandal (2017). "Effective removal of chemical warfare agent simulants using water stable

metal–organic frameworks: mechanistic study and structure–property correlation." RSC Advances **7**(11): 6691-6696.
Atilgan, A., T. Islamoglu, A. J. Howarth, J. T. Hupp and O. K. Farha (2017). "Detoxification of a Sulfur Mustard Simulant Using a BODIPY-Functionalized Zirconium-Based Metal-Organic Framework." ACS Appl. Mater. Interfaces **9**(29): 24555-24560.
Baati, T., F. Bourasset, N. Gharbi, L. Njim, M. Abderrabba, A. Kerkeni, H. Szwarc and F. Moussa (2012). "The prolongation of the lifespan of rats by repeated oral administration of 60 fullerene." Biomaterials **33**(19): 4936-4946.
Babu, S., J. H. Cho, J. M. Dowding, E. Heckert, C. Komanski, S. Das, J. Colon, C. H. Baker, M. Bass, W. T. Self and S. Seal (2010). "Multicolored redox active upconverter cerium oxide nanoparticle for bio-imaging and therapeutics." Chem. Commun. **46**(37): 6915-6917.
Bagheri, N., A. Khataee, B. Habibi and J. Hassanzadeh (2018). "Mimetic Ag nanoparticle/Zn-based MOF nanocomposite (AgNPs@ZnMOF) capped with molecularly imprinted polymer for the selective detection of patulin." Talanta **179**: 710-718.
Bailey, Z. S., E. Nilson, J. A. Bates, A. Oyalowo, K. S. Hockey, V. S. Sajja, C. Thorpe, H. Rogers, B. Dunn, A. S. Frey, M. J. Billings, C. A. Sholar, A. Hermundstad, C. Kumar, P. J. VandeVord and B. A. Rzigalinski (2016). "Cerium Oxide Nanoparticles Improve Outcome After In Vitro and In Vivo Mild Traumatic Brain Injury." J. Neurotrauma **33**: 1-11.
Baldim, V., F. Bedioui, N. Mignet, I. Margaill and J. F. Berret (2018). "The enzyme-like catalytic activity of cerium oxide nanoparticles and its dependency on Ce(3+) surface area concentration." Nanoscale **10**(15): 6971-6980.
Balow, R. B., J. G. Lundin, G. C. Daniels, W. O. Gordon, M. McEntee, G. W. Peterson, J. H. Wynne and P. E. Pehrsson (2017). "Environmental Effects on Zirconium Hydroxide Nanoparticles and Chemical Warfare Agent Decomposition: Implications of Atmospheric Water and Carbon Dioxide." ACS Appl. Mater. Interfaces **9**(45): 39747-39757.
Bandosz, T. J., M. Laskoski, J. Mahle, G. Mogilevsky, G. W. Peterson, J. A. Rossin and G. W. Wagner (2012). "Reactions of VX, GD, and HD with Zr(OH)4: Near Instantaneous Decontamination of VX." The Journal of Physical Chemistry C **116**(21): 11606-11614.
Bao, Q. Q., P. Hu, Y. Y. Xu, T. S. Cheng, C. Y. Wei, L. M. Pan and J. L. Shi (2018). "Simultaneous Blood-Brain Barrier Crossing and Protection for Stroke Treatment Based on Edaravone-Loaded Ceria Nanoparticles." ACS Nano **12**(7): 6794-6805.
Barkam, S., S. Das, S. Saraf, R. McCormack, D. Richardson, L. Atencio, V. Moosavifazel and S. Seal (2015). "The Change in Antioxidant Properties of Dextran-Coated Redox Active Nanoparticles Due to Synergetic Photoreduction-Oxidation." Chemistry-A European Journal **21**(36): 12646-12656.
Batinic Haberle, I., J. S. Reboucas and I. Spasojevic (2010). "Superoxide Dismutase Mimics: Chemistry, Pharmacology, and Therapeutic Potential." Antioxidants & Redox Signaling **13**(6): 877-918.
Behrens, M. M., S. S. Ali, D. N. Dao, J. Lucero, G. Shekhtman, K. L. Quick and L. L. Dugan (2007). "Ketamine-induced loss of phenotype of fast-spiking interneurons is mediated by NADPH-oxidase." Science **318**(5856): 1645-1647.
Belgorodsky, B., L. Fadeev, V. Ittah, H. Benyamini, S. Zelner, D. Huppert, A. B. Kotlyar and M. Gozin (2005). "Formation and characterization of stable human serum albumin-tris-malonic acid [C-60]fullerene complex." Bioconjugate Chemistry **16**(5): 1058-1062.
Beltrame, P., M. Comotti, C. Della Pina and M. Rossi (2006). "Aerobic oxidation of glucose II. Catalysis by colloidal gold." Applied Catalysis a-General **297**(1): 1-7.
Benko, T., A. Beck, O. Geszti, R. Katona, A. Tungler, K. Frey, L. Guczi and Z. Schay (2010). "Selective oxidation of glucose versus CO oxidation over supported gold catalysts." Applied Catalysis a-General **388**(1-2): 31-36.
Bernstein, R., F. Prat and C. S. Foote (1999). "On the mechanism of DNA cleavage by fullerenes investigated in model systems: Electron transfer from guanosine and 8-oxo-guanosine derivatives to C-60." Journal of the American Chemical Society **121**(2): 464-465.
Beveridge, J. S., J. R. Stephens and M. E. Williams (2011). The Use of Magnetic Nanoparticles in Analytical Chemistry. Annual Review of Analytical Chemistry. Palo Alto, Annual Reviews. **4:** 251-273.
Bhagat, S., N. V. S. Vallabani, V. Shutthanandan, M. Bowden, A. S. Karakoti and S. Singh (2018). "Gold core/ceria shell-based redox active nanozyme mimicking the biological multienzyme complex phenomenon." Journal of Colloid and Interface Science **513**: 831-842.
Bhandari, R., R. Coppage and M. R. Knecht (2012). "Mimicking nature's strategies for the design of nanocatalysts." Catalysis Science & Technology **2**(2): 256-266.
Bhattacharjee, R., S. Tanaka, S. Moriam, M. K. Masud, J. Lin, S. M. Alshehri, T. Ahamad, R. R. Salunkhe, N. T. Nguyen, Y. Yamauchi, M. S. Hossain and M. J. A. Shiddiky (2018). "Porous nanozymes: peroxidase-mimetic activity of mesoporous iron oxide for colorimetric and electrochemical detection of global DNA methylation." J. Mater. Chem. B **6**(29): 4783-4791.

Bhattacharya, D., A. Baksi, I. Banerjee, R. Ananthakrishnan, T. K. Maiti and P. Pramanik (2011). "Development of phosphonate modified $Fe_{1-x}Mn_xFe_2O_4$ mixed ferrite nanoparticles: Novel peroxidase mimetics in enzyme linked immunosorbent assay." Talanta **86**: 337-348.
Bhushan, B. and P. Gopinath (2015). "Antioxidant nanozyme: a facile synthesis and evaluation of the reactive oxygen species scavenging potential of nanoceria encapsulated albumin nanoparticles." J. Mater. Chem. B **3**(24): 4843-4852.
Bhuyan, D., S. S. Arbuj and L. Saikia (2015). "Template-free synthesis of Fe3O4 nanorod bundles and their highly efficient peroxidase mimetic activity for the degradation of organic dye pollutants with H2O2." New Journal of Chemistry **39**(10): 7759-7762.
Biella, S., L. Prati and M. Rossi (2002). "Selective oxidation of D-glucose on gold catalyst." Journal of Catalysis **206**(2): 242-247.
Bitner, B. R., D. C. Marcano, J. M. Berlin, R. H. Fabian, L. Cherian, J. C. Culver, M. E. Dickinson, C. S. Robertson, R. G. Pautler, T. A. Kent and J. M. Tour (2012). "Antioxidant Carbon Particles Improve Cerebrovascular Dysfunction Following Traumatic Brain Injury." ACS Nano **6**(9): 8007-8014.
Bixenmann, L., J. Y. He, M. M. Liang and W. Tremel (2018). "Functional Superoxide Dismutase Mimics Become Diverse: From Simple Compounds on Prebiotic Earth to Nanozymes." Progress in Biochemistry and Biophysics **45**(2): 148-169.
Bobbitt, N. S., M. L. Mendonca, A. J. Howarth, T. Islamoglu, J. T. Hupp, O. K. Farha and R. Q. Snurr (2017). "Metal-organic frameworks for the removal of toxic industrial chemicals and chemical warfare agents." Chem. Soc. Rev. **46**(11): 3357-3385.
Bodsgard, B. R., R. W. Clark, A. W. Ehrbar and J. N. Burstyn (2009). "Silica-bound copper(II) triazacyclononane as a phosphate esterase: effect of linker length and surface hydrophobicity." Dalton Transactions(13): 2365-2373.
Bonomi, R., A. Cazzolaro, A. Sansone, P. Scrimin and L. J. Prins (2011). "Detection of Enzyme Activity through Catalytic Signal Amplification with Functionalized Gold Nanoparticles." Angew. Chem. Int. Ed. **50**(10): 2307-2312.
Bonomi, R., P. Scrimin and F. Mancin (2010). "Phosphate diesters cleavage mediated by Ce(IV) complexes self-assembled on gold nanoparticles." Organic & Biomolecular Chemistry **8**(11): 2622-2626.
Bonomi, R., F. Selvestrel, V. Lombardo, C. Sissi, S. Polizzi, F. Mancin, U. Tonellato and P. Scrimin (2008). "Phosphate Diester and DNA Hydrolysis by a Multivalent, Nanoparticle-Based Catalyst." Journal of the American Chemical Society **130**(47): 15744-15745.
Borelli, V., E. Trevisan, F. Vita, C. Bottin, M. Melato, C. Rizzardi and G. Zabucchi (2012). "Peroxidase-Like Activity of Ferruginous Bodies Isolated by Exploiting Their Magnetic Property." Journal of Toxicology and Environmental Health-Part a-Current Issues **75**(11): 603-623.
Bosi, S., T. Da Ros, G. Spalluto and M. Prato (2003). "Fullerene derivatives: an attractive tool for biological applications." European Journal of Medicinal Chemistry **38**(11-12): 913-923.
Boujakhrout, A., P. Díez, P. Martínez-Ruíz, A. Sánchez, C. Parrado, E. Povedano, P. Soto, J. M. Pingarrón and R. Villalonga (2016). "Gold nanoparticles/silver-bipyridine hybrid nanobelts with tuned peroxidase-like activity." RSC Adv. **6**(78): 74957-74960.
Boutorine, A. S., H. Tokuyama, M. Takasugi, H. Isobe, E. Nakamura and C. Helene (1995). "FULLERENE-OLIGONUCLEOTIDE CONJUGATES - PHOTOINDUCED SEQUENCE-SPECIFIC DNA CLEAVAGE." Angew. Chem. Int. Ed. **33**(23-24): 2462-2465.
Brenneisen, P. and A. S. Reichert (2018). "Nanotherapy and Reactive Oxygen Species (ROS) in Cancer: A Novel Perspective." Antioxidants **7**(2): 31.
Bukhari, S., D. Kim, Y. Liu, B. Karabucak and H. Koo (2018). "Novel Endodontic Disinfection Approach Using Catalytic Nanoparticles." Journal of Endodontics **44**(5): 806-812.
Bulbul, G., A. Hayat and S. Andreescu (2015). "A generic amplification strategy for electrochemical aptasensors using a non-enzymatic nanoceria tag." Nanoscale **7**(31): 13230-13238.
Bülbül, G., A. Hayat and S. Andreescu (2016). "ssDNA-Functionalized Nanoceria: A Redox-Active Aptaswitch for Biomolecular Recognition." Adv. Healthcare Mater. **5**(7): 822-828.
Cai, K., Z. C. Lv, K. Chen, L. Huang, J. Wang, F. Shao, Y. J. Wang and H. Y. Han (2013). "Aqueous synthesis of porous platinum nanotubes at room temperature and their intrinsic peroxidase-like activity." Chem. Commun. **49**(54): 6024-6026.
Cai, Q., S. K. Lu, F. Liao, Y. Q. Li, S. Z. Ma and M. W. Shao (2014). "Catalytic degradation of dye molecules and in situ SERS monitoring by peroxidase-like Au/CuS composite." Nanoscale **6**(14): 8117-8123.
Cai, R., D. Yang, X. Chen, Y. Huang, Y. F. Lyv, J. L. He, M. L. Shi, I. T. Teng, S. Wan, W. J. Hou and W. H. Tan (2016). "Three Dimensional Multipod Superstructure based on Cu(OH)2 as a Highly Efficient Nanozyme." J. Mater. Chem. B **4**(27): 4657-4661.

Cai, R., D. Yang, S. J. Peng, X. G. Chen, Y. Huang, Y. Liu, W. J. Hou, S. Y. Yang, Z. B. Liu and W. H. Tan (2015). "Single Nanoparticle to 3D Supercage: Framing for an Artificial Enzyme System." Journal of the American Chemical Society **137**(43): 13957-13963.
Cai, S. F., Q. S. Han, C. Qi, Z. Lian, X. H. Jia, R. Yang and C. Wang (2016). "Pt74Ag26 nanoparticle-decorated ultrathin MoS2 nanosheets as novel peroxidase mimics for highly selective colorimetric detection of H2O2 and glucose." Nanoscale **8**(6): 3685-3693.
Cai, S. F., Q. S. Han, C. Qi, X. H. Wang, T. Wang, X. H. Jia, R. Yang and C. Wang (2017). "MoS2-Pt3Au1 Nanocomposites with Enhanced Peroxidase-Like Activities for Selective Colorimetric Detection of Phenol." Chinese Journal of Chemistry **35**(5): 605-612.
Cai, S. F., X. H. Jia, Q. S. Han, X. Y. Yan, R. Yang and C. Wang (2017). "Porous Pt/Ag nanoparticles with excellent multifunctional enzyme mimic activities and antibacterial effects." Nano Research **10**(6): 2056-2069.
Cai, S. F., X. L. Liu, Q. S. Han, C. Qi, R. Yang and C. Wang (2018). "A novel strategy to construct supported Pd nanocomposites with synergistically enhanced catalytic performances." Nano Research **11**(6): 3272-3281.
Cai, S. F., C. Qi, Y. D. Li, Q. S. Han, R. Yang and C. Wang (2016). "PtCo bimetallic nanoparticles with high oxidase-like catalytic activity and their applications for magnetic-enhanced colorimetric biosensing." J. Mater. Chem. B **4**(10): 1869-1877.
Cai, X., S. Seal and J. F. McGinnis (2014). "Sustained inhibition of neovascularization in vldlr$^{-/-}$ mice following intravitreal injection of cerium oxide nanoparticles and the role of the ASK1-P38/JNK-NF-kappa B pathway." Biomaterials **35**(1): 249-258.
Cai, X., S. A. Sezate, S. Seal and J. F. McGinnis (2012). "Sustained protection against photoreceptor degeneration in tubby mice by intravitreal injection of nanoceria." Biomaterials **33**(34): 8771-8781.
Can, Z., A. Uzer, K. Turkekul, E. Ercag and R. Apak (2015). "Determination of Triacetone Triperoxide with a N,N-Dimethyl-p-phenylenediamine Sensor on Nafion Using Fe3O4 Magnetic Nanoparticles." Analytical Chemistry **87**(19): 9589-9594.
Cao, G. J., X. M. Jiang, H. Zhang, T. R. Croley and J. J. Yin (2017). "Mimicking horseradish peroxidase and oxidase using ruthenium nanomaterials." RSC Advances **7**(82): 52210-52217.
Cao, G. X., X. M. Wu, Y. M. Dong, Z. J. Li and G. L. Wang (2016). "Colorimetric determination of melamine based on the reversal of the mercury(II) induced inhibition of the light-triggered oxidase-like activity of gold nanoclusters." Microchimica Acta **183**(1): 441-448.
Cao, X., Y. J. Xu and N. Wang (2012). "Hollow Fe2O3 polyhedrons: One-pot synthesis and their use as electrochemical material for nitrite sensing." Electrochimica Acta **59**: 81-85.
Carmona, U., L. B. Zhang, L. Li, W. Munchgesang, E. Pippel and M. Knez (2014). "Tuning, inhibiting and restoring the enzyme mimetic activities of Pt-apoferritin." Chem. Commun. **50**(6): 701-703.
Celardo, I., M. De Nicola, C. Mandoli, J. Z. Pedersen, E. Traversa and L. Ghibelli (2011). "Ce^{3+} Ions Determine Redox-Dependent Anti-apoptotic Effect of Cerium Oxide Nanoparticles." ACS Nano **5**(6): 4537-4549.
Celardo, I., J. Z. Pedersen, E. Traversa and L. Ghibelli (2011). "Pharmacological potential of cerium oxide nanoparticles." Nanoscale **3**(4): 1411-1420.
Chai, D. F., Z. Ma, Y. F. Qiu, Y. G. Lv, H. Liu, C. Y. Song and G. G. Gao (2016). "Oxidase-like mimic of Ag@Ag3PO4 microcubes as a smart probe for ultrasensitive and selective Hg2+ detection." Dalton Transactions **45**(7): 3048-3054.
Chai, D. F., Z. Ma, H. Yan, Y. F. Qiu, H. Liu, H. D. Guo and G. G. Gao (2015). "Synergistic effect of sandwich polyoxometalates and copper-imidazole complexes for enhancing the peroxidase-like activity." Rsc Advances **5**(96): 78771-78779.
Chang, C. C., C. P. Chen, C. H. Lee, C. Y. Chen and C. W. Lin (2014). "Colorimetric detection of human chorionic gonadotropin using catalytic gold nanoparticles and a peptide aptamer." Chem. Commun. **50**(92): 14443-14446.
Chang, H. Y., J. S. Cang, P. Roy, H. T. Chang, Y. C. Huang and C. C. Huang (2014). "Synthesis and Antimicrobial Activity of Gold/Silver-Tellurium Nanostructures." Acs Applied Materials & Interfaces **6**(11): 8305-8312.
Chang, Q. and H. Q. Tang (2014). "Optical determination of glucose and hydrogen peroxide using a nanocomposite prepared from glucose oxidase and magnetite nanoparticles immobilized on graphene oxide." Microchimica Acta **181**(5-6): 527-534.
Chang, Y. C., Y. S. Lin, G. T. Xiao, T. C. Chiu and C. C. Hu (2016). "A highly selective and sensitive nanosensor for the detection of glyphosate." Talanta **161**: 94-98.
Chang, Y. Q., Z. Zhang, J. H. Hao, W. S. Yang and J. L. Tang (2016). "BSA-stabilized Au clusters as peroxidase mimetic for colorimetric detection of Ag+." Sensors and Actuators B: Chemical **232**: 692-697.
Chau, L. Y., Q. J. He, A. L. Qin, S. P. Yip and T. M. H. Lee (2016). "Platinum nanoparticles on reduced graphene oxide as

peroxidase mimetics for the colorimetric
detection of specific DNA sequence." J. Mater. Chem. B **4**(23): 4076-4083.
Chaudhari, K. N., N. K. Chaudhari and J.-S. Yu (2012). "Peroxidase mimic activity of hematite iron oxides (α-Fe_2O_3) with different nanostructres." Catalysis Science & Technology **2**(1): 119-124.
Chaudhury, K., K. N. Babu, A. K. Singh, S. Das, A. Kumar and S. Seal (2013). "Mitigation of endometriosis using regenerative cerium oxide nanoparticles." Nanomedicine **9**: 439-448.
Chen, C., I. Ahmed and L. Fruk (2013). "Reactive oxygen species production by catechol stabilized copper nanoparticles." Nanoscale **5**(23): 11610-11614.
Chen, C., S. H. Fan, C. Li, Y. Chong, X. Tian, J. W. Zheng, P. P. Fu, X. M. Jiang, W. G. Wamer and J. J. Yin (2016). "Platinum nanoparticles inhibit antioxidant effects of vitamin C via ascorbate oxidase-mimetic activity." J. Mater. Chem. B **4**(48): 7895-7901.
Chen, C. H., N. X. Li, J. W. Lan, X. H. Ji and Z. K. He (2016). "A label-free colorimetric platform for DNA via target-catalyzed hairpin assembly and the peroxidase-like catalytic of graphene/Au-NPs hybrids." Anal. Chim. Acta **902**: 154-159.
Chen, C. X., L. X. Lu, Y. Zheng, D. Zhao, F. Yang and X. R. Yang (2015). "A new colorimetric protocol for selective detection of phosphate based on the inhibition of peroxidase-like activity of magnetite nanoparticles." Analytical Methods **7**(1): 161-167.
Chen, D. M., B. Li, L. Jiang, D. L. Duan, Y. Z. Li, J. Q. Wang, J. He and Y. B. Zeng (2015). "Highly efficient colorimetric detection of cancer cells utilizing Fe-MIL-101 with intrinsic peroxidase-like catalytic activity over a broad pH range." RSC Advances **5**(119): 97910-97917.
Chen, F. F., Y. J. Zhu, Z. C. Xiong and T. W. Sun (2017). "Hydroxyapatite Nanowires@ Metal-Organic Framework Core/Shell Nanofibers: Templated Synthesis, Peroxidase-Like Activity, and Derived Flexible Recyclable Test Paper." Chemistry-a European Journal **23**(14): 3328-3337.
Chen, F. X., S. L. Xie, X. L. Huang and X. H. Qiu (2017). "Ionothermal synthesis of Fe3O4 magnetic nanoparticles as efficient heterogeneous Fenton-like catalysts for degradation of organic pollutants with H2O2." Journal of Hazardous Materials **322**: 152-162.
Chen, H. Y., Y. Li, F. B. Zhang, G. L. Zhang and X. B. Fan (2011). "Graphene supported Au-Pd bimetallic nanoparticles with core-shell structures and superior peroxidase-like activities." Journal of Materials Chemistry **21**(44): 17658-17661.
Chen, H. Y., P. L. Liao, M. L. Mendonca and R. Q. Snurr (2018). "Insights into Catalytic Hydrolysis of Organophosphate Warfare Agents by Metal-Organic Framework NU-1000." Journal of Physical Chemistry C **122**(23): 12362-12368.
Chen, J., J. Ge, L. Zhang, Z. H. Li, J. J. Li, Y. J. Sun and L. B. Qu (2016). "Reduced graphene oxide nanosheets functionalized with poly(styrene sulfonate) as a peroxidase mimetic in a colorimetric assay for ascorbic acid." Microchimica Acta **183**(6): 1847-1853.
Chen, J., J. Ge, L. Zhang, Z. H. Li, S. S. Zhou and L. B. Qu (2015). "PSS-GN nanocomposites as highly-efficient peroxidase mimics and their applications in colorimetric detection of glucose in serum." RSC Advances **5**(110): 90400-90407.
Chen, J. L., C. Pezzato, P. Scrimin and L. J. Prins (2016). "Chiral Nanozymes-Gold Nanoparticle-Based Transphosphorylation Catalysts Capable of Enantiomeric Discrimination." Chemistry-A European Journal **22**(21): 7028-7032.
Chen, J. P., S. Patil, S. Seal and J. F. McGinnis (2006). "Rare earth nanoparticles prevent retinal degeneration induced by intracellular peroxides." Nature Nanotechnology **1**(2): 142-150.
Chen, J. Z., Y. J. Liu, G. X. Zhu and A. H. Yuan (2014). "Ag@Fe3O4 nanowire: fabrication, characterization and peroxidase-like activity." Crystal Research and Technology **49**(5): 309-314.
Chen, K., A. Bayaguud, H. Li, Y. Chu, H. C. Zhang, H. L. Jia, B. F. Zhang, Z. C. Xiao, P. F. Wu, T. B. Liu and Y. G. Wei (2018). "Improved peroxidase-mimic property: Sustainable, high-efficiency interfacial catalysis with H2O2 on the surface of vesicles of hexavanadate-organic hybrid surfactants." Nano Research **11**(3): 1313-1321.
Chen, L., L. Sha, Y. W. Qiu, G. F. Wang, H. Jiang and X. J. Zhang (2015). "An amplified electrochemical aptasensor based on hybridization chain reactions and catalysis of silver nanoclusters." Nanoscale **7**(7): 3300-3308.
Chen, L. J., B. Sun, X. D. Wang, F. M. Qiao and S. Y. Ai (2013). "2D ultrathin nanosheets of Co-Al layered double hydroxides prepared in L-asparagine solution: enhanced peroxidase-like activity and colorimetric detection of glucose." J. Mater. Chem. B **1**(17): 2268-2274.
Chen, L. J., K. F. Sun, P. P. Li, X. Z. Fan, J. C. Sun and S. Y. Ai (2013). "DNA-enhanced peroxidase-like activity of layered double hydroxide nanosheets and applications in H2O2 and glucose sensing." Nanoscale **5**(22): 10982-10988.
Chen, M., J. X. Shu, Z. H. Wang and C. G. Ren (2017). "Porous surface MnO2 microspheres as oxidase mimetics for

colorimetric detection of sulfite." Journal of Porous Materials **24**(4): 973-977.
Chen, M., Z. H. Wang, J. X. Shu, X. H. Jiang, W. Wang, Z. H. Shi and Y. W. Lin (2017). "Mimicking a Natural Enzyme System: Cytochrome c Oxidase-Like Activity of Cu2O Nanoparticles by Receiving Electrons from Cytochrome c." Inorganic Chemistry **56**(16): 9400-9403.
Chen, M. M., Y. N. Ding, Y. Gao, X. X. Zhu, P. Wang, Z. Q. Shi and Q. Y. Liu (2017). "N,N '-di-caboxy methyl perylene diimide (PDI) functionalized CuO nanocomposites with enhanced peroxidase-like activity and their application in visual biosensing of H2O2 and glucose." RSC Advances **7**(41): 25220-25228.
Chen, M. M., L. F. Sun, Y. N. Ding, Z. Q. Shi and Q. Y. Liu (2017). "N,N '-Di-carboxymethyl perylene diimide functionalized magnetic nanocomposites with enhanced peroxidase-like activity for colorimetric sensing of H2O2 and glucose." New Journal of Chemistry **41**(13): 5853-5862.
Chen, Q., J. Chen, C. J. Gao, M. L. Zhang, J. Y. Chen and H. D. Qiu (2015). "Hemin-functionalized WS_2 nanosheets as highly active peroxidase mimetics for label-free colorimetric detection of H_2O_2 and glucose." Analyst **140**(8): 2857-2863.
Chen, Q., M. L. Liu, J. N. Zhao, X. Peng, X. J. Chen, N. X. Mi, B. D. Yin, H. T. Li, Y. Y. Zhang and S. Z. Yao (2014). "Water-dispersible silicon dots as a peroxidase mimetic for the highly-sensitive colorimetric detection of glucose." Chem. Commun. **50**(51): 6771-6774.
Chen, S., M. Chi, Z. Yang, M. Gao, C. Wang and X. Lu (2017). "Carbon dots/Fe3O4 hybrid nanofibers as efficient peroxidase mimics for sensitive detection of H2O2 and ascorbic acid." Inorganic Chemistry Frontiers **4**(10): 1621-1627.
Chen, S., X. Hai, X. W. Chen and J. H. Wang (2014). "In Situ Growth of Silver Nanoparticles on Graphene Quantum Dots for Ultrasensitive Colorimetric Detection of H2O2 and Glucose." Analytical Chemistry **86**(13): 6689-6694.
Chen, S. H., M. Q. Chi, Y. Zhu, M. Gao, C. Wang and X. F. Lu (2018). "A Facile synthesis of superparamagnetic Fe3O4 nanofibers with superior peroxidase-like catalytic activity for sensitive colorimetric detection of L-cysteine." Applied Surface Science **440**: 237-244.
Chen, T., Y. Y. Li, J. L. Zhang, B. Xu, Y. Lin, C. X. Wang, W. C. Guan, Y. J. Wang and S. Q. Xu (2011). "Protective effect of C_{60}-methionine derivate on lead-exposed human SH-SY5Y neuroblastoma cells." Journal of Applied Toxicology **31**(3): 255-261.
Chen, T. M., X. M. Tian, L. Huang, J. Xiao and G. W. Yang (2017). "Nanodiamonds as pH-switchable oxidation and reduction catalysts with enzyme-like activities for immunoassay and antioxidant applications." Nanoscale **9**(40): 15673-15684.
Chen, T. M., X. J. Wu, J. X. Wang and G. W. Yang (2017). "WSe2 few layers with enzyme mimic activity for high-sensitive and high-selective visual detection of glucose." Nanoscale **9**(32): 11806-11813.
Chen, T. M., J. Xiao and G. W. Yang (2016). "Cubic boron nitride with an intrinsic peroxidase-like activity." RSC Adv. **6**(74): 70124-70132.
Chen, T. M., H. Zou, X. J. Wu, C. C. Liu, B. Situ, L. Zheng and G. W. Yang (2018). "Nanozymatic Antioxidant System Based on MoS2 Nanosheets." Acs Applied Materials & Interfaces **10**(15): 12453-12462.
Chen, W., J. Chen, Y. B. Feng, L. Hong, Q. Y. Chen, L. F. Wu, X. H. Lin and X. H. Xia (2012). "Peroxidase-like activity of water-soluble cupric oxide nanoparticles and its analytical application for detection of hydrogen peroxide and glucose." Analyst **137**(7): 1706-1712.
Chen, W., J. Chen, A. L. Liu, L. M. Wang, G. W. Li and X. H. Lin (2011). "Peroxidase-Like Activity of Cupric Oxide Nanoparticle." Chemcatchem **3**(7): 1151-1154.
Chen, W., L. Hong, A. L. Liu, J. Q. Liu, X. H. Lin and X. H. Xia (2012). "Enhanced chemiluminescence of the luminol-hydrogen peroxide system by colloidal cupric oxide nanoparticles as peroxidase mimic." Talanta **99**: 643-648.
Chen, W., L. S. Xiong and F. X. Chen (2017). "Solvothermal synthesis of sub-200 nm Fe3O4 submicrospheres with enhanced catalytic performances by using acicular goethite as solid precursor." Micro & Nano Letters **12**(9): 711-713.
Chen, W. H., M. Vazquez Gonzalez, A. Kozell, A. Cecconello and I. Willner (2018). "Cu(2+) -Modified Metal-Organic Framework Nanoparticles: A Peroxidase-Mimicking Nanoenzyme." Small **14**(5): 1703149.
Chen, X., N. Zhai, J. H. Snyder, Q. S. Chen, P. P. Liu, L. F. Jin, Q. X. Zheng, F. C. Lin, J. M. Hu and H. N. Zhou (2015). "Colorimetric detection of Hg2+ and Pb2+ based on peroxidase-like activity of graphene oxide-gold nanohybrids." Analytical Methods **7**(5): 1951-1957.
Chen, X., X. D. Zhou and J. M. Hu (2012). "Pt-DNA complexes as peroxidase mimetics and their applications in colorimetric detection of H_2O_2 and glucose." Analytical Methods **4**(7): 2183-2187.
Chen, X. M., B. Y. Su, Z. X. Cai, X. Chen and M. Oyama (2014). "PtPd nanodendrites supported on graphene nanosheets: A peroxidase-like catalyst for colorimetric detection of H2O2." Sensors and Actuators B-Chemical **201**: 286-292.
Chen, X. M., X. T. Tian, B. Y. Su, Z. Y. Huang, X. Chen and M. Oyama (2014). "Au nanoparticles on citrate-functionalized

graphene nanosheets with a high peroxidase-like performance." Dalton Transactions **43**(20): 7449-7454.
Chen, Y. J., H. Y. Cao, W. B. Shi, H. Liu and Y. M. Huang (2013). "Fe-Co bimetallic alloy nanoparticles as a highly active peroxidase mimetic and its application in biosensing." Chem. Commun. **49**(44): 5013-5015.
Chen, Z. B., L. L. Tan, S. X. Wang, Y. M. Zhang and Y. H. Li (2016). "Sensitive colorimetric detection of K(I) using catalytically active gold nanoparticles triggered signal amplification." Biosensors & Bioelectronics **79**: 749-757.
Chen, Z. W., H. W. Ji, C. Q. Liu, W. Bing, Z. Z. Wang and X. G. Qu (2016). "A Multinuclear Metal Complex Based DNase-Mimetic Artificial Enzyme: Matrix Cleavage for Combating Bacterial Biofilms." Angew. Chem. Int. Ed. **55**(36): 10732-10736.
Chen, Z. W., J. J. Yin, Y. T. Zhou, Y. Zhang, L. Song, M. J. Song, S. L. Hu and N. Gu (2012). "Dual Enzyme-like Activities of Iron Oxide Nanoparticles and Their Implication for Diminishing Cytotoxicity." ACS Nano **6**(5): 4001-4012.
Chen, Z. W., C. Q. Zhao, E. G. Ju, H. W. Ji, J. S. Ren, B. P. Binks and X. G. Qu (2016). "Design of Surface-Active Artificial Enzyme Particles to Stabilize Pickering Emulsions for High-Performance Biphasic Biocatalysis." Advanced Materials **28**(8): 1682-1688.
Cheng, H. J., S. C. Lin, F. Muhammad, Y. W. Lin and H. Wei (2016). "Rationally Modulate the Oxidase-like Activity of Nanoceria for Self-Regulated Bioassays." ACS Sens. **1**(11): 1336-1343.
Cheng, H. J., Y. F. Liu, Y. H. Hu, Y. B. Ding, S. C. Lin, W. Cao, Q. Wang, J. J. X. Wu, F. Muhammad, X. Z. Zhao, D. Zhao, Z. Li, H. Xing and H. Wei (2017). "Monitoring of Heparin Activity in Live Rats Using Metal-Organic Framework Nanosheets as Peroxidase Mimics." Analytical Chemistry **89**(21): 11552-11559.
Cheng, H. J., X. Y. Wang and H. Wei (2017). Artificial Enzymes: The Next Wave. Encyclopedia of Physical Organic Chemistry**:** 3885-3948.
Cheng, H. J., L. Zhang, J. He, W. J. Guo, Z. Y. Zhou, X. J. Zhang, S. M. Nie and H. Wei (2016). "Integrated nanozymes with nanoscale proximity for in vivo neurochemical monitoring in living brains." Analytical Chemistry **88**: 5489-5497.
Cheng, R., C. Cheng, G. H. Liu, X. Zheng, G. Q. Li and J. Li (2015). "Removing pentachlorophenol from water using a nanoscale zero-valent iron/H2O2 system." Chemosphere **141**: 138-143.
Cheng, R., G. Q. Li, C. Cheng, L. Shi, X. Zheng and Z. Ma (2015). "Catalytic oxidation of 4-chlorophenol with magnetic Fe3O4 nanoparticles: mechanisms and particle transformation." Rsc Advances **5**(82): 66927-66933.
Cheng, X. L., J. S. Jiang, D. M. Jiang and Z. J. Zhao (2014). "Synthesis of Rhombic Dodecahedral Fe3O4 Nanocrystals with Exposed High-Energy {110} Facets and Their Peroxidase-like Activity and Lithium Storage Properties." Journal of Physical Chemistry C **118**(24): 12588-12598.
Chi, M. Q., S. H. Chen, M. X. Zhong, C. Wang and X. F. Lu (2018). "Self-templated fabrication of FeMnO3 nanoparticle-filled polypyrrole nanotubes for peroxidase mimicking with a synergistic effect and their sensitive colorimetric detection of glutathione." Chem. Commun. **54**(46): 5827-5830.
Chi, M. Q., Y. Zhu, Z. Z. Yang, M. Gao, S. H. Chen, N. Song, C. Wang and X. F. Lu (2017). "Strongly coupled CeO2/Co3O4/poly(3,4-ethylenedioxythiophene) nanofibers with enhanced nanozyme activity for highly sensitive colorimetric detection." Nanotechnology **28**(29): 295704.
Chigurupati, S., M. R. Mughal, E. Okun, S. Das, A. Kumar, M. McCaffery, S. Seal and M. P. Mattson (2013). "Effects of cerium oxide nanoparticles on the growth of keratinocytes, fibroblasts and vascular endothelial cells in cutaneous wound healing." Biomaterials **34**(9): 2194-2201.
Chinthakindi, S., A. Purohit, V. Singh, V. Tak, D. R. Goud, D. K. Dubey and D. Pardasani (2015). "Iron oxide functionalized graphene nano-composite for dispersive solid phase extraction of chemical warfare agents from aqueous samples." Journal of Chromatography A **1394**: 9-17.
Cho, S., S. M. Lee, H. Y. Shin, M. S. Kim, Y. H. Seo, Y. K. Cho, J. Lee, S. P. Lee and M. Il Kim (2018). "Highly sensitive colorimetric detection of allergies based on an immunoassay using peroxidase-mimicking nanozymes." Analyst **143**(5): 1182-1187.
Choi, Y., J. H. Hwang and S. Y. Lee (2018). "Recent Trends in Nanomaterials-Based Colorimetric Detection of Pathogenic Bacteria and Viruses." Small Methods **2**(4): 1700351.
Choleva, T. G., V. A. Gatselou, G. Z. Tsogas and D. L. Giokas (2018). "Intrinsic peroxidase-like activity of rhodium nanoparticles, and their application to the colorimetric determination of hydrogen peroxide and glucose." Microchimica Acta **185**(1): 22.
Chong, Y., C. C. Ge, G. Fang, X. Tian, X. C. Ma, T. Wen, W. G. Wamer, C. Y. Chen, Z. F. Chai and J. J. Yin (2016). "Crossover between Anti- and Pro-oxidant Activities of Graphene Quantum Dots in the Absence or Presence of Light." ACS Nano **10**(9): 8690-8699.
Chun, J., H. Lee, S. H. Lee, S. W. Hong, J. Lee, C. Lee and J. Lee (2012). "Magnetite/mesocellular carbon foam as a magnetically recoverable fenton catalyst for removal of phenol and arsenic." Chemosphere **89**(10): 1230-1237.

Clark, A., A. P. Zhu and H. R. Petty (2013). "Titanium-doped cerium oxide nanoparticles protect cells from hydrogen peroxide-induced apoptosis." Journal of Nanoparticle Research **15**(12): 2126.
Clark, A., A. P. Zhu, K. Sun and H. R. Petty (2011). "Cerium oxide and platinum nanoparticles protect cells from oxidant-mediated apoptosis." Journal of Nanoparticle Research **13**(10): 5547-5555.
Colon, J., L. Herrera, J. Smith, S. Patil, C. Komanski, P. Kupelian, S. Seal, D. W. Jenkins and C. H. Baker (2009). "Protection from radiation-induced pneumonitis using cerium oxide nanoparticles." Nanomedicine-Nanotechnology Biology and Medicine **5**(2): 225-231.
Colon, J., N. Hsieh, A. Ferguson, P. Kupelian, S. Seal, D. W. Jenkins and C. H. Baker (2010). "Cerium oxide nanoparticles protect gastrointestinal epithelium from radiation-induced damage by reduction of reactive oxygen species and upregulation of superoxide dismutase 2." Nanomedicine-Nanotechnology Biology and Medicine **6**(5): 698-705.
Comotti, M., C. Della Pina, E. Falletta and M. Rossi (2006). "Aerobic oxidation of glucose with gold catalyst: Hydrogen peroxide as intermediate and reagent." Advanced Synthesis & Catalysis **348**(3): 313-316.
Comotti, M., C. Della Pina, R. Matarrese and M. Rossi (2004). "The catalytic activity of "Naked" gold particles." Angew. Chem. Int. Ed. **43**(43): 5812-5815.
Corgie, S. C., P. Kahawong, X. N. Duan, D. Bowser, J. B. Edward, L. P. Walker and E. P. Giannelis (2012). "Self-Assembled Complexes of Horseradish Peroxidase with Magnetic Nanoparticles Showing Enhanced Peroxidase Activity." Advanced Functional Materials **22**(9): 1940-1951.
Cormode, D. P., L. Z. Gao and H. Koo (2018). "Emerging Biomedical Applications of Enzyme-Like Catalytic Nanomaterials." Trends in Biotechnology **36**(1): 15-29.
Cui, F. J., Q. F. Deng and L. Sun (2015). "Prussian blue modified metal-organic framework MIL-101(Fe) with intrinsic peroxidase-like catalytic activity as a colorimetric biosensing platform." RSC Advances **5**(119): 98215-98221.
Cui, L., J. Wu, J. Li and H. X. Ju (2015). "Electrochemical Sensor for Lead Cation Sensitized with a DNA Functionalized Porphyrinic Metal-Organic Framework." Analytical Chemistry **87**(20): 10635-10641.
Cui, L., H. S. Yin, J. Dong, H. Fan, T. Liu, P. Ju and S. Y. Ai (2011). "A mimic peroxidase biosensor based on calcined layered double hydroxide for detection of H_2O_2." Biosensors & Bioelectronics **26**(7): 3278-3283.
Cui, M. L., J. D. Zhou, Y. Zhao and Q. J. Song (2017). "Facile synthesis of iridium nanoparticles with superior peroxidase-like activity for colorimetric determination of H2O2 and xanthine." Sensors and Actuators B: Chemical **243**: 203-210.
Cui, R. J., Z. D. Han and J. J. Zhu (2011). "Helical Carbon Nanotubes: Intrinsic Peroxidase Catalytic Activity and Its Application for Biocatalysis and Biosensing." Chemistry-A European Journal **17**(34): 9377-9384.
Cunderlova, V., A. Hlavacek, V. Hornakova, M. Peterek, D. Nemecek, A. Hampl, L. Eyer and P. Skladal (2016). "Catalytic nanocrystalline coordination polymers as an efficient peroxidase mimic for labeling and optical immunoassays." Microchimica Acta **183**(2): 651-658.
Dai, Z. H., S. H. Liu, J. C. Bao and H. X. Ju (2009). "Nanostructured FeS as a Mimic Peroxidase for Biocatalysis and Biosensing." Chemistry-A European Journal **15**(17): 4321-4326.
Dalui, A., B. Pradhan, U. Thupakula, A. H. Khan, G. S. Kumar, T. Ghosh, B. Satpati and S. Acharya (2015). "Insight into the mechanism revealing the peroxidase mimetic catalytic activity of quaternary CuZnFeS nanocrystals: colorimetric biosensing of hydrogen peroxide and glucose." Nanoscale **7**(19): 9062-9074.
Darabdhara, G., B. Sharma, M. R. Das, R. Boukherroub and S. Szunerits (2017). "Cu-Ag bimetallic nanoparticles on reduced graphene oxide nanosheets as peroxidase mimic for glucose and ascorbic acid detection." Sensors and Actuators B-Chemical **238**: 842-851.
Das, M., S. Patil, N. Bhargava, J. F. Kang, L. M. Riedel, S. Seal and J. J. Hickman (2007). "Auto-catalytic ceria nanoparticles offer neuroprotection to adult rat spinal cord neurons." Biomaterials **28**(10): 1918-1925.
Das, S., J. M. Dowding, K. E. Klump, J. F. McGinnis, W. Self and S. Seal (2013). "Cerium oxide nanoparticles: applications and prospects in nanomedicine." Nanomedicine **8**(9): 1483-1508.
Das, S., S. Singh, J. M. Dowding, S. Oommen, A. Kumar, T. X. T. Sayle, S. Saraf, C. R. Patra, N. E. Vlahakis, D. C. Sayle, W. T. Self and S. Seal (2012). "The induction of angiogenesis by cerium oxide nanoparticles through the modulation of oxygen in intracellular environments." Biomaterials **33**(31): 7746-7755.
Dashtestani, F., H. Ghourchian, K. Eskandari and H.-A. Rafiee-Pour (2015). "A superoxide dismutase mimic nanocomposite for amperometric sensing of superoxide anions." Microchimica Acta **182**(5-6): 1045-1053.
de Koning, M. C., M. van Grol and T. Breijaert (2017). "Degradation of Paraoxon and the Chemical Warfare Agents VX, Tabun, and Soman by the Metal-Organic Frameworks UiO-66-NH2, MOF-808, NU-1000, and PCN-777." Inorg. Chem. **56**(19): 11804-11809.
Decoste, J. B. and G. W. Peterson (2014). "Metal-organic frameworks for air purification of toxic chemicals." Chemical

Reviews **114**(11): 5695-5727.
Delidovich, I. V., B. L. Moroz, O. P. Taran, N. V. Gromov, P. A. Pyrjaev, I. P. Prosvirin, V. I. Bukhtiyarov and V. N. Parmon (2013). "Aerobic selective oxidation of glucose to gluconate catalyzed by Au/Al2O3 and Au/C: Impact of the mass-transfer processes on the overall kinetics." Chemical Engineering Journal **223**: 921-931.
Deng, H. H., G. L. Hong, F. L. Lin, A. L. Liu, X. H. Xia and W. Chen (2016). "Colorimetric detection of urea, urease, and urease inhibitor based on the peroxidase-like activity of gold nanoparticles." Anal. Chim. Acta **915**: 74-80.
Deng, H. H., G. W. Li, L. Hong, A. L. Liu, W. Chen, X. H. Lin and X. H. Xia (2014). "Colorimetric sensor based on dual-functional gold nanoparticles: analyte-recognition and peroxidase-like activity." Food Chem. **147**: 257-261.
Deng, H. H., X. L. Lin, Y. H. Liu, K. L. Li, Q. Q. Zhuang, H. P. Peng, A. L. Liu, X. H. Xia and W. Chen (2017). "Chitosan-stabilized platinum nanoparticles as effective oxidase mimics for colorimetric detection of acid phosphatase." Nanoscale **9**(29): 10292-10300.
Deng, H. H., X. Q. Zheng, Y. Y. Wu, X. Q. Shi, X. L. Lin, X. H. Xia, H. P. Peng, W. Chen and G. L. Hong (2017). "Alkaline peroxidase activity of cupric oxide nanoparticles and its modulation by ammonia." Analyst **142**(20): 3986-3992.
Deng, H. M., W. Shen, Y. F. Peng, X. J. Chen, G. S. Yi and Z. Q. Gao (2012). "Nanoparticulate Peroxidase/Catalase Mimetic and Its Application." Chemistry-A European Journal **18**(29): 8906-8911.
Deng, L., C. G. Chen, C. Z. Zhu, S. J. Dong and H. M. Lu (2014). "Multiplexed bioactive paper based on GO@SiO2@CeO2 nanosheets for a low-cost diagnostics platform." Biosensors & Bioelectronics **52**: 324-329.
Deng, S. Q., H. Y. Zou, J. Lan and C. Z. Huang (2016). "Aggregation-induced superior peroxidase-like activity of Cu2−xSe nanoparticles for melamine detection." Analytical Methods **8**(41): 7516-7521.
Deng, S. Y., J. P. Lei, Y. Huang, X. N. Yao, L. Ding and H. X. Ju (2012). "Electrocatalytic reduction of coreactant by highly loaded dendrimer-encapsulated palladium nanoparticles for sensitive electrochemiluminescent immunoassay." Chem. Commun. **48**(73): 9159-9161.
Deng, S. Y., P. X. Yuan, X. B. Ji, D. Shan and X. J. Zhang (2015). "Carbon Nitride Nanosheet-Supported Porphyrin: A New Biomimetic Catalyst for Highly Efficient Bioanalysis." Acs Applied Materials & Interfaces **7**(1): 543-552.
Dhakshinamoorthy, A., S. Navalon, M. Alvaro and H. Garcia (2012). "Metal Nanoparticles as Heterogeneous Fenton Catalysts." ChemSusChem **5**(1): 46-64.
Diez-Castellnou, M., F. Mancin and P. Scrimin (2014). "Efficient phosphodiester cleaving nanozymes resulting from multivalency and local medium polarity control." J. Am. Chem. Soc. **136**(4): 1158-1161.
Ding, C. P., Y. H. Yan, D. S. Xiang, C. L. Zhang and Y. Z. Xian (2016). "Magnetic Fe3S4 nanoparticles with peroxidase-like activity, and their use in a photometric enzymatic glucose assay." Microchimica Acta **183**(2): 625-631.
Ding, N., N. Yan, C. L. Ren and X. G. Chen (2010). "Colorimetric Determination of Melamine in Dairy Products by Fe(3)O(4) Magnetic Nanoparticles-H(2)O(2)-ABTS Detection System." Analytical Chemistry **82**(13): 5897-5899.
Ding, Y., M. M. Chen, K. Wu, M. X. Chen, L. F. Sun, Z. X. Liu, Z. Q. Shi and Q. Y. Liu (2017). "High-performance peroxidase mimics for rapid colorimetric detection of H2O2 and glucose derived from perylene diimides functionalized Co3O4 nanoparticles." Mater. Sci. Eng. C **80**: 558-565.
Ding, Y. N., B. C. Yang, H. Liu, Z. X. Liu, X. Zhang, X. W. Zheng and Q. Y. Liu (2018). "FePt-Au ternary metallic nanoparticles with the enhanced peroxidase-like activity for ultrafast colorimetric detection of H2O2." Sensors and Actuators B-Chemical **259**: 775-783.
Ding, Y. Y., L. F. Sun, Y. L. Jiang, S. X. Liu, M. X. Chen, M. M. Chen, Y. N. Ding and Q. Y. Liu (2016). "A facile strategy for the preparation of ZnS nanoparticles deposited on montmorillonite and their higher catalytic activity for rapidly colorimetric detection of H2O2." Mater. Sci. Eng. C **67**: 188-194.
Dobrovolskaia, M. A. and S. E. McNeil (2007). "Immunological properties of engineered nanomaterials." Nature Nanotechnology **2**(8): 469-478.
Dogra, Y., K. P. Arkill, C. Elgy, B. Stolpe, J. Lead, E. Valsami-Jones, C. R. Tyler and T. S. Galloway (2016). "Cerium oxide nanoparticles induce oxidative stress in the sediment-dwelling amphipod Corophium volutator." Nanotoxicology **10**(4): 480-487.
Dong, H. J., C. Zhang, Y. Y. Fan, W. Zhang, N. Gu and Y. Zhang (2018). "Nanozyme and Their ROS Regulation Effect in Cells." Progress in Biochemistry and Biophysics **45**(2): 105-117.
Dong, J., J. F. Hu, Y. N. Chi, Z. G. Lin, B. Zou, S. Yang, C. L. Hill and C. W. Hu (2017). "A Polyoxoniobate-Polyoxovanadate Double-Anion Catalyst for Simultaneous Oxidative and Hydrolytic Decontamination of Chemical Warfare Agent Simulants." Angew. Chem. Int. Ed. **56**(16): 4473-4477.
Dong, J. L., L. N. Song, J. J. Yin, W. W. He, Y. H. Wu, N. Gu and Y. Zhang (2014). "Co3O4 Nanoparticles with Multi-Enzyme Activities and Their Application in Immunohistochemical Assay." Acs Applied Materials & Interfaces **6**(3): 1959-1970.

Dong, M. M., L. Y. Zhang, R. Li, S. Y. Li, Y. Jiang, Y. C. Qiao, Z. Q. Duan, R. Li, Q. F. Wang and H. Wang (2016). "Crosslinking catalysis-active center of hemin on the protein scaffold toward peroxidase mimic with powerful catalysis." RSC Adv. **6**(53): 47595-47599.
Dong, W., Y. Zhuang, S. Li, X. Zhang, H. Chai and Y. Huang (2018). "High peroxidase-like activity of metallic cobalt nanoparticles encapsulated in metal-organic frameworks derived carbon for biosensing." Sensors and Actuators B-Chemical **255**: 2050-2057.
Dong, W. F., X. D. Liu, W. B. Shi and Y. M. Huang (2015). "Metal-organic framework MIL-53(Fe): facile microwave-assisted synthesis and use as a highly active peroxidase mimetic for glucose biosensing." RSC Advances **5**(23): 17451-17457.
Dong, Y., J. Li, L. Shi and Z. G. Guo (2015). "Iron Impurities as the Active Sites for Peroxidase-like Catalytic Reaction on Graphene and Its Derivatives." Acs Applied Materials & Interfaces **7**(28): 15403-15413.
Dong, Y., J. Li, L. Shi, J. Xu, X. B. Wang, Z. G. Guo and W. M. Liu (2013). "Graphene oxide-iron complex: synthesis, characterization and visible-light-driven photocatalysis." Journal of Materials Chemistry A **1**(3): 644-650.
Dong, Y. L., H. G. Zhang, Z. U. Rahman, L. Su, X. J. Chen, J. Hu and X. G. Chen (2012). "Graphene oxide-Fe_3O_4 magnetic nanocomposites with peroxidase-like activity for colorimetric detection of glucose." Nanoscale **4**(13): 3969-3976.
Dong, Y. M., J. J. Zhang, P. P. Jiang, G. L. Wang, X. M. Wu, H. Zhao and C. Zhang (2015). "Superior peroxidase mimetic activity of carbon dots-Pt nanocomposites relies on synergistic effects." New Journal of Chemistry **39**(5): 4141-4146.
Dong, Z. Y., Q. Luo and J. Q. Liu (2012). "Artificial enzymes based on supramolecular scaffolds." Chemical Society Reviews **41**(23): 7890-7908.
Dowding, J. M., S. Das, A. Kumar, T. Dosani, R. McCormack, A. Gupta, T. X. T. Sayle, D. C. Sayle, L. von Kalm, S. Seal and W. T. Self (2013). "Cellular Interaction and Toxicity Depend on Physicochemical Properties and Surface Modification of Redox-Active Nanomaterials." ACS Nano **7**(6): 4855-4868.
Dowding, J. M., T. Dosani, A. Kumar, S. Seal and W. T. Self (2012). "Cerium oxide nanoparticles scavenge nitric oxide radical (•NO)." Chem. Commun. **48**(40): 4896-4898.
Dowding, J. M., W. Song, K. Bossy, A. Karakoti, A. Kumar, A. Kim, B. Bossy, S. Seal, M. H. Ellisman, G. Perkins, W. T. Self and E. Bossy-Wetzel (2014). "Cerium oxide nanoparticles protect against A beta-induced mitochondrial fragmentation and neuronal cell death." Cell Death and Differentiation **21**(10): 1622-1632.
Drozd, M., M. Pietrzak, P. Parzuchowski, M. Mazurkiewicz-Pawlicka and E. Malinowska (2015). "Peroxidase-like activity of gold nanoparticles stabilized by hyperbranched polyglycidol derivatives over a wide pH range." Nanotechnology **26**(49): 495101.
Drozd, M., M. Pietrzak, P. G. Parzuchowski and E. Malinowska (2016). "Pitfalls and capabilities of various hydrogen donors in evaluation of peroxidase-like activity of gold nanoparticles." Anal. Bioanal. Chem. **408**: 8505–8513.
Du, B. J., D. Li, J. Wang and E. K. Wang (2017). "Designing metal-contained enzyme mimics for prodrug activation." Adv. Drug Deliver. Rev. **118**: 78-93.
Duan, D. M., K. L. Fan, D. X. Zhang, S. G. Tan, M. F. Liang, Y. Liu, J. L. Zhang, P. H. Zhang, W. Liu, X. G. Qiu, G. P. Kobinger, G. F. Gao and X. Y. Yan (2015). "Nanozyme-strip for rapid local diagnosis of Ebola." Biosensors & Bioelectronics **74**: 134-141.
Duan, X. N., S. C. Corgie, D. J. Aneshansley, P. Wang, L. P. Walker and E. P. Giannelis (2014). "Hierarchical Hybrid Peroxidase Catalysts for Remediation of Phenol Wastewater." ChemPhysChem **15**(5): 974-980.
Dubkov, K. A., V. I. Sobolev, E. P. Talsi, M. A. Rodkin, N. H. Watkins, A. A. Shteinman and G. I. Panov (1997). "Kinetic isotope effects and mechanism of biomimetic oxidation of methane and benzene on FeZSM-5 zeolite." Journal of Molecular Catalysis a-Chemical **123**(2-3): 155-161.
Dugan, L. L., J. K. Gabrielsen, S. P. Yu, T. S. Lin and D. W. Choi (1996). "Buckminsterfullerenol free radical scavengers reduce excitotoxic and apoptotic death of cultured cortical neurons." Neurobiology of Disease **3**(2): 129-135.
Dugan, L. L., E. G. Lovett, K. L. Quick, J. Lotharius, T. T. Lin and K. L. O'Malley (2001). "Fullerene-based antioxidants and neurodegenerative disorders." Parkinsonism Relat. Disord. **7**(3): 243-246.
Dugan, L. L., L. L. Tian, K. L. Quick, J. I. Hardt, M. Karimi, C. Brown, S. Loftin, H. Flores, S. M. Moerlein, J. Polich, S. D. Tabbal, J. W. Mink and J. S. Perlmutter (2014). "Carboxyfullerene Neuroprotection Postinjury in Parkinsonian Nonhuman Primates." Annals of Neurology **76**(3): 393-402.
Dugan, L. L., D. M. Turetsky, C. Du, D. Lobner, M. Wheeler, C. R. Almli, C. K. F. Shen, T. Y. Luh, D. W. Choi and T. S. Lin (1997). "Carboxyfullerenes as neuroprotective agents." Proceedings of the National Academy of Sciences of the United States of America **94**(17): 9434-9439.
Dutta, A. K., S. Das, S. Samanta, P. K. Samanta, B. Adhikary and P. Biswas (2013). "CuS nanoparticles as a mimic peroxidase for colorimetric estimation of human blood glucose level." Talanta **107**: 361-367.

Dutta, A. K., S. K. Maji, P. Biswas and B. Adhikary (2013). "New peroxidase-substrate 3,5-di-tert-butylcatechol for colorimetric determination of blood glucose in presence of Prussian Blue-modified iron oxide nanoparticles." Sensors and Actuators B-Chemical **177**: 676-683.
Dutta, A. K., S. K. Maji, A. Mondal, B. Karmakar, P. Biswas and B. Adhikary (2012). "Iron selenide thin film: Peroxidase-like behavior, glucose detection and amperometric sensing of hydrogen peroxide." Sensors and Actuators B-Chemical **173**: 724-731.
Dutta, A. K., S. K. Maji, D. N. Srivastava, A. Mondal, P. Biswas, P. Paul and B. Adhikary (2012). "Peroxidase-like activity and amperometric sensing of hydrogen peroxide by Fe_2O_3 and Prussian Blue-modified Fe_2O_3 nanoparticles." Journal of Molecular Catalysis a-Chemical **360**: 71-77.
Dutta, A. K., S. K. Maji, D. N. Srivastava, A. Mondal, P. Biswas, P. Paul and B. Adhikary (2012). "Synthesis of FeS and FeSe Nanoparticles from a Single Source Precursor: A Study of Their Photocatalytic Activity, Peroxidase-Like Behavior, and Electrochemical Sensing of H_2O_2." ACS Applied Materials & Interfaces **4**(4): 1919-1927.
Dutta, S., C. Ray, S. Mallick, S. Sarkar, R. Sahoo, Y. Negishi and T. Pal (2015). "A Gel-Based Approach To Design Hierarchical CuS Decorated Reduced Graphene Oxide Nanosheets for Enhanced Peroxidase-like Activity Leading to Colorimetric Detection of Dopamine." Journal of Physical Chemistry C **119**(41): 23790-23800.
Essner, J. B., R. N. McCay, C. J. Smith Ii, S. M. Cobb, C. H. Laber and G. A. Baker (2016). "A switchable peroxidase mimic derived from the reversible co-assembly of cytochrome c and carbon dots." J. Mater. Chem. B **4**(12): 2163-2170.
Estevez, A. Y. and J. S. Erlichman (2011). Cerium Oxide Nanoparticles for the Treatment of Neurological Oxidative Stress Diseases. Oxidative Stress: Diagnostics, Prevention, and Therapy, American Chemical Society. **1083:** 255-288.
Estevez, A. Y., S. Pritchard, K. Harper, J. W. Aston, A. Lynch, J. J. Lucky, J. S. Ludington, P. Chatani, W. P. Mosenthal, J. C. Leiter, S. Andreescu and J. S. Erlichman (2011). "Neuroprotective mechanisms of cerium oxide nanoparticles in a mouse hippocampal brain slice model of ischemia." Free Radical Biology and Medicine **51**(6): 1155-1163.
Fan, D. Q., C. S. Shang, W. L. Gu, E. K. Wang and S. J. Dong (2017). "Introducing Ratiometric Fluorescence to MnO2 Nanosheet-Based Biosensing: A Simple, Label-Free Ratiometric Fluorescent Sensor Programmed by Cascade Logic Circuit for Ultrasensitive GSH Detection." ACS Appl. Mater. Interfaces **9**(31): 25870-25877.
Fan, H. M., J. B. Yi, Y. Yang, K. W. Kho, H. R. Tan, Z. X. Shen, J. Ding, X. W. Sun, M. C. Olivo and Y. P. Feng (2009). "Single-Crystalline MFe(2)O(4) Nanotubes/Nanorings Synthesized by Thermal Transformation Process for Biological Applications." ACS Nano **3**(9): 2798-2808.
Fan, J., J. J. Yin, B. Ning, X. C. Wu, Y. Hu, M. Ferrari, G. J. Anderson, J. Y. Wei, Y. L. Zhao and G. J. Nie (2011). "Direct evidence for catalase and peroxidase activities of ferritin-platinum nanoparticles." Biomaterials **32**(6): 1611-1618.
Fan, K. L., C. Q. Cao, Y. X. Pan, D. Lu, D. L. Yang, J. Feng, L. N. Song, M. M. Liang and X. Y. Yan (2012). "Magnetoferritin nanoparticles for targeting and visualizing tumour tissues." Nature Nanotechnology **7**(7): 459-464.
Fan, K. L., H. Wang, J. Q. Xi, Q. Liu, X. Q. Meng, D. M. Duan, L. Z. Gao and X. Y. Yan (2017). "Optimization of Fe3O4 nanozyme activity via single amino acid modification mimicking an enzyme active site." Chem. Commun. **53**(2): 424-427.
Fan, K. L., J. Q. Xi, L. Fan, P. X. Wang, C. H. Zhu, Y. Tang, X. D. Xu, M. M. Liang, B. Jiang, X. Y. Yan and L. Z. Gao (2018). "In vivo guiding nitrogen-doped carbon nanozyme for tumor catalytic therapy." Nat. Commun. **9**: 1440.
Fan, L., X. D. Xu, C. H. Zhu, J. Han, L. Z. Gao, J. Q. Xi and R. Guo (2018). "Tumor Catalytic-Photothermal Therapy with Yolk-Shell Gold@Carbon Nanozymes." Acs Applied Materials & Interfaces **10**(5): 4502-4511.
Fan, S. S., M. G. Zhao, L. J. Ding, H. Li and S. G. Chen (2017). "Preparation of Co3O4/crumpled graphene microsphere as peroxidase mimetic for colorimetric assay of ascorbic acid." Biosens. Bioelectron. **89**(Pt 2): 846-852.
Fan, Y. W. and Y. M. Huang (2012). "The effective peroxidase-like activity of chitosan-functionalized $CoFe_2O_4$ nanoparticles for chemiluminescence sensing of hydrogen peroxide and glucose." Analyst **137**(5): 1225-1231.
Fan, Y. W., W. B. Shi, X. D. Zhang and Y. M. Huang (2014). "Mesoporous material-based manipulation of the enzyme-like activity of CoFe2O4 nanoparticles." Journal of Materials Chemistry A **2**(8): 2482-2486.
Fang, G., W. F. Li, X. M. Shen, J. M. Perez Aguilar, Y. Chong, X. F. Gao, Z. F. Chai, C. Y. Chen, C. C. Ge and R. H. Zhou (2018). "Differential Pd-nanocrystal facets demonstrate distinct antibacterial activity against Gram-positive and Gram-negative bacteria." Nat. Commun. **9**: 129.
Fang, Y. X., S. J. Wang, Y. Y. Liu, Z. F. Xu, K. Zhang and Y. Guo (2018). "Development of Cu nanoflowers modified the flexible needle-type microelectrode and its application in continuous monitoring glucose in vivo." Biosensors & Bioelectronics **110**: 44-51.
Farka, Z., V. Cunderlova, V. Horackova, M. Pastucha, Z. Mikusova, A. Hlavacek and P. Skladal (2018). "Prussian Blue Nanoparticles as a Catalytic Label in a Sandwich Nanozyme-Linked Immunosorbent Assay." Analytical Chemistry **90**(3): 2348-2354.

Fateeva, A., P. A. Chater, C. P. Ireland, A. A. Tahir, Y. Z. Khimyak, P. V. Wiper, J. R. Darwent and M. J. Rosseinsky (2012). "A Water-Stable Porphyrin-Based Metal–Organic Framework Active for Visible-Light Photocatalysis." Angew. Chem. Int. Ed. **51**(30): 7440-7444.
Feng, D., Q. S. Li, F. Liu, H. J. Li, D. H. Li and J. G. Shi (2015). "Research progress on determination method of glucose and its practical application
" Transd. Microsys. Technol. **34**(12): 5-8.
Feng, D. W., Z. Y. Gu, J. R. Li, H. L. Jiang, Z. W. Wei and H. C. Zhou (2012). "Zirconium-Metalloporphyrin PCN-222: Mesoporous Metal-Organic Frameworks with Ultrahigh Stability as Biomimetic Catalysts." Angew. Chem. Int. Ed. **51**(41): 10307-10310.
Feng, X., X. Li, H. Y. Shi, H. Huang, X. C. Wu and W. B. Song (2014). "Highly accessible Pt nanodots homogeneously decorated on Au nanorods surface for sensing." Analytica Chimica Acta **852**: 37-44.
Feng, Y. B., L. Hong, A. L. Liu, W. D. Chen, G. W. Li, W. Chen and X. H. Xia (2015). "High-efficiency catalytic degradation of phenol based on the peroxidase-like activity of cupric oxide nanoparticles." Int. J. Environ. Sci. Technol. **12**(2): 653-660.
Fernandez-Garcia, S., L. Jiang, M. Tinoco, A. B. Hungria, J. Han, G. Blanco, J. J. Calvino and X. Chen (2016). "Enhanced Hydroxyl Radical Scavenging Activity by Doping Lanthanum in Ceria Nanocubes." Journal of Physical Chemistry C **120**(3): 1891-1901.
Figueroa Espi, V., A. Alvarez Paneque, M. Torrens, A. J. Otero Gonzalez and E. Reguera (2011). "Conjugation of manganese ferrite nanoparticles to an anti Sticholysin monoclonal antibody and conjugate applications." Colloid. Surface. A **387**(1-3): 118-124.
Fillon, Y., A. Verma, P. Ghosh, D. Ernenwein, V. M. Rotello and J. Chmielewski (2007). "Peptide ligation catalyzed by functionalized gold nanoparticles." Journal of the American Chemical Society **129**(21): 6676-6677.
Florent, M., D. A. Giannakoudakis, R. Wallace and T. J. Bandosz (2017). "Mixed CuFe and ZnFe (hydr)oxides as reactive adsorbents of chemical warfare agent surrogates." Journal of Hazardous Materials **329**: 141-149.
Frick, R., B. Muller Edenborn, A. Schlicker, B. Rothen Rutishauser, D. O. Raemy, D. Gunther, B. Hattendorf, W. Stark and B. Beck Schimmer (2011). "Comparison of manganese oxide nanoparticles and manganese sulfate with regard to oxidative stress, uptake and apoptosis in alveolar epithelial cells." Toxicology Letters **205**(2): 163-172.
Fu, J. K., Y. R. Shao, L. Y. Wang and Y. C. Zhu (2015). "Lysosome-controlled efficient ROS overproduction against cancer cells with a high pH-responsive catalytic nanosystem." Nanoscale **7**(16): 7275-7283.
Fu, S. Y., S. Wang, X. D. Zhang, A. H. Qi, Z. R. Liu, X. Yu, C. F. Chen and L. L. Li (2017). "Structural effect of Fe3O4 nanoparticles on peroxidase-like activity for cancer therapy." Colloid. Surface. B **154**: 239-245.
Fu, X. M., Z. J. Liu, S. X. Cai, P. Li, Y. T. Li and J. H. Chen (2016). "Electrochemical Sensor for Detection of Mercury(Ⅱ) Based on DNA-templated Ag /Pt Bimetallic Nanoclusters." J. Instrumental Anal. **35**(04): 426-431.
Fu, X. M., Z. J. Liu, S. X. Cai, Y. P. Zhao, D. Z. Wu, C. Y. Li and J. H. Chen (2016). "Electrochemical aptasensor for the detection of vascular endothelial growth factor (VEGF) based on DNA-templated Ag/Pt bimetallic nanoclusters." Chinese Chem. Lett. **27**(6): 920-926.
Fu, Y., H. X. Zhang, S. D. Dai, X. Zhi, J. L. Zhang and W. Li (2015). "Glutathione-stabilized palladium nanozyme for colorimetric assay of silver(I) ions." Analyst **140**(19): 6676-6683.
Fu, Y., X. Y. Zhao, J. L. Zhang and W. Li (2014). "DNA-Based Platinum Nanozymes for Peroxidase Mimetics." Journal of Physical Chemistry C **118**(31): 18116-18125.
Gao, C. J., H. M. Zhu, J. Chen and H. D. Qiu (2017). "Facile synthesis of enzyme functional metal-organic framework for colorimetric detecting H2O2 and ascorbic acid." Chinese Chem. Lett. **28**(5): 1006-1012.
Gao, L., M. Q. Liu, G. F. Ma, Y. L. Wang, L. N. Zhao, Q. Yuan, F. P. Gao, R. Liu, J. Zhai, Z. F. Chai, Y. L. Zhao and X. Y. Gao (2015). "Peptide-Conjugated Gold Nanoprobe: Intrinsic Nanozyme-Linked Immunsorbant Assay of Integrin Expression Level on Cell Membrane." Acs Nano **9**(11): 10979-10990.
Gao, L. Z., K. L. Fan and X. Y. Yan (2017). "Iron Oxide Nanozyme: A Multifunctional Enzyme Mimetic for Biomedical Applications." Theranostics **7**(13): 3207-3227.
Gao, L. Z., K. M. Giglio, J. L. Nelson, H. Sondermann and A. J. Travis (2014). "Ferromagnetic nanoparticles with peroxidase-like activity enhance the cleavage of biological macromolecules for biofilm elimination." Nanoscale **6**(5): 2588-2593.
Gao, L. Z. and H. Koo (2017). "Do catalytic nanoparticles offer an improved therapeutic strategy to combat dental biofilms?" Nanomedicine **12**(4): 275-279.
Gao, L. Z., Y. Liu, D. Kim, Y. Li, G. Hwang, P. C. Naha, D. P. Cormode and H. Koo (2016). "Nanocatalysts promote

Streptococcus mutans biofilm matrix degradation and enhance bacterial killing to suppress dental caries in vivo." Biomaterials **101**: 272-284.
Gao, L. Z., J. M. Wu, S. Lyle, K. Zehr, L. L. Cao and D. Gao (2008). "Magnetite Nanoparticle-Linked Immunosorbent Assay." Journal of Physical Chemistry C **112**(44): 17357-17361.
Gao, L. Z. and X. Y. Yan (2013). "Discovery and Current Application of Nanozyme." Progress in Biochemistry and Biophysics **40**(10): 892-902.
Gao, L. Z. and X. Y. Yan (2016). "Nanozymes: an emerging field bridging nanotechnology and biology." Sci. China Life Sci. **59**(4): 400-402.
Gao, L. Z., J. Zhuang, L. Nie, J. B. Zhang, Y. Zhang, N. Gu, T. H. Wang, J. Feng, D. L. Yang, S. Perrett and X. Y. Yan (2007). "Intrinsic peroxidase-like activity of ferromagnetic nanoparticles." Nature Nanotechnology **2**(9): 577-583.
Gao, M., X. F. Lu, G. D. Nie, M. Q. Chi and C. Wang (2017). "Hierarchical CNFs/MnCo2O4.5 nanofibers as a highly active oxidase mimetic and its application in biosensing." Nanotechnology **28**(48): 485708.
Gao, N., K. Dong, A. D. Zhao, H. J. Sun, Y. Wang, J. S. Ren and X. G. Qu (2016). "Polyoxometalate-based nanozyme: Design of a multifunctional enzyme for multi-faceted treatment of Alzheimer's disease." Nano Research **9**(4): 1079-1090.
Gao, T., C. L. Mu, H. Shi, L. Shi, X. X. Mao and G. X. Li (2018). "Embedding Capture-Magneto-Catalytic Activity into a Nanocatalyst for the Determination of Lipid Kinase." Acs Applied Materials & Interfaces **10**(1): 59-65.
Gao, W., X. P. Wei, X. J. Wang, G. W. Cui, Z. H. Liu and B. Tang (2016). "A competitive coordination-based CeO_2 nanowire-DNA nanosensor: fast and selective detection of hydrogen peroxide in living cells and in vivo." Chem. Commun. **52**(18): 3643-3646.
Gao, Y., G. N. Wang, H. Huang, J. J. Hu, S. M. Shah and X. G. Su (2011). "Fluorometric method for the determination of hydrogen peroxide and glucose with Fe_3O_4 as catalyst." Talanta **85**(2): 1075-1080.
Gao, Y., Z. Wei, F. Li, Z. M. Yang, Y. M. Chen, M. Zrinyi and Y. Osada (2014). "Synthesis of a morphology controllable Fe3O4 nanoparticle/hydrogel magnetic nanocomposite inspired by magnetotactic bacteria and its application in H2O2 detection." Green Chemistry **16**(3): 1255-1261.
Gao, Y. Y., H. X. Li, Z. Z. Ou, P. Hao, Y. Li and G. Q. Yang (2011). "Enhancing the Catalytic Activity of Peroxidase by Adsorption onto Fe3O4 Magnetic Nanoparticle/Multiwalled Carbon Nanotube Composite Surfaces." Acta Physico-Chimica Sinica **27**(10): 2469-2477.
Gao, Z. Q., L. Hou, M. D. Xu and D. P. Tang (2014). "Enhanced Colorimetric Immunoassay Accompanying with Enzyme Cascade Amplification Strategy for Ultrasensitive Detection of Low-Abundance Protein." Sci. Rep. **4**: 3966.
Gao, Z. Q., Y. Y. Li, X. B. Zhang, J. H. Feng, L. Kong, P. Wang, Z. W. Chen, Y. H. Dong and Q. Wei (2018). "Ultrasensitive electrochemical immunosensor for quantitative detection of HBeAg using Au@Pd/MoS2@MWCNTs nanocomposite as enzyme-mimetic labels." Biosensors & Bioelectronics **102**: 189-195.
Gao, Z. Q., G. G. Liu, H. H. Ye, R. Rauschendorfer, D. P. Tang and X. H. Xia (2017). "Facile Colorimetric Detection of Silver Ions with Picomolar Sensitivity." Analytical Chemistry **89**(6): 3622-3629.
Gao, Z. Q., S. Z. Lv, M. D. Xu and D. P. Tang (2017). "High-index {hk0} faceted platinum concave nanocubes with enhanced peroxidase-like activity for an ultrasensitive colorimetric immunoassay of the human prostate-specific antigen." Analyst **142**(6): 911-917.
Gao, Z. Q., M. D. Xu, L. Hou, G. N. Chen and D. P. Tang (2013). "Irregular-shaped platinum nanoparticles as peroxidase mimics for highly efficient colorimetric immunoassay." Analytica Chimica Acta **776**: 79-86.
Gao, Z. Q., M. D. Xu, L. Hou, G. N. Chen and D. P. Tang (2013). "Magnetic Bead-Based Reverse Colorimetric Immunoassay Strategy for Sensing Biomolecules." Analytical Chemistry **85**(14): 6945-6952.
Gao, Z. Q., M. D. Xu, M. H. Lu, G. N. Chen and D. P. Tang (2015). "Urchin-like (gold core)@(platinum shell) nanohybrids: A highly efficient peroxidase-mimetic system for in situ amplified colorimetric immunoassay." Biosensors & Bioelectronics **70**: 194-201.
Gao, Z. Q., H. H. Ye, D. Y. Tang, J. Tao, S. Habibi, A. Minerick, D. P. Tang and X. H. Xia (2017). "Platinum-Decorated Gold Nanoparticles with Dual Functionalities for Ultrasensitive Colorimetric in Vitro Diagnostics." Nano Lett. **17**(9): 5572-5579.
Garg, B. and T. Bisht (2016). "Carbon Nanodots as Peroxidase Nanozymes for Biosensing." Molecules **21**(12): 1653.
Garg, B., T. Bisht and Y. C. Ling (2015). "Graphene-Based Nanomaterials as Efficient Peroxidase Mimetic Catalysts for Biosensing Applications: An Overview." Molecules **20**(8): 14155-14190.
Garg, D., M. Kaur, S. Sharma and V. Verma (2018). "Effect of CTAB coating on structural, magnetic and peroxidase mimic activity of ferric oxide nanoparticles." Bull. Mater. Sci. **41**(5): 134.
Gayathri, P. and A. S. Kumar (2013). "An Iron Impurity in Multiwalled Carbon Nanotube Complexes with Chitosan that

Biomimics the Heme-Peroxidase Function." Chemistry-a European Journal **19**(50): 17103-17112.
Ge, C., G. Fang, X. M. Shen, Y. Chong, W. G. Wamer, X. F. Gao, Z. F. Chai, C. Y. Chen and J. J. Yin (2016). "Facet Energy versus Enzyme-like Activities: The Unexpected Protection of Palladium Nanocrystals against Oxidative Damage." ACS Nano **10**(11): 10436-10445.
Ge, S. G., F. Liu, W. Y. Liu, M. Yan, X. R. Song and J. H. Yu (2014). "Colorimetric assay of K-562 cells based on folic acid-conjugated porous bimetallic Pd@Au nanoparticles for point-of-care testing." Chem. Commun. **50**(4): 475-477.
Ge, S. G., W. Y. Liu, H. Y. Liu, F. Liu, J. H. Yu, M. Yan and J. D. Huang (2015). "Colorimetric detection of the flux of hydrogen peroxide released from living cells based on the high peroxidase-like catalytic performance of porous PtPd nanorods." Biosensors & Bioelectronics **71**: 456-462.
Ge, S. G., M. W. Sun, W. Y. Liu, S. Li, X. Wang, C. C. Chu, M. Yan and J. H. Yu (2014). "Disposable electrochemical immunosensor based on peroxidase-like magnetic silica-graphene oxide composites for detection of cancer antigen 153." Sensors and Actuators B-Chemical **192**: 317-326.
Gharbi, N., M. Pressac, M. Hadchouel, H. Szwarc, S. R. Wilson and F. Moussa (2005). "60 Fullerene is a powerful antioxidant in vivo with no acute or subacute toxicity." Nano Letters **5**(12): 2578-2585.
Ghosh, A. B., N. Saha, A. Sarkar, A. K. Dutta, P. Biswas, K. Nag and B. Adhikary (2016). "Morphological tuning of Eu2O2S nanoparticles, manifestation of peroxidase-like activity and glucose assay use." New Journal of Chemistry **40**(2): 1595-1604.
Ghosh, S., P. Roy, N. Karmodak, E. D. Jemmis and G. Mugesh (2018). "Nanoisozymes: Crystal-Facet-Dependent Enzyme-Mimetic Activity of V2O5 Nanomaterials." Angew. Chem. Int. Ed. **57**(17): 4510-4515.
Giannakoudakis, D. A., J. A. Arcibar-Orozco and T. J. Bandosz (2016). "Effect of GO phase in Zn(OH)(2)/GO composite on the extent of photocatalytic reactive adsorption of mustard gas surrogate." Applied Catalysis B-Environmental **183**: 37-46.
Giannakoudakis, D. A., Y. Hu, M. Florent and T. J. Bandosz (2017). "Smart textiles of MOF/g-C3N4 nanospheres for the rapid detection/detoxification of chemical warfare agents." Nanoscale Horiz. **2**(6): 356-364.
Gil-San Millan, R., E. Lopez Maya, M. Hall, N. M. Padial, G. W. Peterson, J. B. DeCoste, L. M. Rodriguez Albelo, J. E. Oltra, E. Barea and J. A. R. Navarro (2017). "Chemical Warfare Agents Detoxification Properties of Zirconium Metal-Organic Frameworks by Synergistic Incorporation of Nucleophilic and Basic Sites." ACS Appl. Mater. Interfaces **9**(28): 23967-23973.
Giri, S., A. Karakoti, R. P. Graham, J. L. Maguire, C. M. Reilly, S. Seal, R. Rattan and V. Shridhar (2013). "Nanoceria: A Rare-Earth Nanoparticle as a Novel Anti-Angiogenic Therapeutic Agent in Ovarian Cancer." PLoS One **8**(1): e54578.
Gojova, A., B. Guo, R. S. Kota, J. C. Rutledge, I. M. Kennedy and A. I. Barakat (2007). "Induction of inflammation in vascular endothelial cells by metal oxide nanoparticles: Effect of particle composition." Environmental Health Perspectives **115**(3): 403-409.
Golchin, J., K. Golchin, N. Alidadian, S. Ghaderi, S. Eslamkhah, M. Eslamkhah and A. Akbarzadeh (2017). "Nanozyme applications in biology and medicine: an overview." Artif. Cell. Nanomed. B. **45**(6): 1069-1076.
Golub, E., H. B. Albada, W.-C. Liao, Y. Biniuri and I. Willner (2016). "Nucleoapzymes: Hemin/G-Quadruplex DNAzyme–Aptamer Binding Site Conjugates with Superior Enzyme-like Catalytic Functions." Journal of the American Chemical Society **138**(1): 164-172.
Gorbachevskii, M. V., D. S. Kopitsyn, M. S. Kotelev, E. V. Ivanov, V. A. Vinokurov and A. A. Novikov (2018). "Amplification of surface-enhanced Raman scattering by the oxidation of capping agents on gold nanoparticles." Rsc Advances **8**(34): 19051-19057.
Groothaert, M. H., P. J. Smeets, B. F. Sels, P. A. Jacobs and R. A. Schoonheydt (2005). "Selective oxidation of methane by the bis(μ-oxo)dicopper core stabilized on ZSM-5 and mordenite zeolites." Journal of the American Chemical Society **127**(5): 1394-1395.
Grulke, E., K. Reed, M. Beck, X. Huang, A. Cormack and S. Seal (2014). "Nanoceria: factors affecting its pro- and anti-oxidant properties." Environ. Sci. -Nano **1**(5): 429-444.
Grundner, S., M. A. C. Markovits, G. Li, M. Tromp, E. A. Pidko, E. J. M. Hensen, A. Jentys, M. Sanchez-Sanchez and J. A. Lercher (2015). "Single-site trinuclear copper oxygen clusters in mordenite for selective conversion of methane to methanol." Nat. Commun. **6**: 7546.
Guan, G. J., L. Yang, Q. S. Mei, K. Zhang, Z. P. Zhang and M. Y. Han (2012). "Chemiluminescence Switching on Peroxidase-Like Fe3O4 Nanoparticles for Selective Detection and Simultaneous Determination of Various Pesticides." Analytical Chemistry **84**(21): 9492-9497.
Guan, J. F., J. Peng and X. Y. Jin (2015). "Synthesis of copper sulfide nanorods as peroxidase mimics for the colorimetric detection of hydrogen peroxide." Analytical Methods **7**(13): 5454-5461.

Guan, Y. J., M. Li, K. Dong, N. Gao, J. S. Ren, Y. C. Zheng and X. G. Qu (2016). "Ceria/POMs hybrid nanoparticles as a mimicking metallopeptidase for treatment of neurotoxicity of amyloid-beta peptide." Biomaterials **98**: 92-102.
Guivar, J. A. R., E. G. R. Fernandes and V. Zucolotto (2015). "A peroxidase biomimetic system based on Fe3O4 nanoparticles in non-enzymatic sensors." Talanta **141**: 307-314.
Guo, F. F., W. Yang, W. Jiang, S. Geng, T. Peng and J. L. Li (2012). "Magnetosomes eliminate intracellular reactive oxygen species in Magnetospirillum gryphiswaldense MSR-1." Environmental Microbiology **14**(7): 1722-1729.
Guo, J. L., Y. Wang and M. Zhao (2018). "3D flower-like ferrous(II) phosphate nanostructures as peroxidase mimetics for sensitive colorimetric detection of hydrogen peroxide and glucose at nanomolar level." Talanta **182**: 230-240.
Guo, L. L., K. X. Huang and H. M. Liu (2016). "Biocompatibility selenium nanoparticles with an intrinsic oxidase-like activity." Journal of Nanoparticle Research **18**(3): 74.
Guo, L. L., L. Mao, K. X. Huang and H. M. Liu (2017). "Pt-Se nanostructures with oxidase-like activity and their application in a selective colorimetric assay for mercury(II)." Journal of Materials Science **52**(18): 10738-10750.
Guo, L. Y., P. Qian and M. H. Yang (2017). "Determination of Immunoglobulin G by a Hemin-Manganese (IV) Oxide-Labeled Enzyme-linked Immunosorbent Assay." Analytical Letters **50**(11): 1803-1811.
Guo, W., H. Lv, K. P. Sullivan, W. O. Gordon, A. Balboa, G. W. Wagner, D. G. Musaev, J. Bacsa and C. L. Hill (2016). "Broad-Spectrum Liquid- and Gas-Phase Decontamination of Chemical Warfare Agents by One-Dimensional Heteropolyniobates." Angew. Chem. Int. Ed. **55**(26): 7403-7407.
Guo, X. R., Y. Wang, F. Y. Wu, Y. N. Ni and S. Kokot (2015). "A colorimetric method of analysis for trace amounts of hydrogen peroxide with the use of the nano-properties of molybdenum disulfide." Analyst **140**(4): 1119-1126.
Guo, Y., W. W. Li, M. Y. Zheng and Y. Huang (2014). "Facile Preparation of Graphene Dots Functionalized Au Nanoparticles and Their Application as Peroxidase Mimetics in Glucose Detection." Acta Chimica Sinica **72**(6): 713-719.
Guo, Y., H. Wang, X. W. Ma, J. Jin, W. Ji, X. Wang, W. Song, B. Zhao and C. Y. He (2017). "Fabrication of Ag-Cu2O/Reduced Graphene Oxide Nanocomposites as Surface-Enhanced Raman Scattering Substrates for in Situ Monitoring of Peroxidase-Like Catalytic Reaction and Biosensing." ACS Applied Materials & Interfaces **9**(22): 19074-19081.
Guo, Y. J., L. Deng, J. Li, S. J. Guo, E. K. Wang and S. J. Dong (2011). "Hemin-Graphene Hybrid Nanosheets with Intrinsic Peroxidase-like Activity for Label-free Colorimetric Detection of Single-Nucleotide Polymorphism." Acs Nano **5**(2): 1282-1290.
Guo, Y. J., J. Li and S. J. Dong (2011). "Hemin functionalized graphene nanosheets-based dual biosensor platforms for hydrogen peroxide and glucose." Sensors and Actuators B-Chemical **160**(1): 295-300.
Guo, Y. L., X. Y. Liu, X. D. Wang, A. Iqbal, C. D. Yang, W. S. Liu and W. W. Qin (2015). "Carbon dot/NiAl-layered double hydroxide hybrid material: facile synthesis, intrinsic peroxidase-like catalytic activity and its application." Rsc Advances **5**(116): 95495-95503.
Guo, Y. L., X. Y. Liu, C. D. Yang, X. D. Wang, D. Wang, A. Iqbal, W. S. Liu and W. W. Qin (2015). "Synthesis and Peroxidase-Like Activity of Cobalt@Carbon-Dots Hybrid Material." ChemCatChem **7**(16): 2467-2474.
Gupta, A., R. Das, G. Yesilbag Tonga, T. Mizuhara and V. M. Rotello (2018). "Charge-Switchable Nanozymes for Bioorthogonal Imaging of Biofilm-Associated Infections." ACS Nano **12**(1): 89-94.
Haider, W., A. Hayat, Y. Raza, A. A. Chaudhry, R. Ihtesham Ur and J. L. Marty (2015). "Gold nanoparticle decorated single walled carbon nanotube nanocomposite with synergistic peroxidase like activity for D-alanine detection." Rsc Advances **5**(32): 24853-24858.
Han, K. N., J. S. Choi and J. Kwon (2017). "Gold nanozyme-based paper chip for colorimetric detection of mercury ions." Sci. Rep. **7**: 2806.
Han, L., C. C. Li, T. Zhang, Q. L. Lang and A. H. Liu (2015). "Au@Ag Heterogeneous Nanorods as Nanozyme Interfaces with Peroxidase-Like Activity and Their Application for One-Pot Analysis of Glucose at Nearly Neutral pH." Acs Applied Materials & Interfaces **7**(26): 14463-14470.
Han, L., Y. Li and A. P. Fan (2018). "Improvement of mimetic peroxidase activity of gold nanoclusters on the luminol chemiluminescence reaction by surface modification with ethanediamine." Luminescence **33**(4): 751-758.
Han, L., P. Liu, H. J. Zhang, F. Li and A. H. Liu (2017). "Phage capsid protein-directed MnO2 nanosheets with peroxidase-like activity for spectrometric biosensing and evaluation of antioxidant behaviour." Chem. Commun. **53**(37): 5216-5219.
Han, L., J. G. Shi and A. H. Liu (2017). "Novel biotemplated MnO2 1D nanozyme with controllable peroxidase-like activity and unique catalytic mechanism and its application for glucose sensing." Sensors and Actuators B-Chemical **252**: 919-926.

Han, L., L. X. Zeng, M. D. Wei, C. M. Li and A. H. Liu (2015). "A V_2O_3-ordered mesoporous carbon composite with novel peroxidase-like activity towards the glucose colorimetric assay." Nanoscale **7**(27): 11678-11685.
Han, L., H. J. Zhang, D. Y. Chen and F. Li (2018). "Protein-Directed Metal Oxide Nanoflakes with Tandem Enzyme-Like Characteristics: Colorimetric Glucose Sensing Based on One-Pot Enzyme-Free Cascade Catalysis." Advanced Functional Materials **28**(17): 1800018.
Han, M., S. L. Liu, J. C. Bao and Z. H. Dai (2012). "Pd nanoparticle assemblies-As the substitute of HRP, in their biosensing applications for H2O2 and glucose." Biosensors & Bioelectronics **31**(1): 151-156.
Han, T. H., M. M. Khan, J. Lee and M. H. Cho (2014). "Optimization of positively charged gold nanoparticles synthesized using a stainless-steel mesh and its application for colorimetric hydrogen peroxide detection." J. Ind. Eng. Chem. **20**(4): 2003-2009.
Hao, C., Y. R. Shen, Z. Y. Wang, X. H. Wang, F. Feng, C. W. Ge, Y. T. Zhao and K. Wang (2016). "Preparation and Characterization of Fe2O3 Nanoparticles by Solid-Phase Method and Its Hydrogen Peroxide Sensing Properties." ACS Sustain. Chem. Eng. **4**(3): 1069-1077.
Hao, J. H., Z. Zhang, W. S. Yang, B. P. Lu, X. Ke, B. L. Zhang and J. L. Tang (2013). "In situ controllable growth of CoFe2O4 ferrite nanocubes on graphene for colorimetric detection of hydrogen peroxide." Journal of Materials Chemistry A **1**(13): 4352-4357.
Hassanzadeh, J. and A. Khataee (2018). "Ultrasensitive chemiluminescent biosensor for the detection of cholesterol based on synergetic peroxidase-like activity of MoS2 and graphene quantum dots." Talanta **178**: 992-1000.
Hassanzadeh, J., A. Khataee and H. Eskandari (2018). "Encapsulated cholesterol oxidase in metal-organic framework and biomimetic Ag nanocluster decorated MoS2 nanosheets for sensitive detection of cholesterol." Sensors and Actuators B-Chemical **259**: 402-410.
Hayat, A. and S. Andreescu (2013). "Nanoceria Particles As Catalytic Amplifiers for Alkaline Phosphatase Assays." Analytical Chemistry **85**(21): 10028-10032.
Hayat, A., G. Bulbul and S. Andreescu (2014). "Probing phosphatase activity using redox active nanoparticles: A novel colorimetric approach for the detection of enzyme activity." Biosensors & Bioelectronics **56**: 334-339.
Hayat, A., J. Cunningham, G. Bulbul and S. Andreescu (2015). "Evaluation of the oxidase like activity of nanoceria and its application in colorimetric assays." Analytica Chimica Acta **885**: 140-147.
Hayat, A., W. Haider, Y. Raza and J. L. Marty (2015). "Colorimetric cholesterol sensor based on peroxidase like activity of zinc oxide nanoparticles incorporated carbon nanotubes." Talanta **143**: 157-161.
He, J., F. J. Xu, J. Hu, S. L. Wang, X. D. Hou and Z. Long (2017). "Covalent triazine framework-1: A novel oxidase and peroxidase mimic." Microchemical Journal **135**: 91-99.
He, S. B., H. H. Deng, A. L. Liu, G. W. Li, X. H. Lin, W. Chen and X. H. Xia (2014). "Synthesis and Peroxidase-Like Activity of Salt-Resistant Platinum Nanoparticles by Using Bovine Serum Albumin as the Scaffold." ChemCatChem **6**(6): 1543-1548.
He, S. B., G. W. Wu, H. H. Deng, A. L. Liu, X. H. Lin, X. H. Xia and W. Chen (2014). "Choline and acetylcholine detection based on peroxidase-like activity and protein antifouling property of platinum nanoparticles in bovine serum albumin scaffold." Biosensors & Bioelectronics **62**: 331-336.
He, S. B., Y. F. Zhang, H. N. Huang, Z. Q. Lin and W. Chen (2017). "The Applications of Metal-Nanocomposite Using Bovine Serum Albumin as Scaffold in Biological Detection." J. Anal. Sci. **33**(04): 567-572.
He, S. H., W. B. Shi, X. D. Zhang, J. A. Li and Y. M. Huang (2010). "β-cyclodextrins-based inclusion complexes of $CoFe_2O_4$ magnetic nanoparticles as catalyst for the luminol chemiluminescence system and their applications in hydrogen peroxide detection." Talanta **82**(1): 377-383.
He, W. W., H. M. Jia, X. X. Li, Y. Lei, J. Li, H. X. Zhao, L. W. Mi, L. Z. Zhang and Z. Zheng (2012). "Understanding the formation of CuS concave superstructures with peroxidase-like activity." Nanoscale **4**(11): 3501-3506.
He, W. W., Y. Liu, J. S. Yuan, J. J. Yin, X. C. Wu, X. N. Hu, K. Zhang, J. B. Liu, C. Y. Chen, Y. L. Ji and Y. T. Guo (2011). "Au@Pt nanostructures as oxidase and peroxidase mimetics for use in immunoassays." Biomaterials **32**(4): 1139-1147.
He, W. W., W. Wamer, Q. S. Xia, J. J. Yin and P. P. Fu (2014). "Enzyme-Like Activity of Nanomaterials." J. Environ. Sci. Health C **32**(2): 186-211.
He, W. W., X. C. Wu, J. B. Liu, X. N. Hu, K. Zhang, S. A. Hou, W. Y. Zhou and S. S. Xie (2010). "Design of AgM Bimetallic Alloy Nanostructures (M = Au, Pd, Pt) with Tunable Morphology and Peroxidase-Like Activity." Chemistry of Materials **22**(9): 2988-2994.
He, W. W., Y. T. Zhou, W. G. Wamer, M. D. Boudreau and J. J. Yin (2012). "Mechanisms of the pH dependent generation of hydroxyl radicals and oxygen induced by Ag nanoparticles." Biomaterials **33**(30): 7547-7555.
He, W. W., Y. T. Zhou, W. G. Warner, X. N. Hu, X. C. Wu, Z. Zheng, M. D. Boudreau and J. J. Yin (2013). "Intrinsic catalytic

activity of Au nanoparticles with respect to hydrogen peroxide decomposition and superoxide scavenging." Biomaterials **34**(3): 765-773.
He, X., F. Zhang, J. Liu, G. Fang and S. Wang (2017). "Homogenous graphene oxide-peptide nanofiber hybrid hydrogel as biomimetic polysaccharide hydrolase." Nanoscale **9**(45): 18066-18074.
He, X. L., L. F. Tan, D. Chen, X. L. Wu, X. L. Ren, Y. Q. Zhang, X. W. Meng and F. Q. Tang (2013). "Fe_3O_4-Au@mesoporous SiO_2 microspheres: an ideal artificial enzymatic cascade system." Chem. Commun. **49**(41): 4643-4645.
He, Y. F., X. H. Niu, L. B. Shi, H. L. Zhao, X. Li, W. C. Zhang, J. M. Pan, X. F. Zhang, Y. S. Yan and M. B. Lan (2017). "Photometric determination of free cholesterol via cholesterol oxidase and carbon nanotube supported Prussian blue as a peroxidase mimic." Microchimica Acta **184**(7): 2181-2189.
He, Y. F., F. Qi, X. H. Niu, W. C. Zhang, X. F. Zhang and J. M. Pan (2018). "Uricase-free on-demand colorimetric biosensing of uric acid enabled by integrated CoP nanosheet arrays as a monolithic peroxidase mimic." Analytica Chimica Acta **1021**: 113-120.
Heckert, E. G., A. S. Karakoti, S. Seal and W. T. Self (2008). "The role of cerium redox state in the SOD mimetic activity of nanoceria." Biomaterials **29**(18): 2705-2709.
Heckert, E. G., S. Seal and W. T. Self (2008). "Fenton-like reaction catalyzed by the rare earth inner transition metal cerium." Environmental Science & Technology **42**(13): 5014-5019.
Heckman, K. L., W. DeCoteau, A. Estevez, K. J. Reed, W. Costanzo, D. Sanford, J. C. Leiter, J. Clauss, K. Knapp, C. Gomez, P. Mullen, E. Rathbun, K. Prime, J. Marini, J. Patchefsky, A. S. Patchefsky, R. K. Hailstone and J. S. Erlichman (2013). "Custom Cerium Oxide Nanoparticles Protect against a Free Radical Mediated Autoimmune Degenerative Disease in the Brain." ACS Nano **7**(12): 10582-10596.
Herget, K., H. Frerichs, F. Pfitzner, M. N. Tahir and W. Tremel (2018). "Functional Enzyme Mimics for Oxidative Halogenation Reactions that Combat Biofilm Formation." Adv. Mater.: 1707073.
Herget, K., P. Hubach, S. Pusch, P. Deglmann, H. Goetz, T. E. Gorelik, I. y. A. Gural'skiy, F. Pfitzner, T. Link, S. Schenk, M. Panthoefer, V. Ksenofontov, U. Kolb, T. Opatz, R. Andre and W. Tremel (2017). "Haloperoxidase Mimicry by CeO2-x Nanorods Combats Biofouling." Advanced Materials **29**(4): 1603823.
Hijaz, M., S. Das, I. Mert, A. Gupta, Z. Al-Wahab, C. Tebbe, S. Dar, J. Chhina, S. Giri, A. Munkarah, S. Seal and R. Rattan (2016). "Folic acid tagged nanoceria as a novel therapeutic agent in ovarian cancer." BMC Cancer **16**: 220.
Hirakawa, T., K. Sato, A. Komano, S. Kishi, C. K. Nishimoto, N. Mera, M. Kugishima, T. Sano, N. Negishi, H. Ichinose, Y. Seto and K. Takeuchi (2013). "Specific properties on TiO2 photocatalysis to decompose isopropyl methylphosphonofluoridate and dimethyl methylphosphonate in Gas Phase." Journal of Photochemistry and Photobiology a-Chemistry **264**: 12-17.
Hirst, S. M., A. Karakoti, S. Singh, W. Self, R. Tyler, S. Seal and C. M. Reilly (2013). "Bio-distribution and in vivo antioxidant effects of cerium oxide nanoparticles in mice." Environ. Toxicol. **28**(2): 107-118.
Hirst, S. M., A. S. Karakoti, R. D. Tyler, N. Sriranganathan, S. Seal and C. M. Reilly (2009). "Anti-inflammatory Properties of Cerium Oxide Nanoparticles." Small **5**(24): 2848-2856.
Hizir, M. S., M. Top, M. Balcioglu, M. Rana, N. M. Robertson, F. S. Shen, J. Sheng and M. V. Yigit (2016). "Multiplexed Activity of perAuxidase: DNA-Capped AuNPs Act as Adjustable Peroxidase." Analytical Chemistry **88**(1): 600-605.
Hong, L., A. L. Liu, G. W. Li, W. Chen and X. H. Lin (2013). "Chemiluminescent cholesterol sensor based on peroxidase-like activity of cupric oxide nanoparticles." Biosensors & Bioelectronics **43**: 1-5.
Horie, M., H. Kato, K. Fujita, S. Endoh and H. Iwahashi (2012). "In Vitro Evaluation of Cellular Response Induced by Manufactured Nanoparticles." Chemical Research in Toxicology **25**(3): 605-619.
Horie, M., K. Nishio, H. Kato, K. Fujita, S. Endoh, A. Nakamura, A. Miyauchi, S. Kinugasa, K. Yamamoto, E. Niki, Y. Yoshida, Y. Hagihara and H. Iwahashi (2011). "Cellular responses induced by cerium oxide nanoparticles: induction of intracellular calcium level and oxidative stress on culture cells." Journal of Biochemistry **150**(4): 461-471.
Hosseini, M., M. Aghazadeh and M. R. Ganjali (2017). "A facile one-pot synthesis of cobalt-doped magnetite/graphene nanocomposite as peroxidase mimetics in dopamine detection." New Journal of Chemistry **41**(21): 12678-12684.
Hosseini, M., F. S. Sabet, H. Khabbaz, M. Aghazadeh, F. Mizani and M. R. Ganjali (2017). "Enhancement of the peroxidase-like activity of cerium-doped ferrite nanoparticles for colorimetric detection of H2O2 and glucose." Analytical Methods **9**(23): 3519-3524.
Hostert, L., S. F. Blaskievicz, J. E. S. Fonsaca, S. H. Domingues, A. J. G. Zarbin and E. S. Orth (2017). "Imidazole-derived graphene nanocatalysts for organophosphate destruction: Powder and thin film heterogeneous reactions." Journal of Catalysis **356**: 75-84.
Hou, C., Y. Wang, Q. H. Ding, L. Jiang, M. Li, W. W. Zhu, D. Pan, H. Zhu and M. Z. Liu (2015). "Facile synthesis of enzyme-embedded magnetic metal-organic frameworks as a reusable mimic multi-enzyme system: mimetic

peroxidase properties and colorimetric sensor." Nanoscale **7**(44): 18770-18779.
Hou, J. W., M. Vazquez Gonzalez, M. Fadeev, X. Liu, R. Lavi and I. Willner (2018). "Catalyzed and Electrocatalyzed Oxidation of l-Tyrosine and l-Phenylalanine to Dopachrome by Nanozymes." Nano letters **18**(6): 4015-4022.
Hou, S., X. N. Hu, T. Wen, W. Q. Liu and X. C. Wu (2013). "Core-Shell Noble Metal Nanostructures Templated by Gold Nanorods." Advanced Materials **25**(28): 3857-3862.
Hsu, C. L., C. W. Lien, S. G. Harroun, R. Ravindranath, H. T. Chang, J. Y. Mao and C. C. Huang (2017). "Metal-deposited bismuth oxyiodide nanonetworks with tunable enzyme-like activity: sensing of mercury and lead ions." Mater. Chem. Front. **1**(5): 893-899.
Hsu, C. L., C. W. Lien, C. W. Wang, S. G. Harroun, C. C. Huang and H. T. Chang (2016). "Immobilization of aptamer-modified gold nanoparticles on BiOCl nanosheets: Tunable peroxidase-like activity by protein recognition." Biosens. Bioelectron. **75**: 181-187.
Hsu, C. W., Z. Y. Lin, T. Y. Chan, T. C. Chiu and C. C. Hu (2017). "Oxidized multiwalled carbon nanotubes decorated with silver nanoparticles for fluorometric detection of dimethoate." Food Chemistry **224**: 353-358.
Hu, A. L., H. H. Deng, X. Q. Zheng, Y. Y. Wu, X. L. Lin, A. L. Liu, X. H. Xia, H. P. Peng, W. Chen and G. L. Hong (2017). "Self-cascade reaction catalyzed by CuO nanoparticle-based dual-functional enzyme mimics." Biosensors & Bioelectronics **97**: 21-25.
Hu, A. L., Y. H. Liu, H. H. Deng, G. L. Hong, A. L. Liu, X. H. Lin, X. H. Xia and W. Chen (2014). "Fluorescent hydrogen peroxide sensor based on cupric oxide nanoparticles and its application for glucose and L-lactate detection." Biosensors & Bioelectronics **61**: 374-378.
Hu, D. H., Z. H. Sheng, S. T. Fang, Y. N. Wang, D. Y. Gao, P. F. Zhang, P. Gong, Y. F. Ma and L. T. Cai (2014). "Folate Receptor-Targeting Gold Nanoclusters as Fluorescence Enzyme Mimetic Nanoprobes for Tumor Molecular Colocalization Diagnosis." Theranostics **4**(2): 142-153.
Hu, J. T., P. J. Ni, H. C. Dai, Y. J. Sun, Y. L. Wang, S. Jiang and Z. Li (2015). "Aptamer-based colorimetric biosensing of abrin using catalytic gold nanoparticles." Analyst **140**(10): 3581-3586.
Hu, J. T., P. J. Ni, H. C. Dai, Y. J. Sun, Y. L. Wang, S. Jiang and Z. Li (2015). "A facile label-free colorimetric aptasensor for ricin based on the peroxidase-like activity of gold nanoparticles." Rsc Advances **5**(21): 16036-16041.
Hu, L. Z., H. Liao, L. Y. Feng, M. Wang and W. S. Fu (2018). "Accelerating the Peroxidase-Like Activity of Gold Nanoclusters at Neutral pH for Colorimetric Detection of Heparin and Heparinase Activity." Analytical Chemistry **90**(10): 6247-6252.
Hu, L. Z., Y. L. Yuan, L. Zhang, J. M. Zhao, S. Majeed and G. B. Xu (2013). "Copper nanoclusters as peroxidase mimetics and their applications to H2O2 and glucose detection." Analytica Chimica Acta **762**: 83-86.
Hu, M. H., K. Korschelt, P. Daniel, K. Landfester, W. Tremel and M. B. Bannwarth (2017). "Fibrous Nanozyme Dressings with Catalase-Like Activity for H2O2 Reduction To Promote Wound Healing." ACS Applied Materials & Interfaces **9**(43): 38024-38031.
Hu, P., L. Han and S. J. Dong (2014). "A Facile One-Pot Method to Synthesize a Polypyrrole/Hemin Nanocomposite and Its Application in Biosensor, Dye Removal, and Photothermal Therapy." ACS Applied Materials & Interfaces **6**(1): 500-506.
Hu, S. L., X. Q. Zhang, F. C. Zang, Y. Zhang, W. Zhang, Y. H. Wu, M. J. Song, Y. H. Wang and N. Gu (2016). "Surface Modified Iron Oxide Nanoparticles as Fe Source Precursor to Induce the Formation of Prussian Blue Nanocubes." Journal of Nanoscience and Nanotechnology **16**(2): 1967-1974.
Hu, X. N., J. B. Liu, S. Hou, T. Wen, W. Q. Liu, K. Zhang, W. W. He, Y. L. Ji, H. X. Ren, Q. Wang and X. C. Wu (2011). "Research progress of nanoparticles as enzyme mimetics." Science China-Physics Mechanics & Astronomy **54**(10): 1749-1756.
Hu, X. N., A. Saran, S. Hou, T. Wen, Y. L. Ji, W. Q. Liu, H. Zhang, W. W. He, J. J. Yin and X. C. Wu (2013). "Au@PtAg core/shell nanorods: tailoring enzyme-like activities via alloying." Rsc Advances **3**(17): 6095-6105.
Hu, X. N., A. Saran, S. Hou, T. Wen, Y. L. Ji, W. Q. Liu, H. Zhang and X. C. Wu (2014). "Rod-shaped Au@PtCu nanostructures with enhanced peroxidase-like activity and their ELISA application." Chinese Science Bulletin **59**(21): 2588-2596.
Hu, Y., X. J. Gao, Y. Zhu, F. Muhammad, S. Tan, W. Cao, S. Lin, Z. Jin, X. Gao and H. Wei (2018). "Nitrogen-doped carbon nanomaterials as highly active and specific peroxidase mimics." Chem. Mater. **30**(18): 6431-6439.
Hu, Y. and T. L. Ma (2018). "Research progress of nanoparticle enzyme mimics." Modern Chem. Ind. **38**(3): 71-75.
Hu, Y. H., H. J. Cheng, X. Z. Zhao, J. J. Wu, F. Muhammad, S. C. Lin, J. He, L. Q. Zhou, C. P. Zhang, Y. Deng, P. Wang, Z. Y. Zhou, S. M. Nie and H. Wei (2017). "Surface-Enhanced Raman Scattering Active Gold Nanoparticles with Enzyme-Mimicking Activities for Measuring Glucose and Lactate in Living Tissues." ACS Nano **11**(6): 5558-5566.

Huang, C. C., H. Bai, C. Li and G. Q. Shi (2011). "A graphene oxide/hemoglobin composite hydrogel for enzymatic catalysis in organic solvents." Chem. Commun. **47**(17): 4962-4964.
Huang, D. M., J. K. Hsiao, Y. C. Chen, L. Y. Chien, M. Yao, Y. K. Chen, B. S. Ko, S. C. Hsu, L. A. Tai, H. Y. Cheng, S. W. Wang, C. S. Yang and Y. C. Chen (2009). "The promotion of human mesenchymal stem cell proliferation by superparamagnetic iron oxide nanoparticles." Biomaterials **30**(22): 3645-3651.
Huang, F., J. Z. Wang, W. M. Chen, Y. J. Wan, X. M. Wang, N. Cai, J. Liu and F. Q. Yu (2018). "Synergistic peroxidase-like activity of CeO2-coated hollow Fe3O4 nanocomposites as an enzymatic mimic for low detection limit of glucose." Journal of the Taiwan Institute of Chemical Engineers **83**: 40-49.
Huang, J., Q. Chang, G. D. Jiang, Y. Qiu and H. Q. Tang (2014). "Indirect and Rapid Spectrophotometric Determination of Hydrogen Peroxide --Based on the Catalytic Action of Mimetic Peroxidase of Nanoparticles of a-FeOOH/GO." Phys. Testing Chem. Anal. Part B (Chem. Anal.) **50**(4): 417-420.
Huang, L. J., W. T. Zhang, K. Chen, W. X. Zhu, X. N. Liu, R. Wang, X. Zhang, N. Hu, Y. R. Suo and J. L. Wang (2017). "Facet-selective response of trigger molecule to CeO 2 {1 1 0} for up-regulating oxidase-like activity." Chemical Engineering Journal **330**: 746-752.
Huang, L. J., W. X. Zhu, W. T. Zhang, K. Chen, J. Wang, R. Wang, Q. F. Yang, N. Hu, Y. R. Suo and J. L. Wang (2018). "Layered vanadium(IV) disulfide nanosheets as a peroxidase-like nanozyme for colorimetric detection of glucose." Microchimica Acta **185**(1): 7.
Huang, M., J. L. Gu, S. P. Elangovan, Y. S. Li, W. R. Zhao, T. Iijima, Y. Yamazaki and J. L. Shi (2013). "Intrinsic Peroxidase-like Catalytic Activity of Hydrophilic Mesoporous Carbons." Chemistry Letters **42**(8): 785-787.
Huang, R. X., Z. Q. Fang, X. B. Fang and E. P. Tsang (2014). "Ultrasonic Fenton-like catalytic degradation of bisphenol A by ferroferric oxide (Fe3O4) nanoparticles prepared from steel pickling waste liquor." Journal of Colloid and Interface Science **436**: 258-266.
Huang, R. X., Z. Q. Fang, X. M. Yan and W. Cheng (2012). "Heterogeneous sono-Fenton catalytic degradation of bisphenol A by Fe3O4 magnetic nanoparticles under neutral condition." Chemical Engineering Journal **197**: 242-249.
Huang, W., T. Y. Lin, Y. Cao, X. Y. Lai, J. Peng and J. C. Tu (2017). "Hierarchical NiCo2O4 Hollow Sphere as a Peroxidase Mimetic for Colorimetric Detection of H2O2 and Glucose." Sensors **17**(1): 217.
Huang, X., X. M. Liu, Q. A. Luo, J. Q. Liu and J. C. Shen (2011). "Artificial selenoenzymes: Designed and redesigned." Chemical Society Reviews **40**(3): 1171-1184.
Huang, X. L. (2018). "Hydrolysis of Phosphate Esters Catalyzed by Inorganic Iron Oxide Nanoparticles Acting as Biocatalysts." Astrobiology **18**(3): 294-310.
Huang, X. L., C. Xu, J. P. Ma and F. X. Chen (2018). "Ionothermal synthesis of Cu-doped Fe3O4 magnetic nanoparticles with enhanced peroxidase-like activity for organic wastewater treatment." Advanced Powder Technology **29**(3): 796-803.
Huang, X. L. and J. Z. Zhang (2012). "Hydrolysis of glucose-6-phosphate in aged, acid-forced hydrolysed nanomolar inorganic iron solutions-an inorganic biocatalyst?" RSC Advances **2**(1): 199-208.
Huang, X. W., J. J. Wei, T. Liu, X. L. Zhang, S. M. Bai and H. H. Yang (2017). "Silk fibroin-assisted exfoliation and functionalization of transition metal dichalcogenide nanosheets for antibacterial wound dressings." Nanoscale **9**(44): 17193-17198.
Huang, Y., M. T. Zhao, S. K. Han, Z. C. Lai, J. Yang, C. L. Tan, Q. L. Ma, Q. P. Lu, J. Z. Chen, X. Zhang, Z. C. Zhang, B. Li, B. Chen, Y. Zong and H. Zhang (2017). "Growth of Au Nanoparticles on 2D Metalloporphyrinic Metal-Organic Framework Nanosheets Used as Biomimetic Catalysts for Cascade Reactions." Adv. Mater. **29**: 1700102.
Huang, Y. Y., Y. H. Lin, F. Pu, J. S. Ren and X. G. Qu (2018). "The Current Progress of Nanozymes in Disease Treatments." Progress in Biochemistry and Biophysics **45**(2): 256-267.
Huang, Y. Y., Y. H. Lin, X. Ran, J. S. Ren and X. G. Qu (2016). "Self-Assembly and Compartmentalization of Nanozymes in Mesoporous Silica-Based Nanoreactors." Chemistry-A European Journal **22**(16): 5705-5711.
Huang, Y. Y., C. Q. Liu, F. Pu, Z. Liu, J. S. Ren and X. G. Qu (2017). "A GO-Se nanocomposite as an antioxidant nanozyme for cytoprotection." Chem. Commun. **53**(21): 3082-3085.
Huang, Y. Y., Z. Liu, C. Q. Liu, E. G. Ju, Y. Zhang, J. S. Ren and X. G. Qu (2016). "Self-Assembly of Multi-nanozymes to Mimic an Intracellular Antioxidant Defense System." Angew. Chem. Int. Ed. **55**(23): 6646-6650.
Huang, Y. Y., Z. Liu, C. Q. Liu, Y. Zhang, J. S. Ren and X. G. Qu (2018). "Selenium-Based Nanozyme as Biomimetic Antioxidant Machinery." Chemistry-A European Journal **24**: 10224-10230.
Huang, Y. Y., F. Pu, J. S. Ren and X. G. Qu (2017). "Artificial Enzyme-based Logic Operations to Mimic an Intracellular Enzyme-participated Redox Balance System." Chemistry-a European Journal **23**(38): 9156-9161.
Huang, Y. Y., X. Ran, Y. H. Lin, J. S. Ren and X. G. Qu (2015). "Self-assembly of an organic-inorganic hybrid nanoflower

as an efficient biomimetic catalyst for self-activated tandem reactions." Chem. Commun. **51**(21): 4386-4389.
Huo, M. F., L. Y. Wang, Y. Chen and J. L. Shi (2017). "Tumor-selective catalytic nanomedicine by nanocatalyst delivery." Nat. Commun. **8**(1): 357.
Il Kim, M., M. S. Kim, M. A. Woo, Y. Ye, K. S. Kang, J. Lee and H. G. Park (2014). "Highly efficient colorimetric detection of target cancer cells utilizing superior catalytic activity of graphene oxide-magnetic-platinum nanohybrids." Nanoscale **6**(3): 1529-1536.
Iranifam, M. (2013). "Analytical applications of chemiluminescence-detection systems assisted by magnetic microparticles and nanoparticles." TrAC Trend. Anal. Chem. **51**: 51-70.
Ishida, T., N. Kinoshita, H. Okatsu, T. Akita, T. Takei and M. Haruta (2008). "Influence of the Support and the Size of Gold Clusters on Catalytic Activity for Glucose Oxidation." Angew. Chem. Int. Ed. **47**(48): 9265-9268.
Ishida, T., S. Okamoto, R. Makiyama and M. Haruta (2009). "Aerobic oxidation of glucose and 1-phenylethanol over gold nanoparticles directly deposited on ion-exchange resins." Applied Catalysis a-General **353**(2): 243-248.
Ishii, M., R. Shibata, Y. Numaguchi, T. Kito, H. Suzuki, K. Shimizu, A. Ito, H. Honda and T. Murohara (2011). "Enhanced Angiogenesis by Transplantation of Mesenchymal Stem Cell Sheet Created by a Novel Magnetic Tissue Engineering Method." Arteriosclerosis Thrombosis and Vascular Biology **31**(10): 2210-2215.
Islamoglu, T., A. Atilgan, S.-Y. Moon, G. W. Peterson, J. B. DeCoste, M. Hall, J. T. Hupp and O. K. Farha (2017). "Cerium(IV) vs Zirconium(IV) Based Metal–Organic Frameworks for Detoxification of a Nerve Agent." Chemistry of Materials **29**(7): 2672-2675.
Jacquet, P., D. Daude, J. Bzdrenga, P. Masson, M. Elias and E. Chabriere (2016). "Current and emerging strategies for organophosphate decontamination: special focus on hyperstable enzymes." Environmental Science and Pollution Research **23**(9): 8200-8218.
Jalilov, A. S., L. G. Nilewski, V. Berka, C. Zhang, A. A. Yakovenko, G. Wu, T. A. Kent, A. L. Tsai and J. M. Tour (2017). "Perylene Diimide as a Precise Graphene-like Superoxide Dismutase Mimetic." ACS Nano **11**(2): 2024-2032.
Jampaiah, D., T. Srinivasa Reddy, V. E. Coyle, A. Nafady and S. K. Bhargava (2017). "Co3O4@CeO2 hybrid flower-like microspheres: a strong synergistic peroxidase-mimicking artificial enzyme with high sensitivity for glucose detection." J. Mater. Chem. B **5**(4): 720-730.
Jampaiah, D., T. Srinivasa Reddy, A. E. Kandjani, P. R. Selvakannan, Y. M. Sabri, V. E. Coyle, R. Shukla and S. K. Bhargava (2016). "Fe-doped CeO2nanorods for enhanced peroxidase-like activity and their application towards glucose detection." J. Mater. Chem. B **4**(22): 3874-3885.
Janos, P., J. Henych, O. Pelant, V. Pilarova, L. Vrtoch, M. Kormunda, K. Mazanec and V. Stengl (2016). "Cerium oxide for the destruction of chemical warfare agents: A comparison of synthetic routes." Journal of Hazardous Materials **304**: 259-268.
Janos, P., P. Kuran, M. Kormunda, V. Stengl, T. M. Grygar, M. Dosek, M. Stastny, J. Ederer, V. Pilarova and L. Vrtoch (2014). "Cerium dioxide as a new reactive sorbent for fast degradation of parathion methyl and some other organophosphates." J. Rare Earth. **32**(4): 360-370.
Janos, P., P. Kuran, V. Pilarova, J. Trogl, M. Stastny, O. Pelant, J. Henych, S. Bakardjieva, O. Zivotsky, M. Kormunda, K. Mazanec and M. Skoumal (2015). "Magnetically separable reactive sorbent based on the CeO2/gamma-Fe2O3 composite and its utilization for rapid degradation of the organophosphate pesticide parathion methyl and certain nerve agents." Chemical Engineering Journal **262**: 747-755.
Jawaid, P., M. U. Rehman, Q. L. Zhao, K. Takeda, K. Ishikawa, M. Hori, T. Shimizu and T. Kondo (2016). "Helium-based cold atmospheric plasma-induced reactive oxygen species-mediated apoptotic pathway attenuated by platinum nanoparticles." Journal of Cellular and Molecular Medicine **20**(9): 1737-1748.
Ji, Y., J. Xu, X. L. Chen, L. Han, X. H. Wang, F. Chai and M. S. Zhao (2015). "Inorganic-bimolecular hybrids based on polyoxometalates: Intrinsic oxidase catalytic activity and their application to cancer immunoassay." Sensors and Actuators B-Chemical **208**: 497-504.
Jia, H. M., D. F. Yang, X. N. Han, J. H. Cai, H. Y. Liu and W. W. He (2016). "Peroxidase-like activity of the Co3O4 nanoparticles used for biodetection and evaluation of antioxidant behavior." Nanoscale **8**(11): 5938-5945.
Jia, Y., H. M. Yu, L. Wu, X. D. Hou, L. Yang and C. B. Zheng (2015). "Three Birds with One Fe3O4 Nanoparticle: Integration of Microwave Digestion, Solid Phase Extraction, and Magnetic Separation for Sensitive Determination of Arsenic and Antimony in Fish." Analytical Chemistry **87**(12): 5866-5871.
Jiang, B., D. Duan, L. Gao, M. Zhou, K. Fan, Y. Tang, J. Xi, Y. Bi, Z. Tong, G. F. Gao, N. Xie, A. Tang, G. Nie, M. Liang and X. Yan (2018). "Standardized assays for determining the catalytic activity and kinetics of peroxidase-like nanozymes." Nat. Protoc. **13**(7): 1506-1520.
Jiang, C. F., Z. J. Li, Y. X. Wu, W. Guo, J. S. Wang and Q. Jiang (2018). "Colorimetric Detection of Hg2+ Based on

Enhancement of Peroxidase-like Activity of Chitosan-Gold Nanoparticles." Bulletin of the Korean Chemical Society **39**(5): 625-630.
Jiang, C. F., J. Zhu, Z. Li, J. H. Luo, J. S. Wang and Y. Sun (2017). "Chitosan-gold nanoparticles as peroxidase mimic and their application in glucose detection in serum." RSC Advances **7**(70): 44463-44469.
Jiang, H., Z. H. Chen, H. Y. Cao and Y. M. Huang (2012). "Peroxidase-like activity of chitosan stabilized silver nanoparticles for visual and colorimetric detection of glucose." Analyst **137**(23): 5560-5564.
Jiang, J. Z., J. Zou, L. H. Zhu, L. Huang, H. P. Jiang and Y. X. Zhang (2011). "Degradation of Methylene Blue with H(2)O(2) Activated by Peroxidase-Like Fe(3)O(4) Magnetic Nanoparticles." Journal of Nanoscience and Nanotechnology **11**(6): 4793-4799.
Jiang, L., S. Fernandez-Garcia, M. Tinoco, Z. Yan, Q. Xue, G. Blanco, J. J. Calvino, A. B. Hungria and X. Chen (2017). "Improved Oxidase Mimetic Activity by Praseodymium Incorporation into Ceria Nanocubes." ACS Appl. Mater. Interfaces **9**(22): 18595-18608.
Jiang, T., Y. Song, D. Du, X. T. Liu and Y. H. Lin (2016). "Detection of p53 Protein Based on Mesoporous Pt–Pd Nanoparticles with Enhanced Peroxidase-like Catalysis." ACS Sens. **1**(6): 717-724.
Jiang, T., Y. Song, T. X. Wei, H. Li, D. Du, M. J. Zhu and Y. H. Lin (2016). "Sensitive detection of Escherichia coli O157:H7 using Pt-Au bimetal nanoparticles with peroxidase-like amplification." Biosens. Bioelectron. **77**: 687-694.
Jiang, X., C. J. Sun, Y. Guo, G. J. Nie and L. Xu (2015). "Peroxidase-like activity of apoferritin paired gold clusters for glucose detection." Biosensors & Bioelectronics **64**: 165-170.
Jiang, Y. J., W. Wang, X. T. Li, X. C. Wang, J. W. Zhou and X. D. Mu (2013). "Enzyme-Mimetic Catalyst-Modified Nanoporous SiO2-Cellulose Hybrid Composites with High Specific Surface Area for Rapid H2O2 Detection." Acs Applied Materials & Interfaces **5**(6): 1913-1916.
Jiang, Y. Z., Y. Gu, G. D. Nie, M. Q. Chi, Z. Z. Yang, C. Wang, Y. Wei and X. F. Lu (2017). "Synthesis of RGO/Cu8S5/PPy Composite Nanosheets with Enhanced Peroxidase-Like Activity for Sensitive Colorimetric Detection of H2O2and Phenol." Particle & Particle Systems Characterization **34**(3): 1600233.
Jiang, Y. Z., G. D. Nie, M. Q. Chi, Z. Z. Yang, Z. Zhang, C. Wang and X. F. Lu (2016). "Synergistic effect of ternary electrospun TiO2/Fe2O3/PPy composite nanofibers on peroxidase-like mimics with enhanced catalytic performance." RSC Advances **6**(37): 31107-31113.
Jiang, Y. Z., N. Song, C. Wang, N. Pinna and X. F. Lu (2017). "A facile synthesis of Fe3O4/nitrogen-doped carbon hybrid nanofibers as a robust peroxidase-like catalyst for the sensitive colorimetric detection of ascorbic acid." J. Mater. Chem. B **5**(27): 5499-5505.
Jiang, Z. L., L. Kun, H. X. Ouyang, A. H. Liang and H. S. Jiang (2011). "A Simple and Sensitive Fluorescence Quenching Method for the Determination of H_2O_2 Using Rhodamine B and Fe_3O_4 Nanocatalyst." Journal of Fluorescence **21**(5): 2015-2020.
Jiang, Z. W., Y. Liu, X. O. Hu and Y. F. Li (2014). "Colorimetric determination of thiol compounds in serum based on Fe-MIL-88NH(2) metal-organic framework as peroxidase mimetics." Analytical Methods **6**(15): 5647-5651.
Jiao, L., L. H. Zhang, W. W. Du, S. Q. Liu, Q. Wei and H. Li (2017). "Robust enzyme-free electrochemical immunoassay of CEA enhanced by porous PdCu nanoparticles." Electrochimica Acta **252**: 374-380.
Jiao, X., W. Y. Liu, D. Wu, W. H. Liu and H. J. Song (2018). "Enhanced peroxidase-like activity of Mo-doped ceria nanoparticles for sensitive colorimetric detection of glucose." Analytical Methods **10**(1): 76-83.
Jiao, X., H. J. Song, H. H. Zhao, W. Bai, L. C. Zhang and Y. Lv (2012). "Well-redispersed ceria nanoparticles: Promising peroxidase mimetics for H2O2 and glucose detection." Analytical Methods **4**(10): 3261-3267.
Jin, C., J. H. Dong, D. X. Li, M. C. Zhu and Y. C. Zhang (2012). Characterization and Application of Expanded Graphite Coated by Fe3O4 Nanoparticles. Advanced Materials Research. Stafa-Zurich, Trans Tech Publications. **356-360:** 554-557.
Jin, H., W. Q. Chen, X. W. Tang, L. Y. Chiang, C. Y. Yang, J. V. Schloss and J. Y. Wu (2000). "Polyhydroxylated C(60), fullerenols, as glutamate receptor antagonists and neuroprotective agents." Journal of Neuroscience Research **62**(4): 600-607.
Jin, L. H., Z. Meng, Y. Q. Zhang, S. J. Cai, Z. H. Zhang, C. Li, L. Shang and Y. H. Shen (2017). "Ultrasmall Pt Nanoclusters as Robust Peroxidase Mimics for Colorimetric Detection of Glucose in Human Serum." ACS Applied Materials & Interfaces **9**(11): 10027-10033.
Jin, L. Y., Y. M. Dong, X. M. Wu, G. X. Cao and G. L. Wang (2015). "Versatile and Amplified Biosensing through Enzymatic Cascade Reaction by Coupling Alkaline Phosphatase in Situ Generation of Photoresponsive Nanozyme." Analytical Chemistry **87**(20): 10429-10436.
Jin, X., Y. Y. Zhong, L. Chen, L. J. Xu, Y. N. Wu and F. F. Fu (2018). "A Palladium-Doped Graphitic Carbon Nitride

Nanosheet with High Peroxidase-Like Activity: Preparation, Characterization, and Application in Glucose Detection." Particle & Particle Systems Characterization **35**(3): 1700359.
Jing, P., W. J. Xu, H. Y. Yi, Y. M. Wu, L. J. Bai and R. Yuan (2014). "An amplified electrochemical aptasensor for thrombin detection based on pseudobienzymic Fe3O4-Au nanocomposites and electroactive hemin/G-quadruplex as signal enhancers." Analyst **139**(7): 1756-1761.
Ju, E., K. Dong, Z. Wang, Y. Zhang, F. Cao, Z. Chen, F. Pu, J. Ren and X. Qu (2017). "Confinement of Reactive Oxygen Species in an Artificial-Enzyme-Based Hollow Structure To Eliminate Adverse Effects of Photocatalysis on UV Filters." Chemistry-a European Journal **23**(54): 13518-13524.
Ju, H. X. (2017). "Signal Amplification for Highly Sensitive Immunosensing." Journal of Analysis and Testing **1**(1): 7.
Ju, H. X. (2018). "Functional nanomaterials and nanoprobes for amplified biosensing." Appl. Mater. Today **10**: 51-71.
Ju, H. X., X. J. Zhang and J. Wang (2011). Nanostructured Mimic Enzymes for Biocatalysis and Biosensing. Nanobiosensing: Principles, Development and Application. New York, Springer**:** 85-109.
Ju, J., R. Z. Zhang and W. Chen (2016). "Photochemical deposition of surface-clean silver nanoparticles on nitrogen-doped graphene quantum dots for sensitive colorimetric detection of glutathione." Sensors and Actuators B-Chemical **228**: 66-73.
Ju, L. L., Z. Y. Chen, L. Fang, W. Dong, F. G. Zheng and M. R. Shen (2011). "Sol-Gel Synthesis and Photo-Fenton-Like Catalytic Activity of EuFeO(3) Nanoparticles." Journal of the American Ceramic Society **94**(10): 3418-3424.
Ju, P., Y. H. Xiang, Z. B. Xiang, M. Wang, Y. Zhao, D. Zhang, J. Q. Yu and X. X. Han (2016). "BiOI hierarchical nanoflowers as a novel robust peroxidase mimetics for colorimetric detection of H2O2." RSC Adv. **6**(21): 17483-17493.
Ju, P., Y. Z. Yu, M. Wang, Y. Zhao, D. Zhang, C. J. Sun and X. X. Han (2016). "Synthesis of EDTA-assisted CeVO4 nanorods as robust peroxidase mimics towards colorimetric detection of H2O2." J. Mater. Chem. B **4**(38): 6316-6325.
Ju, Y. and J. Kim (2015). "Dendrimer-encapsulated Pt nanoparticles with peroxidase-mimetic activity as biocatalytic labels for sensitive colorimetric analyses." Chem. Commun. **51**(72): 13752-13755.
Jv, Y., B. X. Li and R. Cao (2010). "Positively-charged gold nanoparticles as peroxidiase mimic and their application in hydrogen peroxide and glucose detection." Chem. Commun. **46**(42): 8017-8019.
Kaittanis, C., S. Santra, A. Asati and J. M. Perez (2012). "A cerium oxide nanoparticle-based device for the detection of chronic inflammation via optical and magnetic resonance imaging." Nanoscale **4**(6): 2117-2123.
Kaittanis, C., S. Santra and J. M. Perez (2009). "Role of Nanoparticle Valency in the Nondestructive Magnetic-Relaxation-Mediated Detection and Magnetic Isolation of Cells in Complex Media." Journal of the American Chemical Society **131**(35): 12780-12791.
Kajita, M., K. Hikosaka, M. Iitsuka, A. Kanayama, N. Toshima and Y. Miyamoto (2007). "Platinum nanoparticle is a useful scavenger of superoxide anion and hydrogen peroxide." Free Radical Research **41**(6): 615-626.
Kalinovskyy, Y., N. J. Cooper, M. J. Main, S. J. Holder and B. A. Blight (2017). "Microwave-assisted activation and modulator removal in zirconium MOFs for buffer-free CWA hydrolysis." Dalton Transactions **46**(45): 15704-15709.
Kamada, K. and N. Soh (2015). "Enzyme-Mimetic Activity of Ce-Intercalated Titanate Nanosheets." Journal of Physical Chemistry B **119**(16): 5309-5314.
Kandula, S. and P. Jeevanandam (2015). "A facile synthetic approach for SiO2@Co3O4 core-shell nanorattles with enhanced peroxidase-like activity." Rsc Advances **5**(7): 5295-5306.
Kang, F. S., X. S. Hou and K. Xu (2015). "Highly sensitive colorimetric detection of glucose in a serum based on DNA-embeded Au@Ag core-shell nanoparticles." Nanotechnology **26**(40): 405707.
Karakoti, A., S. Singh, J. M. Dowding, S. Seal and W. T. Self (2010). "Redox-active radical scavenging nanomaterials." Chemical Society Reviews **39**(11): 4422-4432.
Karakoti, A. S., N. A. Monteiro-Riviere, R. Aggarwal, J. P. Davis, R. J. Narayan, W. T. Self, J. McGinnis and S. Seal (2008). "Nanoceria as antioxidant: Synthesis and biomedical applications." JOM **60**(3): 33-37.
Karakoti, A. S., S. Singh, A. Kumar, M. Malinska, S. Kuchibhatla, K. Wozniak, W. T. Self and S. Seal (2009). "PEGylated Nanoceria as Radical Scavenger with Tunable Redox Chemistry." Journal of the American Chemical Society **131**(40): 14144-14145.
Karakoti, A. S., O. Tsigkou, S. Yue, P. D. Lee, M. M. Stevens, J. R. Jones and S. Seal (2010). "Rare earth oxides as nanoadditives in 3-D nanocomposite scaffolds for bone regeneration." Journal of Materials Chemistry **20**(40): 8912-8919.
Karim, M. N., S. R. Anderson, S. Singh, R. Ramanathan and V. Bansal (2018). "Nanostructured silver fabric as a free-standing NanoZyme for colorimetric detection of glucose in urine." Biosensors & Bioelectronics **110**: 8-15.
Karyakin, A. A., O. V. Gitelmacher and E. E. Karyakina (1995). "Prussian Blue-Based First-Generation Biosensor. A Sensitive Amperometric Electrode for Glucose." Analytical Chemistry **67**(14): 2419-2423.

Karyakin, A. A., E. E. Karyakina and L. Gorton (1998). "The electrocatalytic activity of Prussian blue in hydrogen peroxide reduction studied using a wall-jet electrode with continuous flow." J. Electroanal. Chem. **456**(1-2): 97-104.
Katz, M. J., J. E. Mondloch, R. K. Totten, J. K. Park, S. T. Nguyen, O. K. Farha and J. T. Hupp (2014). "Simple and Compelling Biomimetic Metal-Organic Framework Catalyst for the Degradation of Nerve Agent Simulants." Angew. Chem. Int. Ed. **53**(2): 497-501.
Katz, M. J., S.-Y. Moon, J. E. Mondloch, M. H. Beyzavi, C. J. Stephenson, J. T. Hupp and O. K. Farha (2015). "Exploiting parameter space in MOFs: a 20-fold enhancement of phosphate-ester hydrolysis with UiO-66-NH2." Chemical Science **6**(4): 2286-2291.
Kaur, M. and N. Kaur (2016). "Ferrites: Synthesis and Applications for Environmental Remediation." ACS Symposium Series **1238**: 113-136.
Ke, X. L., G. D. Zhu, Y. Dai, Y. Q. Shen, J. M. Yang and J. Y. Liu (2018). "Fabrication of Pt-ZnO composite nanotube modified electrodes for the detection of H2O2." Journal of Electroanalytical Chemistry **817**: 176-183.
Khaksar, M. R., M. Rahimifard, M. Baeeri, F. Maqbool, M. Navaei-Nigjeh, S. Hassani, S. Moeini-Nodeh, A. Kebriaeezadeh and M. Abdollahi (2017). "Protective effects of cerium oxide and yttrium oxide nanoparticles on reduction of oxidative stress induced by sub-acute exposure to diazinon in the rat pancreas." Journal of Trace Elements in Medicine and Biology **41**: 79-90.
Khataee, A., M. H. Irani Nezhad and J. Hassanzadeh (2018). "Improved peroxidase mimetic activity of a mixture of WS2 nanosheets and silver nanoclusters for chemiluminescent quantification of H2O2 and glucose." Microchimica Acta **185**(3): 190.
Khataee, A., M. H. Irani nezhad, J. Hassanzadeh and S. W. Joo (2018). "Superior peroxidase mimetic activity of tungsten disulfide nanosheets/silver nanoclusters composite: Colorimetric, fluorometric and electrochemical studies." Journal of Colloid and Interface Science **515**: 39-49.
Kim, C. K., T. Kim, I. Y. Choi, M. Soh, D. Kim, Y. J. Kim, H. Jang, H. S. Yang, J. Y. Kim, H. K. Park, S. P. Park, S. Park, T. Yu, B. W. Yoon, S. H. Lee and T. Hyeon (2012). "Ceria Nanoparticles that can Protect against Ischemic Stroke." Angew. Chem. Int. Ed. **51**(44): 11039-11043.
Kim, J., H. R. Cho, H. Jeon, D. Kim, C. Song, N. Lee, S. H. Choi and T. Hyeon (2017). "Continuous O2-Evolving MnFe2O4 Nanoparticle-Anchored Mesoporous Silica Nanoparticles for Efficient Photodynamic Therapy in Hypoxic Cancer." J. Am. Chem. Soc. **139**(32): 10992-10995.
Kim, J., M. Takahashi, T. Shimizu, T. Shirasawa, M. Kajita, A. Kanayama and Y. Miyamoto (2008). "Effects of a potent antioxidant, platinum nanoparticle, on the lifespan of Caenorhabditis elegans." Mechanisms of Ageing and Development **129**(6): 322-331.
Kim, M., M. S. Kim, S. H. Kweon, S. Jeong, M. H. Kang, M. I. Kim, J. Lee and J. Doh (2015). "Simple and Sensitive Point-of-Care Bioassay System Based on Hierarchically Structured Enzyme-Mimetic Nanoparticles." Adv. Healthcare Mater. **4**(9): 1311-1316.
Kim, M. C., D. Lee, S. H. Jeong, S. Y. Lee and E. Kang (2016). "Nanodiamond-Gold Nanocomposites with the Peroxidase-Like Oxidative Catalytic Activity." ACS Appl. Mater. Interfaces **8**(50): 34317-34326.
Kim, M. C. and S. Y. Lee (2015). "Peroxidase-like oxidative activity of a manganese-coordinated histidyl bolaamphiphile self-assembly." Nanoscale **7**(40): 17063-17070.
Kim, M. I., D. Cho and H. G. Park (2015). "Colorimetric Quantification of Glucose and Cholesterol in Human Blood Using a Nanocomposite Entrapping Magnetic Nanoparticles and Oxidases." Journal of Nanoscience and Nanotechnology **15**(10): 7955-7961.
Kim, M. I., K. S. Park and H. G. Park (2014). "Ultrafast colorimetric detection of nucleic acids based on the inhibition of the oxidase activity of cerium oxide nanoparticles." Chem. Commun. **50**(67): 9577-9580.
Kim, M. I., J. Shim, T. Li, J. Lee and H. G. Park (2011). "Fabrication of Nanoporous Nanocomposites Entrapping Fe_3O_4 Magnetic Nanoparticles and Oxidases for Colorimetric Biosensing." Chemistry-A European Journal **17**(38): 10700-10707.
Kim, M. I., J. Shim, T. Li, M. A. Woo, D. Cho, J. Lee and H. G. Park (2012). "Colorimetric quantification of galactose using a nanostructured multi-catalyst system entrapping galactose oxidase and magnetic nanoparticles as peroxidase mimetics." Analyst **137**(5): 1137-1143.
Kim, M. I., J. Shim, H. J. Parab, S. C. Shin, J. Lee and H. G. Park (2012). "A Convenient Alcohol Sensor Using One-Pot Nanocomposite Entrapping Alcohol Oxidase and Magnetic Nanoparticles as Peroxidase Mimetics." Journal of Nanoscience and Nanotechnology **12**(7): 5914-5919.
Kim, M. I., Y. Ye, B. Y. Won, S. Shin, J. Lee and H. G. Park (2011). "A Highly Efficient Electrochemical Biosensing Platform by Employing Conductive Nanocomposite Entrapping Magnetic Nanoparticles and Oxidase in Mesoporous Carbon

Foam." Advanced Functional Materials **21**(15): 2868-2875.
Kim, M. I., Y. Ye, M. A. Woo, J. Lee and H. G. Park (2014). "A Highly Efficient Colorimetric Immunoassay Using a Nanocomposite Entrapping Magnetic and Platinum Nanoparticles in Ordered Mesoporous Carbon." Adv. Healthcare Mater. **3**(1): 36-41.
Kim, M. S., S. H. Kweon, S. Cho, S. S. A. An, M. I. Kim, J. Doh and J. Lee (2017). "Pt-Decorated Magnetic Nanozymes for Facile and Sensitive Point-of-Care Bioassay." ACS Applied Materials & Interfaces **9**(40): 35133-35140.
Kim, M. Y. and J. Kim (2017). "Chitosan Microgels Embedded with Catalase Nanozyme-Loaded Mesocellular Silica Foam for Glucose-Responsive Drug Delivery." ACS Biomaterials Science & Engineering **3**(4): 572-578.
Kim, S., W. B. Ying, H. Jung, S. G. Ryu, B. Lee and K. J. Lee (2017). "Zirconium Hydroxide-coated Nanofiber Mats for Nerve Agent Decontamination." Chem. Asian J. **12**(6): 698-705.
Kim, S. R., S. Cho and M. I. Kim (2018). "Highly Efficient Electrochemical Detection of Phenolic Compounds Utilizing Superior Catalytic Activity of Nanohybrids Consisting of Magnetic Nanoparticles and Gold Nanoclusters." Journal of Nanoscience and Nanotechnology **18**(2): 1246-1250.
Kim, Y. S. and J. Jurng (2013). "A simple colorimetric assay for the detection of metal ions based on the peroxidase-like activity of magnetic nanoparticles." Sensors and Actuators B-Chemical **176**: 253-257.
Kinnan, M. K., W. R. Creasy, L. B. Fullmer, H. L. Schreuder-Gibson and M. Nyman (2014). "Nerve agent degradation with polyoxoniobates." European Journal of Inorganic Chemistry(14): 2361-2367.
Kisailus, D., M. Najarian, J. C. Weaver and D. E. Morse (2005). "Functionalized gold nanoparticles mimic catalytic activity of a polysiloxane-synthesizing enzyme." Advanced Materials **17**(10): 1234-1239.
Kishi, S., T. Hirakawa, K. Sato, A. Komano, C. K. Nishimoto, N. Mera, M. Kugishima, T. Sano, N. Negishi, H. Ichinose, Y. Seto and K. Takeuchi (2013). "Photocatalytic Decomposition of Ethyl S-Diisopropylaminoethyl Methylphosphonothioate (VX) by Ag and Au Metal Deposited on TiO2 in Aqueous Phase." Chemistry Letters **42**(5): 518-520.
Kluenker, M., M. N. Tahir, R. Ragg, K. Korschelt, P. Simon, T. E. Gorelik, B. Barton, S. I. Shylin, M. Panthoefer, J. Herzberger, H. Frey, V. Ksenofontov, A. Moeller, U. Kolb, J. Grin and W. Tremel (2017). "Pd@Fe2O3 Superparticles with Enhanced Peroxidase Activity by Solution Phase Epitaxial Growth." Chemistry of Materials **29**(3): 1134-1146.
Klünker, M., M. Nawaz Tahir, R. Ragg, K. Korschelt, P. Simon, T. E. Gorelik, B. Barton, S. I. Shylin, M. Panthoefer, J. Herzberger, H. Frey, D. V. Ksenofontov, A. Möller, U. Kolb, Y. Grin and W. Tremel (2016). "Pd@Fe2O3 Superparticles with Enhanced Peroxidase Activity by Solution Phase Epitaxial Growth." Chemistry of Materials **29**(3): 1134-1146.
Kolli, M. B., N. D. P. K. Manne, R. Para, S. K. Nalabotu, G. Nandyala, T. Shokuhfar, K. He, A. Hamlekhan, J. Y. Ma, P. S. Wehner, L. Dornon, R. Arvapalli, K. M. Rice and E. R. Blough (2014). "Cerium oxide nanoparticles attenuate monocrotaline induced right ventricular hypertrophy following pulmonary arterial hypertension." Biomaterials **35**(37): 9951-9962.
Komano, A., T. Hirakawa, K. Sato, S. Kishi, C. K. Nishimoto, N. Mera, M. Kugishima, T. Sano, N. Negishi, H. Ichinose, Y. Seto and K. Takeuchi (2013). "Titanium dioxide photocatalytic decomposition of ethyl-S-dimethylaminoethyl methylphosphonothiolate (VX) in aqueous phase." Applied Catalysis B-Environmental **134**: 19-25.
Konczol, M., A. Weiss, E. Stangenberg, R. Gminski, M. Garcia-Kaufer, R. Giere, I. Merfort and V. Mersch-Sundermann (2013). "Cell-Cycle Changes and Oxidative Stress Response to Magnetite in A549 Human Lung Cells." Chemical Research in Toxicology **26**(5): 693-702.
Kong, J. M., X. H. Yu, W. W. Hu, Q. Hu, S. L. Shui, L. Z. Li, X. J. Han, H. F. Xie, X. J. Zhang and T. H. Wang (2015). "A biomimetic enzyme modified electrode for H_2O_2 highly sensitive detection." Analyst **140**(22): 7792-7798.
Kong, L., X. Cai, X. H. Zhou, L. L. Wong, A. S. Karakoti, S. Seal and J. F. McGinnis (2011). "Nanoceria extend photoreceptor cell lifespan in tubby mice by modulation of apoptosis/survival signaling pathways." Neurobiology of Disease **42**(3): 514-523.
Kora, A. J. and L. Rastogi (2018). "Peroxidase activity of biogenic platinum nanoparticles: A colorimetric probe towards selective detection of mercuric ions in water samples." Sensors and Actuators B-Chemical **254**: 690-700.
Korschelt, K., R. Ragg, C. S. Metzger, M. Kluenker, M. Oster, B. Barton, M. Panthofer, D. Strand, U. Kolb, M. Mondeshki, S. Strand, J. Brieger, M. Nawaz Tahir and W. Tremel (2017). "Glycine-functionalized copper(ii) hydroxide nanoparticles with high intrinsic superoxide dismutase activity." Nanoscale **9**(11): 3952-3960.
Korschelt, K., M. N. Tahir and W. Tremel (2018). "A Step into the Future: Applications of Nanoparticle Enzyme Mimics." Chemistry-a European Journal **24**(39): 9703-9713.
Korsvik, C., S. Patil, S. Seal and W. T. Self (2007). "Superoxide dismutase mimetic properties exhibited by vacancy engineered ceria nanoparticles." Chem. Commun. (10): 1056-1058.
Kotchey, G. P., S. A. Hasan, A. A. Kapralov, S. H. Ha, K. Kim, A. A. Shvedova, V. E. Kagan and A. Star (2012). "A Natural

Vanishing Act: The Enzyme-Catalyzed Degradation of Carbon Nanomaterials." Accounts of Chemical Research **45**(10): 1770-1781.
Kotov, N. A. (2010). "Inorganic Nanoparticles as Protein Mimics." Science **330**(6001): 188-189.
Kou, B. B., Y. Q. Chai, Y. L. Yuan and R. Yuan (2017). "PtNPs as Scaffolds to Regulate Interenzyme Distance for Construction of Efficient Enzyme Cascade Amplification for Ultrasensitive Electrochemical Detection of MMP-2." Anal. Chem. **89**(17): 9383-9387.
Kowsalya Vellingiri , L. P., Ki Hyun Kim (2017). "Metal–organic frameworks as media for the catalytic degradation." Coordination Chemistry Reviews **353**: 159-179.
Krusic, P. J., E. Wasserman, P. N. Keizer, J. R. Morton and K. F. Preston (1991). "Radical Reactions of C60." Science **254**(5035): 1183-1185.
Kuah, E., S. Toh, J. Yee, Q. Ma and Z. Gao (2016). "Enzyme Mimics: Advances and Applications." Chemistry-a European Journal **22**(25): 8404-8430.
Kuchma, M. H., C. B. Komanski, J. Colon, A. Teblum, A. E. Masunov, B. Alvarado, S. Babu, S. Seal, J. Summy and C. H. Baker (2010). "Phosphate ester hydrolysis of biologically relevant molecules by cerium oxide nanoparticles." Nanomedicine-Nanotechnology Biology and Medicine **6**(6): 738-744.
Kumar, A., S. Das, P. Munusamy, W. Self, D. R. Baer, D. C. Sayle and S. Seal (2014). "Behavior of nanoceria in biologically-relevant environments." Environ. Sci. -Nano **1**(6): 516-532.
Kumar, S., P. Bhushan and S. Bhattacharya (2017). "Facile synthesis of Au@Ag-hemin decorated reduced graphene oxide sheets: a novel peroxidase mimetic for ultrasensitive colorimetric detection of hydrogen peroxide and glucose." RSC Advances **7**(60): 37568-37577.
Kumari, S., B. B. Dhar, C. Panda, A. Meena and S. Sen Gupta (2014). "Fe-TAML Encapsulated Inside Mesoporous Silica Nanoparticles as Peroxidase Mimic: Femtomolar Protein Detection." Acs Applied Materials & Interfaces **6**(16): 13866-13873.
Kuo, P. C., C. W. Lien, J. Y. Mao, B. Unnikrishnan, H. T. Chang, H. J. Lin and C. C. Huang (2018). "Detection of urinary spermine by using silver-gold/silver chloride nanozymes." Analytica Chimica Acta **1009**: 89-97.
Kwon, H. J., M.-Y. Cha, D. Kim, D. K. Kim, M. Soh, K. Shin, T. Hyeon and I. Mook-Jung (2016). "Mitochondria-Targeting Ceria Nanoparticles as Antioxidants for Alzheimer's Disease." ACS Nano **10**(2): 2860-2870.
Kwon, H. J., D. Kim, K. Seo, Y. G. kIm, S. I. Han, T. Kang, M. Soh and T. Hyeon (2018). "Ceria nanoparticle systems for selective scavenging of mitochondrial, intracellular, and extracellular reactive oxygen species in Parkinson's disease." Angew. Chem. Int. Ed. **57**(30): 9408-9412.
Lai, W., Q. Wei, M. Xu, J. Zhuang and D. Tang (2017). "Enzyme-controlled dissolution of MnO2 nanoflakes with enzyme cascade amplification for colorimetric immunoassay." Biosens. Bioelectron. **89**(Pt 1): 645-651.
Lai, W. Q., J. Y. Zhuang, X. H. Que, L. B. Fu and D. P. Tang (2014). "Mesoporous nanogold-MnO2-poly(o-phenylenediamine) hollow microspheres as nanotags and peroxidase mimics for sensing biomolecules." Biomater. Sci. **2**(8): 1073-1079.
Lan, J. M., W. M. Xu, Q. P. Wan, X. Zhang, J. Lin, J. H. Chen and J. Z. Chen (2014). "Colorimetric determination of sarcosine in urine samples of prostatic carcinoma by mimic enzyme palladium nanoparticles." Analytica Chimica Acta **825**: 63-68.
Lang, N. J., B. W. Liu and J. W. Liu (2014). "Characterization of glucose oxidation by gold nanoparticles using nanoceria." Journal of Colloid and Interface Science **428**: 78-83.
Lee, D. T., J. Zhao, G. W. Peterson and G. N. Parsons (2017). "Catalytic "MOF-Cloth" Formed via Directed Supramolecular Assembly of UiO-66-NH2 Crystals on Atomic Layer Deposition-Coated Textiles for Rapid Degradation of Chemical Warfare Agent Simulants." Chemistry of Materials **29**(11): 4894-4903.
Lee, J. W., H. J. Jeon, H. J. Shin and J. K. Kang (2012). "Superparamagnetic Fe_3O_4 nanoparticles-carbon nitride nanotube hybrids for highly efficient peroxidase mimetic catalysts." Chem. Commun. **48**(3): 422-424.
Lee, J. W., S. Yoon, Y. M. Lo, H. H. Wu, S. Y. Lee and B. Moon (2015). "Intrinsic polyphenol oxidase-like activity of gold@platinum nanoparticles." Rsc Advances **5**(78): 63757-63764.
Lee, S. S., W. Song, M. Cho, H. L. Puppala, N. Phuc, H. Zhu, L. Segatori and V. L. Colvin (2013). "Antioxidant Properties of Cerium Oxide Nanocrystals as a Function of Nanocrystal Diameter and Surface Coating." ACS Nano **7**(11): 9693-9703.
Lee, S. Y., S. Lee, J. Lee, H. S. Lee and J. H. Chang (2013). "Biomimetic magnetic nanoparticles for rapid hydrolysis of ester compounds." Materials Letters **110**: 229-232.
Lee, Y. C., M. I. Kim, M. A. Woo, H. G. Park and J. I. Han (2013). "Effective peroxidase-like activity of a water-solubilized Fe-aminoclay for use in immunoassay." Biosensors & Bioelectronics **42**: 373-378.

Lei, J. Y., X. F. Lu, G. D. Nie, Z. Q. Jiang and C. Wang (2015). "One-Pot Synthesis of Algae-Like MoS2/PPy Nanocomposite: A Synergistic Catalyst with Superior Peroxidase-Like Catalytic Activity for H2O2 Detection." Particle & Particle Systems Characterization **32**(9): 886-892.
Levy, R. (2006). "Peptide-capped gold nanoparticles: Towards artificial proteins." ChemBioChem **7**(8): 1141-1145.
Li, A. P., Q. X. Yuchi and L. B. Zhang (2018). "Ferritin: a Powerful Platform for Nanozymes." Progress in Biochemistry and Biophysics **45**(2): 193-203.
Li, B., D. M. Chen, J. Q. Wang, Z. Y. Yan, L. Jiang, D. L. Duan, J. He, Z. R. Luo, J. P. Zhang and F. G. Yuan (2014). "MOFzyme: Intrinsic protease-like activity of Cu-MOF." Sci. Rep. **4**: 6759.
Li, B. L., H. Q. Luo, J. L. Lei and N. B. Li (2014). "Hemin-functionalized MoS2 nanosheets: enhanced peroxidase-like catalytic activity with a steady state in aqueous solution." Rsc Advances **4**(46): 24256-24262.
Li, D., H. Y. Han, Y. H. Wang, X. Wang, Y. G. Li and E. B. Wang (2013). "Modification of Tetranuclear Zirconium-Substituted Polyoxometalates - Syntheses, Structures, and Peroxidase-Like Catalytic Activities." European Journal of Inorganic Chemistry(10-11): 1926-1934.
Li, D. l., K. Dai, X. Zhang, K. L. Zhang, R. Y. Bai, R. Hu and Y. H. Yang (2017). "The research on the detection of dopamine in cells based on nano − porous platinum." J. Yunnan Univ. **39**(03): 447-453.
Li, F., T. Y. Li, C. X. Sun, J. H. Xia, Y. Jiao and H. P. Xu (2017). "Selenium-Doped Carbon Quantum Dots for Free-Radical Scavenging." Angew. Chem. Int. Ed. **56**(33): 9910-9914.
Li, G. L., P. Ma, Y. F. Zhang, X. L. Liu, H. Zhang, W. M. Xue, Y. Mi, Y. E. Luo and H. M. Fan (2016). "Synthesis of Cu_2O nanowire mesocrystals using PTCDA as a modifier and their superior peroxidase-like activity." Journal of Materials Science **51**(8): 3979-3988.
Li, G. W., L. Hong, M. S. Tong, H. H. Deng, X. H. Xia and W. Chen (2015). "Determination of tannic acid based on luminol chemiluminescence catalyzed by cupric oxide nanoparticles." Analytical Methods **7**(5): 1924-1928.
Li, H., T. Wang, Y. Wang, S. Wang, P. Su and Y. Yang (2018). "Intrinsic Triple-Enzyme Mimetic Activity of V6O13 Nanotextiles: Mechanism Investigation and Colorimetric and Fluorescent Detections." Industrial & Engineering Chemistry Research **57**(6): 2416-2425.
Li, H., Z. Y. Yang, C. Liu, Y. P. Zeng, Y. H. Hao, Y. Gu, W. D. Wang and R. Li (2015). "PEGylated ceria nanoparticles used for radioprotection on human liver cells under gamma-ray irradiation." Free Radical Biology and Medicine **87**: 26-35.
Li, H. P., H. F. Liu, J. D. Zhang, Y. X. Cheng, C. L. Zhang, X. Y. Fei and Y. Z. Xian (2017). "Platinum Nanoparticle Encapsulated Metal-Organic Frameworks for Colorimetric Measurement and Facile Removal of Mercury(II)." ACS Applied Materials & Interfaces **9**(46): 40716-40725.
Li, J., Y. Cao, S. S. Hinman, K. S. McKeating, Y. Guan, X. Hu, Q. Cheng and Z. Yang (2018). "Efficient label-free chemiluminescent immunosensor based on dual functional cupric oxide nanorods as peroxidase mimics." Biosensors & Bioelectronics **100**: 304-311.
Li, J., Y. Li, J. N. Peng and S. L. Feng (2015). "Kinetic spectrofluorimetric determination of hydrogen peroxide with Fe_3 O_4 magnetic nanomaterials." Chem. Res. Appl.(03): 388-392.
Li, J. N., W. Q. Liu, X. C. Wu and X. F. Gao (2015). "Mechanism of pH-switchable peroxidase and catalase-like activities of gold, silver, platinum and palladium." Biomaterials **48**: 37-44.
Li, J. R., L. Lv, G. N. Zhang, X. D. Zhou, A. G. Shen and J. M. Hu (2016). "Core-shell Fructus Broussonetia-like Au@Ag@Pt nanoparticles as highly efficient peroxidase mimetics for supersensitive resonance-enhanced Raman sensing." Analytical Methods **8**(9): 2097-2105.
Li, J. R., A. G. Shen and J. M. Hu (2016). "Research Progress of Nanozymes and Its Application in Analysis." Chinese J. Appl. Chem. **33**(11): 1245-1252.
Li, J. R., J. Wang, Y. L. Wang and M. Trau (2017). "Simple and rapid colorimetric detection of melanoma circulating tumor cells using bifunctional magnetic nanoparticles." Analyst **142**(24): 4788-4793.
Li, J. R., G. N. Zhang, L. H. Wang, A. G. Shen and J. M. Hu (2015). "Simultaneous enzymatic and SERS properties of bifunctional chitosan-modified popcorn-like Au-Ag nanoparticles for high sensitive detection of melamine in milk powder." Talanta **140**: 204-211.
Li, J. X., Z. Q. Gao, H. H. Ye, S. L. Wan, M. Pierce, D. P. Tang and X. H. Xia (2017). "A non-enzyme cascade amplification strategy for colorimetric assay of disease biomarkers." Chem. Commun. **53**(65): 9055-9058.
Li, K., K. Wang, W. W. Qin, S. H. Deng, D. Li, J. Y. Shi, Q. Huang and C. H. Fan (2015). "DNA-Directed Assembly of Gold Nanohalo for Quantitative Plasmonic Imaging of Single-Particle Catalysis." Journal of the American Chemical Society **137**(13): 4292-4295.
Li, K. F., C. F. Chen, C. Y. Chen, Y. Z. Wang, Z. Wei, W. D. Pan and T. Song (2015). "Magnetosomes extracted from Magnetospirillum magneticum strain AMB-1 showed enhanced peroxidase-like activity under visible-light irradiation."

Enzyme Microb. Tech. **72**: 72-78.
Li, L., L. Zhang, U. Carmona and M. Knez (2014). "Semi-artificial and bioactive ferroxidase with nanoparticles as the active sites." Chem. Commun. **50**(59): 8021-8023.
Li, L. L., L. H. Ai, C. H. Zhang and J. Jiang (2014). "Hierarchical {001}-faceted BiOBr microspheres as a novel biomimetic catalyst: dark catalysis towards colorimetric biosensing and pollutant degradation." Nanoscale **6**(9): 4627-4634.
Li, L. L., K. X. Liang, Z. T. Hua, M. Zou, K. Z. Chen and W. Wang (2015). "A green route to water-soluble polyaniline for photothermal therapy catalyzed by iron phosphates peroxidase mimic." Polym. Chem.-UK **6**(12): 2290-2296.
Li, L. L., W. Wang and K. Z. Chen (2014). "Synthesis of Black Elemental Selenium Peroxidase Mimic and Its Application in Green Synthesis of Water-Soluble Polypyrrole as a Photothermal Agent." Journal of Physical Chemistry C **118**(45): 26351-26358.
Li, L. L., C. M. Zeng, L. H. Ai and J. Jiang (2015). "Synthesis of reduced graphene oxide-iron nanoparticles with superior enzyme-mimetic activity for biosensing application." Journal of Alloys and Compounds **639**: 470-477.
Li, M., P. Shi, C. Xu, J. S. Ren and X. G. Qu (2013). "Cerium oxide caged metal chelator: anti-aggregation and anti-oxidation integrated H_2O_2-responsive controlled drug release for potential Alzheimer's disease treatment." Chemical Science **4**(6): 2536-2542.
Li, N., Y. Yan, B. Y. Xia, J. Y. Wang and X. Wang (2014). "Novel tungsten carbide nanorods: An intrinsic peroxidase mimetic with high activity and stability in aqueous and organic solvents." Biosensors & Bioelectronics **54**: 521-527.
Li, P., R. C. Klet, S. Y. Moon, T. C. Wang, P. Deria, A. W. Peters, B. M. Klahr, H. J. Park, S. S. Al-Juaid, J. T. Hupp and O. K. Farha (2015). "Synthesis of nanocrystals of Zr-based metal-organic frameworks with csq-net: significant enhancement in the degradation of a nerve agent simulant." Chem. Commun. **51**(54): 10925-10928.
Li, Q., G. E. Tang, X. W. Xiong, Y. L. Cao, L. L. Chen, F. G. Xu and H. L. Tan (2015). "Carbon coated magnetite nanoparticles with improved water-dispersion and peroxidase-like activity for colorimetric sensing of glucose." Sensors and Actuators B-Chemical **215**: 86-92.
Li, Q. Y., G. H. Tang, S. H. Xue, X. S. He, P. Miao, Y. N. Li, J. X. Wang, L. Q. Xiong, Y. T. Wang, C. F. Zhang and G. Y. Yang (2013). "Silica-coated superparamagnetic iron oxide nanoparticles targeting of EPCs in ischemic brain injury." Biomaterials **34**(21): 4982-4992.
Li, R. M., M. M. Zhen, M. R. Guan, D. Q. Chen, G. Q. Zhang, J. C. Ge, P. Gong, C. R. Wang and C. Y. Shu (2013). "A novel glucose colorimetric sensor based on intrinsic peroxidase-like activity of C_{60}-carboxyfullerenes." Biosensors & Bioelectronics **47**: 502-507.
Li, R. M., Y. Zhou, L. Zou, S. M. Li, J. Wang, C. Y. Shu, C. R. Wang, J. C. Ge and L. S. Ling (2017). "In situ growth of gold nanoparticles on hydrogen-bond supramolecular structures with high peroxidase-like activity at neutral pH and their application to one-pot blood glucose sensing." Sensors and Actuators B: Chemical **245**: 656-664.
Li, S., L. Y. Zhang, Y. Jiang, S. Y. Zhu, X. X. Lv, Z. Q. Duan and H. Wang (2017). "In-site encapsulating gold "nanowires" into hemin-coupled protein scaffolds through biomimetic assembly towards the nanocomposites with strong catalysis, electrocatalysis, and fluorescence properties." Nanoscale **9**(41): 16005-16011.
Li, S. L., H. Li, F. J. Chen, J. Liu, H. L. Zhang, Z. Y. Yang and B. D. Wang (2016). "Strong coupled palladium nanoparticles decorated on magnetic graphene nanosheets as enhanced peroxidase mimetics for colorimetric detection of H2O2." Dyes and Pigments **125**: 64-71.
Li, S. Q., L. T. Wang, X. D. Zhang, H. X. Chai and Y. M. Huang (2018). "A Co,N co-doped hierarchically porous carbon hybrid as a highly efficient oxidase mimetic for glutathione detection." Sensors and Actuators B-Chemical **264**: 312-319.
Li, S. R., Y. C. Huang, J. R. Liu, E. K. Wang and H. Wei (2018). "Nanozymes in Analytical Chemistry: From in vitro Detection to Live Bioassays." Progress in Biochemistry and Biophysics **45**(2): 129-147.
Li, W., C. Bin, H. X. Zhang, Y. H. Sun, J. Wang, J. L. Zhang and Y. Fu (2015). "BSA-stabilized Pt nanozyme for peroxidase mimetics and its application on colorimetric detection of mercury(II) ions." Biosensors & Bioelectronics **66**: 251-258.
Li, W., Z. Liu, C. Liu, Y. Guan, J. Ren and X. Qu (2017). "Manganese Dioxide Nanozymes as Responsive Cytoprotective Shells for Individual Living Cell Encapsulation." Angew. Chem. Int. Ed. **56**(44): 13661-13665.
Li, W., H. X. Zhang, J. L. Zhang and Y. Fu (2015). "Synthesis and sensing application of glutathione-capped platinum nanoparticles." Analytical Methods **7**(11): 4464-4471.
Li, X., Z. Qi, K. Liang, X. Bai, J. Xu, J. Liu and J. Shen (2008). "An Artificial Supramolecular Nanozyme Based on β-Cyclodextrin-Modified Gold Nanoparticles." Catalysis Letters **124**(3): 413-417.
Li, X. J., Y. S. Wang, S. Y. Yang, X. Tang, L. Liu, B. Zhou, X. F. Wang, Y. F. Zhu, Y. Q. Huang and S. Z. He (2016). "Determination of metallothioneins based on the enhanced peroxidase-like activity of mercury-coated gold nanoparticles aggregated by metallothioneins." Microchimica Acta **183**(7): 2123-2129.

Li, X. N., F. Wen, B. Creran, Y. Jeong, X. R. Zhang and V. M. Rotello (2012). "Colorimetric Protein Sensing Using Catalytically Amplified Sensor Arrays." Small **8**(23): 3589-3592.
Li, X. Q., F. Yuan, G. X. Cao and G. L. Wang (2017). "Sensitive Detection of Pyrophosphate Using a Novel Colorimetric Sensor Based on Carbon Quantum Dots Photocatalytic Mimic Enzyme Activity." J. Instrumental Anal. **36**(06): 794-799.
Li, Y., J. Xuan, Y. J. Song, P. Wang and L. D. Qin (2015). "A microfluidic platform with digital readout and ultra-low detection limit for quantitative point-of-care diagnostics." Lab Chip **15**(16): 3300-3306.
Li, Y. H., X. L. Li, Y. S. Wong, T. F. Chen, H. B. Zhang, C. R. Liu and W. J. Zheng (2011). "The reversal of cisplatin-induced nephrotoxicity by selenium nanoparticles functionalized with 11-mercapto-1-undecanol by inhibition of ROS-mediated apoptosis." Biomaterials **32**(34): 9068-9076.
Li, Y. Q., Q. Gao, L. J. Zhang, Y. S. Zhou, Y. X. Zhong, Y. Ying, M. C. Zhang, C. Q. Huang and Y. A. Wang (2018). "H5PV2Mo10O40 encapsulated in MIL-101(Cr): facile synthesis and characterization of rationally designed composite materials for efficient decontamination of sulfur mustardt." Dalton Transactions **47**(18): 6394-6403.
Li, Y. Y., X. He, J. J. Yin, Y. H. Ma, P. Zhang, J. Y. Li, Y. Y. Ding, J. Zhang, Y. L. Zhao, Z. F. Chai and Z. Y. Zhang (2015). "Acquired Superoxide-Scavenging Ability of Ceria Nanoparticles." Angew. Chem. Int. Ed. **54**(6): 1832-1835.
Li, Y. Z., T. T. Li, W. Chen and Y. Y. Song (2017). "Co4N Nanowires: Noble-Metal-Free Peroxidase Mimetic with Excellent Salt- and Temperature-Resistant Abilities." ACS Applied Materials & Interfaces **9**(35): 29881-29888.
Li, Z. H., X. D. Yang, Y. B. Yang, Y. N. Tan, Y. He, M. Liu, X. W. Liu and Q. Yuan (2018). "Peroxidase-Mimicking Nanozyme with Enhanced Activity and High Stability Based on Metal-Support Interactions." Chemistry-a European Journal **24**(2): 409-415.
Liang, H., F. F. Lin, Z. J. Zhang, B. W. Liu, S. H. Jiang, Q. P. Yuan and J. W. Liu (2017). "Multicopper Laccase Mimicking Nanozymes with Nucleotides as Ligands." ACS Appl. Mater. Interfaces **9**(2): 1352-1360.
Liang, L. L., S. G. Ge, L. Li, F. Liu and J. H. Yu (2015). "Microfluidic paper-based multiplex colorimetric immunodevice based on the catalytic effect of Pd/Fe3O4@C peroxidase mimetics on multiple chromogenic reactions." Analytica Chimica Acta **862**: 70-76.
Liang, M. M., K. L. Fan, Y. Pan, H. Jiang, F. Wang, D. L. Yang, D. Lu, J. Feng, J. J. Zhao, L. Yang and X. Y. Yan (2013). "Fe_3O_4 Magnetic Nanoparticle Peroxidase Mimetic-Based Colorimetric Assay for the Rapid Detection of Organophosphorus Pesticide and Nerve Agent." Analytical Chemistry **85**(1): 308-312.
Liang, M. M. and F. X. Meng (2018). "Nanozyme: opportunities and challenges." Progress in Biochemistry and Biophysics **45**(02): 272-276.
Liang, X., C. J. Liu and P. Y. Kuai (2008). "Selective oxidation of glucose to gluconic acid over argon plasma reduced Pd/Al2O3." Green Chemistry **10**(12): 1318-1322.
Liao, H., L. Z. Hu, Y. Zhang, X. R. Yu, Y. L. Liu and R. Li (2018). "A highly selective colorimetric sulfide assay based on the inhibition of the peroxidase-like activity of copper nanoclusters." Microchimica Acta **185**(2): 143.
Lien, C. W., Y. C. Chen, H. T. Chang and C. C. Huang (2013). "Logical regulation of the enzyme-like activity of gold nanoparticles by using heavy metal ions." Nanoscale **5**(17): 8227-8234.
Lien, C. W., C. C. Huang and H. T. Chang (2012). "Peroxidase-mimic bismuth-gold nanoparticles for determining the activity of thrombin and drug screening." Chem. Commun. **48**(64): 7952-7954.
Lien, C. W., Y. T. Tseng, C. C. Huang and H. T. Chang (2014). "Logic Control of Enzyme-Like Gold Nanoparticles for Selective Detection of Lead and Mercury Ions." Analytical Chemistry **86**(4): 2065-2072.
Lien, C. W., B. Unnikrishnan, S. G. Harroun, C. M. Wang, J. Y. Chang, H. T. Chang and C. C. Huang (2018). "Visual detection of cyanide ions by membrane-based nanozyme assay." Biosensors & Bioelectronics **102**: 510-517.
Lin, A. M. Y., B. Y. Chyi, S. D. Wang, H. H. Yu, P. P. Kanakamma, T. Y. Luh, C. K. Chou and L. T. Ho (1999). "Carboxyfullerene prevents iron-induced oxidative stress in rat brain." Journal of Neurochemistry **72**(4): 1634-1640.
Lin, B., Q. Q. Sun, K. Liu, D. Q. Lu, Y. Fu, Z. A. Xu and W. Zhang (2014). "Label-Free Colorimetric Protein Assay and Logic Gates Design Based on the Self-assembly of Hemin-Graphene Hybrid Nanosheet." Langmuir **30**(8): 2144-2151.
Lin, L. P., X. H. Song, Y. Y. Chen, M. C. Rong, T. T. Zhao, Y. R. Wang, Y. Q. Jiang and X. Chen (2015). "Intrinsic peroxidase-like catalytic activity of nitrogen-doped graphene quantum dots and their application in the colorimetric detection of H2O2 and glucose." Analytica Chimica Acta **869**: 89-95.
Lin, S., J. Wu, J. Yao, W. Cao, F. Muhammad and H. Wei (2018). Nanozymes for Biomedical Sensing Applications: from in vitro Sensing to Living Systems. Biomedical Applications of Functionalized Nanomaterials, Elsevier**:** 171-201.
Lin, T. R., Y. M. Qin, Y. L. Huang, R. T. Yang, L. Hou, F. G. Ye and S. L. Zhao (2018). "A label-free fluorescence assay for hydrogen peroxide and glucose based on the bifunctional MIL-53(Fe) nanozyme." Chem. Commun. **54**(14): 1762-1765.
Lin, T. R., L. S. Zhong, L. Q. Guo, F. F. Fu and G. N. Chen (2014). "Seeing diabetes: visual detection of glucose based on

the intrinsic peroxidase-like activity of MoS2 nanosheets." Nanoscale **6**(20): 11856-11862.
Lin, T. R., L. S. Zhong, Z. P. Song, L. Q. Guo, H. Y. Wu, Q. Q. Guo, Y. Chen, F. F. Fu and G. N. Chen (2014). "Visual detection of blood glucose based on peroxidase-like activity of WS2 nanosheets." Biosensors & Bioelectronics **62**: 302-307.
Lin, T. R., L. S. Zhong, J. Wang, L. Q. Guo, H. Y. Wu, Q. Q. Guo, F. F. Fu and G. N. Chen (2014). "Graphite-like carbon nitrides as peroxidase mimetics and their applications to glucose detection." Biosensors & Bioelectronics **59**: 89-93.
Lin, X. D., Y. Q. Liu, Z. H. Tao, J. T. Gao, J. K. Deng, J. J. Yin and S. Wang (2017). "Nanozyme-based bio-barcode assay for high sensitive and logic-controlled specific detection of multiple DNAs." Biosens. Bioelectron. **94**: 471-477.
Lin, X. Q., H. H. Deng, G. W. Wu, H. P. Peng, A. L. Liu, X. H. Lin, X. H. Xia and W. Chen (2015). "Platinum nanoparticles/graphene-oxide hybrid with excellent peroxidase-like activity and its application for cysteine detection." Analyst **140**(15): 5251-5256.
Lin, Y. H., Y. Y. Huang, J. S. Ren and X. G. Qu (2014). "Incorporating ATP into biomimetic catalysts for realizing exceptional enzymatic performance over a broad temperature range." NPG Asia Mater. **6**: e114.
Lin, Y. H., Z. H. Li, Z. W. Chen, J. S. Ren and X. G. Qu (2013). "Mesoporous silica-encapsulated gold nanoparticles as artificial enzymes for self-activated cascade catalysis." Biomaterials **34**(11): 2600-2610.
Lin, Y. H., J. S. Ren and X. G. Qu (2014). "Catalytically Active Nanomaterials: A Promising Candidate for Artificial Enzymes." Accounts of Chemical Research **47**(4): 1097-1105.
Lin, Y. H., J. S. Ren and X. G. Qu (2014). "Nano-Gold as Artificial Enzymes: Hidden Talents." Advanced Materials **26**(25): 4200-4217.
Lin, Y. H., L. Wu, Y. Y. Huang, J. S. Ren and X. G. Qu (2015). "Positional assembly of hemin and gold nanoparticles in graphene-mesoporous silica nanohybrids for tandem catalysis." Chemical Science **6**(2): 1272-1276.
Lin, Y. H., C. Xu, J. S. Ren and X. G. Qu (2012). "Using Thermally Regenerable Cerium Oxide Nanoparticles in Biocomputing to Perform Label-free, Resettable, and Colorimetric Logic Operations." Angew. Chem. Int. Ed. **51**(50): 12579-12583.
Lin, Y. H., A. D. Zhao, Y. Tao, J. S. Ren and X. G. Qu (2013). "Ionic Liquid as an Efficient Modulator on Artificial Enzyme System: Toward the Realization of High-Temperature Catalytic Reactions." Journal of the American Chemical Society **135**(11): 4207-4210.
Ling, P. H., J. P. Lei, L. Zhang and H. X. Ju (2015). "Porphyrin-Encapsulated Metal-Organic Frameworks as Mimetic Catalysts for Electrochemical DNA Sensing via Allosteric Switch of Hairpin DNA." Analytical Chemistry **87**(7): 3957-3963.
Ling, P. H., Q. Zhang, T. T. Cao and F. Gao (2018). "Versatile Three-Dimensional Porous Cu@Cu2 O Aerogel Networks as Electrocatalysts and Mimicking Peroxidases." Angew. Chem. Int. Ed. **57**(23): 6819-6824.
Ling, Y. H., M. C. Long, P. D. Hu, Y. Chen and J. W. Huang (2014). "Magnetically separable core-shell structural gamma-Fe2O3@Cu/Al-MCM-41 nanocomposite and its performance in heterogeneous Fenton catalysis." Journal of Hazardous Materials **264**: 195-202.
Liu, B. W., X. Han and J. W. Liu (2016). "Iron oxide nanozyme catalyzed synthesis of fluorescent polydopamine for light-up Zn2+ detection." Nanoscale **8**: 13620-13626.
Liu, B. W., Z. C. Huang and J. W. Liu (2016). "Boosting the oxidase mimicking activity of nanoceria by fluoride capping: rivaling protein enzymes and ultrasensitive F(-) detection." Nanoscale **8**(28): 13562-13567.
Liu, B. W. and J. W. Liu (2015). "Accelerating peroxidase mimicking nanozymes using DNA." Nanoscale **7**(33): 13831-13835.
Liu, B. W. and J. W. Liu (2017). "Surface modification of nanozymes." Nano Research **10**(4): 1125-1148.
Liu, B. W., Z. Y. Sun, P.-J. J. Huang and J. W. Liu (2015). "Hydrogen Peroxide Displacing DNA from Nanoceria: Mechanism and Detection of Glucose in Serum." Journal of the American Chemical Society **137**(3): 1290-1295.
Liu, C. H. and W. L. Tseng (2011). "Oxidase-functionalized Fe_3O_4 nanoparticles for fluorescence sensing of specific substrate." Analytica Chimica Acta **703**(1): 87-93.
Liu, C. P., T. H. Wu, Y. L. Lin, C. Y. Liu, S. Wang and S. Y. Lin (2016). "Tailoring Enzyme-Like Activities of Gold Nanoclusters by Polymeric Tertiary Amines for Protecting Neurons Against Oxidative Stress." Small **12**(30): 4127-4135.
Liu, C. P., T. H. Wu, C. Y. Liu, K. C. Chen, Y. X. Chen, G. S. Chen and S. Y. Lin (2017). "Self-Supplying O-2 through the Catalase-Like Activity of Gold Nanoclusters for Photodynamic Therapy against Hypoxic Cancer Cells." Small **13**(26): 1700278.
Liu, F. F., J. He, M. L. Zeng, J. Hao, Q. H. Guo, Y. H. Song and L. Wang (2016). "Cu–hemin metal-organic frameworks with peroxidase-like activity as peroxidase mimics for colorimetric sensing of glucose." Journal of Nanoparticle Research **18**(5): 106.

Liu, F. P., J. Q. Tang, J. Xu, Y. Shu, Q. Xu, H. M. Wang and X. Y. Hu (2016). "Low potential detection of indole-3-acetic acid based on the peroxidase-like activity of hemin/reduced graphene oxide nanocomposite." Biosens. Bioelectron. **86**: 871-878.
Liu, G. F., M. Filipovic, I. Ivanovic-Burmazovic, F. Beuerle, P. Witte and A. Hirsch (2008). "High catalytic activity of dendritic C(60) monoadducts in metal-free superoxide dismutation." Angew. Chem. Int. Ed. **47**(21): 3991-3994.
Liu, G. F., N. Wang, J. T. Zhou, A. J. Wang, J. Wang, R. F. Jin and H. Lv (2015). "Microbial preparation of magnetite/reduced graphene oxide nanocomposites for the removal of organic dyes from aqueous solutions." Rsc Advances **5**(116): 95857-95865.
Liu, H. Y., C. C. Gu, W. W. Xiong and M. Z. Zhang (2015). "A sensitive hydrogen peroxide biosensor using ultra-small CuInS2 nanocrystals as peroxidase mimics." Sensors and Actuators B-Chemical **209**: 670-676.
Liu, H. Y., M. R. Jiao, C. C. Gu and M. Z. Zhang (2018). "Au@CuxOS yolk-shell nanomaterials with porous shells act as a new peroxidase mimic for the colorimetric detection of H2O2." Journal of Alloys and Compounds **741**: 197-204.
Liu, J., M. R. Cui, L. Niu, H. Zhou and S. S. Zhang (2016). "Enhanced Peroxidase-Like Properties of Graphene-Hemin-Composite Decorated with Au Nanoflowers as Electrochemical Aptamer Biosensor for the Detection of K562 Leukemia Cancer Cells." Chemistry-A European Journal **22**(50): 18001-18008.
Liu, J., L. J. Meng, Z. F. Fei, P. J. Dyson, X. N. Jing and X. Liu (2017). "MnO2 nanosheets as an artificial enzyme to mimic oxidase for rapid and sensitive detection of glutathione." Biosens. Bioelectron. **90**: 69-74.
Liu, J., X. Y. Xin, H. Zhou and S. S. Zhang (2015). "A Ternary Composite Based on Graphene, Hemin, and Gold Nanorods with High Catalytic Activity for the Detection of Cell-Surface Glycan Expression." Chemistry-a European Journal **21**(5): 1908-1914.
Liu, J., W. Zhang, H. L. Zhang, Z. Y. Yang, T. R. Li, B. D. Wang, X. Huo, R. Wang and H. T. Chen (2013). "A multifunctional nanoprobe based on Au-Fe3O4 nanoparticles for multimodal and ultrasensitive detection of cancer cells." Chem. Commun. **49**(43): 4938-4940.
Liu, J. B., X. N. Hu, S. Hou, T. Wen, W. Q. Liu, X. Zhu and X. C. Wu (2011). "Screening of inhibitors for oxidase mimics of Au@Pt nanorods by catalytic oxidation of OPD." Chem. Commun. **47**(39): 10981-10983.
Liu, J. B., X. N. Hu, S. Hou, T. Wen, W. Q. Liu, X. Zhu, J. J. Yin and X. C. Wu (2012). "Au@Pt core/shell nanorods with peroxidase- and ascorbate oxidase-like activities for improved detection of glucose." Sensors and Actuators B-Chemical **166**: 708-714.
Liu, J. B., X. M. Jiang, L. M. Wang, Z. J. Hu, T. Wen, W. Q. Liu, J. J. Yin, C. Y. Chen and X. C. Wu (2015). "Ferroxidase-like activity of Au nanorod/Pt nanodot structures and implications for cellular oxidative stress." Nano Research **8**(12): 4024-4037.
Liu, L., B. J. Du, C. S. Shang, J. Wang and E. K. Wang (2018). "Construction of surface charge-controlled reduced graphene oxide-loaded Fe3O4 and Pt nanohybrid for peroxidase mimic with enhanced catalytic activity." Analytica Chimica Acta **1014**: 77-84.
Liu, M., H. M. Zhao, S. Chen, H. T. Yu and X. Quan (2012). "Interface Engineering Catalytic Graphene for Smart Colorimetric Biosensing." ACS Nano **6**(4): 3142-3151.
Liu, M., H. M. Zhao, S. Chen, H. T. Yu and X. Quan (2012). "Stimuli-responsive peroxidase mimicking at a smart graphene interface." Chem. Commun. **48**(56): 7055-7057.
Liu, P., L. Han, F. Wang, X. Q. Li, V. A. Petrenko and A. H. Liu (2018). "Sensitive colorimetric immunoassay of Vibrio parahaemolyticus based on specific nonapeptide probe screening from a phage display library conjugated with MnO2 nanosheets with peroxidase-like activity." Nanoscale **10**(6): 2825-2833.
Liu, Q. Y., P. P. Chen, Z. Xu, M. M. Chen, Y. N. Ding, K. Yue and J. Xu (2017). "A facile strategy to prepare porphyrin functionalized ZnS nanoparticles and their peroxidase-like catalytic activity for colorimetric sensor of hydrogen peroxide and glucose." Sensors and Actuators B-Chemical **251**: 339-348.
Liu, Q. Y., Y. Y. Ding, Y. T. Yang, L. Y. Zhang, L. F. Sun, P. P. Chen and C. Gao (2016). "Enhanced peroxidase-like activity of porphyrin functionalized ceria nanorods for sensitive and selective colorimetric detection of glucose." Mater. Sci. Eng. C **59**: 445-453.
Liu, Q. Y., Q. Y. Jia, R. R. Zhu, Q. Shao, D. M. Wang, P. Cui and J. C. Ge (2014). "5,10,15,20-Tetrakis(4-carboxyl phenyl) porphyrin-CdS nanocomposites with intrinsic peroxidase-like activity for glucose colorimetric detection." Mater. Sci. Eng. C **42**: 177-184.
Liu, Q. Y., Y. L. Jiang, L. Y. Zhang, X. P. Zhou, X. T. Lv, Y. Y. Ding, L. F. Sun, P. P. Chen and H. L. Yin (2016). "The catalytic activity of Ag2S-montmorillonites as peroxidase mimetic toward colorimetric detection of H2O2." Mater. Sci. Eng. C **65**: 109–115.
Liu, Q. Y., H. Li, Q. R. Zhao, R. R. Zhu, Y. T. Yang, Q. Y. Jia, B. Bian and L. H. Zhuo (2014). "Glucose-sensitive colorimetric

sensor based on peroxidase mimics activity of porphyrin-Fe(3)o(4) nanocomposites." Mater. Sci. Eng. C **41**: 142-151.
Liu, Q. Y., Y. T. Yang, H. Li, R. R. Zhu, Q. Shao, S. G. Yang and J. J. Xu (2015). "NiO nanoparticles modified with 5,10,15,20-tetrakis(4-carboxyl pheyl)-porphyrin: Promising peroxidase mimetics for H2O2 and glucose detection." Biosensors & Bioelectronics **64**: 147-153.
Liu, Q. Y., Y. T. Yang, X. T. Lv, Y. N. Ding, Y. Z. Zhang, J. J. Jing and C. X. Xu (2017). "One-step synthesis of uniform nanoparticles of porphyrin functionalized ceria with promising peroxidase mimetics for H2O2 and glucose colorimetric detection." Sensors and Actuators B-Chemical **240**: 726-734.
Liu, Q. Y., L. Y. Zhang, H. Li, Q. Y. Jia, Y. L. Jiang, Y. T. Yang and R. R. Zhu (2015). "One-pot synthesis of porphyrin functionalized gamma-Fe2O3 nanocomposites as peroxidase mimics for H2O2 and glucose detection." Mater. Sci. Eng. C **55**: 193-200.
Liu, Q. Y., R. R. Zhu, H. Du, H. Li, Y. T. Yang, Q. Y. Jia and B. Bian (2014). "Higher catalytic activity of porphyrin functionalized Co3O4 nanostructures for visual and colorimetric detection of H2O2 and glucose." Mater. Sci. Eng. C **43**: 321-329.
Liu, S., J. Q. Tian, L. Wang, Y. L. Luo, G. H. Chang and X. P. Sun (2011). "Iron-substituted SBA-15 microparticles: a peroxidase-like catalyst for H_2O_2 detection." Analyst **136**(23): 4894-4897.
Liu, S., J. Q. Tian, L. Wang, Y. L. Luo and X. P. Sun (2012). "A general strategy for the production of photoluminescent carbon nitride dots from organic amines and their application as novel peroxidase-like catalysts for colorimetric detection of H_2O_2 and glucose." RSC Advances **2**(2): 411-413.
Liu, S., J. Q. Tian, L. Wang and X. P. Sun (2012). "Highly sensitive and selective colorimetric detection of Ag(I) ion using 3,3 ',5,5 ',-tetramethylbenzidine (TMB) as an indicator." Sensors and Actuators B-Chemical **165**(1): 44-47.
Liu, S., J. Q. Tian, L. Wang, Y. W. Zhang, Y. L. Luo, H. Y. Li, A. M. Asiri, A. O. Al-Youbi and X. P. Sun (2012). "Fast and Sensitive Colorimetric Detection of H2O2 and Glucose: A Strategy Based on Polyoxometalate Clusters." ChemPlusChem **77**(7): 541-544.
Liu, S., L. Wang, J. F. Zhai, Y. L. Luo and X. P. Sun (2011). "Carboxyl functionalized mesoporous polymer: A novel peroxidase-like catalyst for H_2O_2 detection." Analytical Methods **3**(7): 1475-1477.
Liu, S. G., L. Han, N. Li, N. Xiao, Y. J. Ju, N. B. Li and H. Q. Luo (2018). "A fluorescence and colorimetric dual-mode assay of alkaline phosphatase activity via destroying oxidase-like CoOOH nanoflakes." J. Mater. Chem. B **6**(18): 2843-2850.
Liu, S. H., F. Lu, R. M. Xing and J. J. Zhu (2011). "Structural Effects of Fe_3O_4 Nanocrystals on Peroxidase-Like Activity." Chemistry-A European Journal **17**(2): 620-625.
Liu, T. T., X. H. Niu, L. B. Shi, X. Zhu, H. L. Zhao and M. B. Lana (2015). "Electrocatalytic analysis of superoxide anion radical using nitrogen-doped graphene supported Prussian Blue as a biomimetic superoxide dismutase." Electrochimica Acta **176**: 1280-1287.
Liu, W. Y., H. M. Yang, Y. A. Ding, S. G. Ge, J. H. Yu, M. Yan and X. R. Song (2014). "Paper-based colorimetric immunosensor for visual detection of carcinoembryonic antigen based on the high peroxidase-like catalytic performance of ZnFe2O4-multiwalled carbon nanotubes." Analyst **139**(1): 251-258.
Liu, W. Y., H. M. Yang, S. G. Ge, L. Shen, J. H. Yu, M. Yan and J. D. Huang (2015). "Application of bimetallic PtPd alloy decorated graphene in peroxydisulfate electrochemiluminescence aptasensor based on Ag dendrites decorated indium tin oxide device." Sensors and Actuators B: Chemical **209**: 32-39.
Liu, X., Q. Wang, Y. Zhang, L. C. Zhang, Y. Y. Su and Y. Lv (2013). "Colorimetric detection of glutathione in human blood serum based on the reduction of oxidized TMB." New Journal of Chemistry **37**(7): 2174-2178.
Liu, X., Q. Wang, H. H. Zhao, L. C. Zhang, Y. Y. Su and Y. Lv (2012). "BSA-templated MnO2 nanoparticles as both peroxidase and oxidase mimics." Analyst **137**(19): 4552-4558.
Liu, X. X., H. Zhu and X. R. Yang (2011). "An amperometric hydrogen peroxide chemical sensor based on graphene-Fe_3O_4 multilayer films modified ITO electrode." Talanta **87**: 243-248.
Liu, X. Y., W. Wei, Q. Yuan, X. Zhang, N. Li, Y. G. Du, G. H. Ma, C. H. Yan and D. Ma (2012). "Apoferritin-CeO2 nano-truffle that has excellent artificial redox enzyme activity." Chem. Commun. **48**(26): 3155-3157.
Liu, Y., D. Ding, Y. L. Zhen and R. Guo (2017). "Amino acid-mediated 'turn-off/turn-on' nanozyme activity of gold nanoclusters for sensitive and selective detection of copper ions and histidine." Biosens. Bioelectron. **92**: 140-146.
Liu, Y., P. C. Naha, G. Hwang, D. Kim, Y. Huang, A. Simon-Soro, H.-I. Jung, Z. Ren, Y. Li, S. Gubara, F. Alawi, D. Zero, A. T. Hara, D. P. Cormode and H. Koo (2018). "Topical ferumoxytol nanoparticles disrupt biofilms and prevent tooth decay in vivo via intrinsic catalytic activity." Nat. Commun. **9**: 2920.
Liu, Y., D. L. Purich, C. C. Wu, Y. Wu, T. Chen, C. Cui, L. Q. Zhang, S. Cansiz, W. J. Hou, Y. Y. Wang, S. Y. Yang and W. H. Tan (2015). "Ionic Functionalization of Hydrophobic Colloidal Nanoparticles To Form Ionic Nanoparticles with Enzyme like Properties." Journal of the American Chemical Society **137**(47): 14952-14958.

Liu, Y., H. H. Wu, Y. Chong, W. G. Wamer, Q. S. Xia, L. N. Cai, Z. H. Nie, P. P. Fu and J. J. Yin (2015). "Platinum Nanoparticles: Efficient and Stable Catechol Oxidase Mimetics." Acs Applied Materials & Interfaces **7**(35): 19709-19717.
Liu, Y., H. H. Wu, M. Li, J. J. Yin and Z. H. Nie (2014). "pH dependent catalytic activities of platinum nanoparticles with respect to the decomposition of hydrogen peroxide and scavenging of superoxide and singlet oxygen." Nanoscale **6**(20): 11904-11910.
Liu, Y., Y. p. Xiang, D. Ding and R. Guo (2016). "Structural effects of amphiphilic protein/gold nanoparticle hybrid based nanozyme on peroxidase-like activity and silver-mediated inhibition." RSC Advances **6**(113): 112435-112444.
Liu, Y., Y. P. Xiang, Y. L. Zhen and R. Guo (2017). "Halide Ion-Induced Switching of Gold Nanozyme Activity Based on Au-X Interactions." Langmuir **33**(25): 6372-6381.
Liu, Y., M. Yuan, L. J. Qiao and R. Guo (2014). "An efficient colorimetric biosensor for glucose based on peroxidase-like protein-Fe3O4 and glucose oxidase nanocomposites." Biosensors & Bioelectronics **52**: 391-396.
Liu, Y., W. Zhen, L. Jin, S. Zhang, G. Sun, T. Zhang, X. Xu, S. Song, Y. Wang, J. Liu and H. Zhang (2018). "All-in-One Theranostic Nanoagent with Enhanced Reactive Oxygen Species Generation and Modulating Tumor Microenvironment Ability for Effective Tumor Eradication." ACS Nano **12**(5): 4886-4893.
Liu, Y., Y. L. Zheng, D. Ding and R. Guo (2017). "Switching Peroxidase-Mimic Activity of Protein Stabilized Platinum Nanozymes by Sulfide Ions: Substrate Dependence, Mechanism, and Detection." Langmuir **33**(48): 13811-13820.
Liu, Y. J., G. X. Zhu, C. L. Bao, A. H. Yuan and X. P. Shen (2014). "Intrinsic Peroxidase-like Activity of Porous CuO Micro-/nanostructures with Clean Surface." Chin. J. Chem. **32**(2): 151-156.
Liu, Y. J., G. X. Zhu, J. Yang, A. H. Yuan and X. P. Shen (2014). "Peroxidase-Like Catalytic Activity of Ag3PO4 Nanocrystals Prepared by a Colloidal Route." PLoS One **9**(10): e109158.
Liu, Y. L., K. L. Ai, X. Y. Ji, D. Askhatova, R. Du, L. H. Lu and J. J. Shi (2017). "Comprehensive Insights into the Multi-Antioxidative Mechanisms of Melanin Nanoparticles and Their Application To Protect Brain from Injury in Ischemic Stroke." Journal of the American Chemical Society **139**(2): 856-862.
Liu, Y. L., W. L. Fu, C. M. Li, C. Z. Huang and Y. F. Li (2015). "Gold nanoparticles immobilized on metal-organic frameworks with enhanced catalytic performance for DNA detection." Analytica Chimica Acta **861**: 55-61.
Liu, Y. L., X. J. Zhao, X. X. Yang and Y. F. Li (2013). "A nanosized metal-organic framework of Fe-MIL-88NH_2 as a novel peroxidase mimic used for colorimetric detection of glucose." Analyst **138**(16): 4526-4531.
Liu, Y. P., C. W. Wang, N. Cai, S. H. Long and F. Q. Yu (2014). "Negatively charged gold nanoparticles as an intrinsic peroxidase mimic and their applications in the oxidation of dopamine." Journal of Materials Science **49**(20): 7143-7150.
Liu, Y. P. and F. Q. Yu (2011). "Substrate-specific modifications on magnetic iron oxide nanoparticles as an artificial peroxidase for improving sensitivity in glucose detection." Nanotechnology **22**(14): 145704.
Liu, Y. Y., Z. W. Chen, C. H. Shek, C. M. L. Wu and J. K. L. Lai (2014). "Hierarchical Mesoporous MnO2 Superstructures Synthesized by Soft-Interface Method and Their Catalytic Performances." Acs Applied Materials & Interfaces **6**(12): 9776-9784.
Liu, Y. Y., S.-Y. Moon, J. T. Hupp and O. K. Farha (2015). "Dual-Function Metal-Organic Framework as a Versatile Catalyst for Detoxifying Chemical Warfare Agent Simulants." Acs Nano **9**(12): 12358-12364.
Liu, Z., X. J. Liu, Y. D. Du, J. S. Ren and X. G. Qu (2015). "Using Plasmonic Copper Sulfide Nanocrystals as Smart Light-Driven Sterilants." Acs Nano **9**(10): 10335-10346.
Long, L., J. B. Liu, K. S. Lu, T. Zhang, Y. Q. Xie, Y. L. Ji and X. C. Wu (2018). "Highly sensitive and robust peroxidase-like activity of Au-Pt core/shell nanorod-antigen conjugates for measles virus diagnosis." Journal of Nanobiotechnology **16**(1): 46.
Long, Y. J., Y. F. Li, Y. Liu, J. J. Zheng, J. Tang and C. Z. Huang (2011). "Visual observation of the mercury-stimulated peroxidase mimetic activity of gold nanoparticles." Chem. Commun. **47**(43): 11939-11941.
Long, Y. J., X. L. Wang, D. J. Shen and H. Z. Zheng (2016). "Detection of glucose based on the peroxidase-like activity of reduced state carbon dots." Talanta **159**: 122-126.
López-Maya, E., C. Montoro, L. M. Rodríguez-Albelo, S. D. Aznar Cervantes, A. A. Lozano-Pérez, J. L. Cenís, E. Barea and J. A. R. Navarro (2015). "Textile/Metal–Organic-Framework Composites as Self-Detoxifying Filters for Chemical-Warfare Agents." Angew. Chem. Int. Ed. **54**(23): 6790-6794.
Lord, M. S., M. Jung, W. Y. Teoh, C. Gunawan, J. A. Vassie, R. Amal and J. M. Whitelock (2012). "Cellular uptake and reactive oxygen species modulation of cerium oxide nanoparticles in human monocyte cell line U937." Biomaterials **33**(31): 7915-7924.
Lou, D. D., Y. Y. Tian, Y. Zhang, J. J. Yin, T. Yang, C. He, M. Ma, W. Yu and N. Gu (2018). "Peroxidase-Like Activity of Gold

Nanoparticles and Their Gold Staining Enhanced ELISA Application." Journal of Nanoscience and Nanotechnology **18**(2): 951-958.
Loynachan, C. N., M. R. Thomas, E. R. Gray, D. A. Richards, J. Kim, B. S. Miller, J. C. Brookes, S. Agarwal, V. Chudasama, R. A. McKendry and M. M. Stevens (2018). "Platinum Nanocatalyst Amplification: Redefining the Gold Standard for Lateral Flow Immunoassays with Ultrabroad Dynamic Range." Acs Nano **12**(1): 279-288.
Lu, C., X. J. Liu, Y. F. Li, F. Yu, L. H. Tang, Y. J. Hu and Y. B. Yine (2015). "Multifunctional Janus Hematite Silica Nanoparticles: Mimicking Peroxidase-Like Activity and Sensitive Colorimetric Detection of Glucose." Acs Applied Materials & Interfaces **7**(28): 15395-15402.
Lu, J., H. C. Zhang, B. Zhang, W. C. Gao, X. Li, H. H. Chang and W. L. Wei (2017). "Application of colorimetric sensor based nanomaterials in food detection." Chemical Industry and Engineering Progress **36**(1): 20-28.
Lu, J. Y., L. Q. Wei, D. M. Yao, X. J. Yin, H. F. Lai and X. X. Huang (2017). "beta-AgVO3 Nanorods as Peroxidase Mimetic for Colorimetric Determination of Glucose." J. Chin. Chem. Soc. **64**(7): 795-803.
Lu, J. Y., Y. H. Xiong, C. J. Liao and F. G. Ye (2015). "Colorimetric detection of uric acid in human urine and serum based on peroxidase mimetic activity of MIL-53(Fe)." Analytical Methods **7**(23): 9894-9899.
Lu, L. X., Y. Wang, X. X. Lin, X. Y. Li and M. N. Xin (2018). "Colorimetric Detection of Iodine Ion Based on Its Inhibition Effect on Peroxidase-Like Activity of Platinum Nanoparticles." Chin. J. Anal. Chem. **46**(1): 94-99.
Lu, N., M. Zhang, L. Ding, J. Zheng, C. X. Zeng, Y. L. Wen, G. Liu, A. Aldalbahi, J. Y. Shi, S. P. Song, X. L. Zuo and L. H. Wang (2017). "Yolk-shell nanostructured Fe3O4@C magnetic nanoparticles with enhanced peroxidase-like activity for label-free colorimetric detection of H2O2 and glucose." Nanoscale **9**(13): 4508-4515.
Lu, W. Y., J. X. Shu, Z. H. Wang, N. Huang and W. J. Song (2015). "The intrinsic oxidase-like activity of Ag2O nanoparticles and its application for colorimetric detection of sulfite." Materials Letters **154**: 33-36.
Lu, X. F., X. J. Bian, Z. C. Li, D. M. Chao and C. Wang (2013). "A facile strategy to decorate Cu9S5 nanocrystals on polyaniline nanowires and their synergetic catalytic properties." Sci. Rep. **3**: 2955.
Lu, Y., W. C. Ye, Q. Yang, J. Yu, Q. Wang, P. P. Zhou, C. M. Wang, D. S. Xue and S. Q. Zhao (2016). "Three-dimensional hierarchical porous PtCu dendrites: A highly efficient peroxidase nanozyme for colorimetric detection of H2O2." Sensors and Actuators B-Chemical **230**: 721-730.
Lu, Y., J. Yu, W. C. Ye, X. Yao, P. P. Zhou, H. X. Zhang, S. Q. Zhao and L. P. Jia (2016). "Spectrophotometric determination of mercury(II) ions based on their stimulation effect on the peroxidase-like activity of molybdenum disulfide nanosheets." Microchimica Acta **183**(8): 2481-2489.
Lucente-Schultz, R. M., V. C. Moore, A. D. Leonard, B. K. Price, D. V. Kosynkin, M. Lu, R. Partha, J. L. Conyers and J. M. Tour (2009). "Antioxidant Single-Walled Carbon Nanotubes." Journal of the American Chemical Society **131**(11): 3934-3941.
Luo, C., Y. Li and J. G. Long (2015). "Applications of iron oxide nanoparticles as peroxidase mimetics." Sci. Bull. **60**(35): 3478-3488.
Luo, C., Y. Li, Q. W. Long and J. G. Long (2016). "Recent Advances of Nanozymes in Glucose Detection." Chinese J. Biomed. Eng. **35**(01): 105-113.
Luo, K. Y. and Z. Z. Shao (2017). "A novel regenerated silk fibroin-based hydrogels with magnetic and catalytic activities." Chinese J. Polym. Sci. **35**(4): 515-523.
Luo, M., X. Chen, G. H. Zhou, X. Xiang, L. Chen, X. H. Ji and Z. K. He (2012). "Chemiluminescence biosensors for DNA detection using graphene oxide and a horseradish peroxidase-mimicking DNAzyme." Chem. Commun. **48**(8): 1126-1128.
Luo, S. J., Y. Q. Liu, H. B. Rao, Y. Y. Wang and X. X. Wang (2017). "Fluorescence and magnetic nanocomposite Fe3O4@SiO2@Au MNPs as peroxidase mimetics for glucose detection." Analytical Biochemistry **538**: 26-33.
Luo, W., M. E. Abbas, L. H. Zhu, K. J. Deng and H. Q. Tang (2008). "Rapid quantitative determination of hydrogen peroxide by oxidation decolorization of methyl orange using a Fenton reaction system." Analytica Chimica Acta **629**(1-2): 1-5.
Luo, W., Y. S. Li, J. Yuan, L. H. Zhu, Z. D. Liu, H. Q. Tang and S. S. Liu (2010). "Ultrasensitive fluorometric determination of hydrogen peroxide and glucose by using multiferroic $BiFeO_3$ nanoparticles as a catalyst." Talanta **81**(3): 901-907.
Luo, W., L. H. Zhu, N. Wang, H. Q. Tang, M. J. Cao and Y. B. She (2010). "Efficient Removal of Organic Pollutants with Magnetic Nanoscaled BiFeO3 as a Reusable Heterogeneous Fenton-Like Catalyst." Environmental Science & Technology **44**(5): 1786-1791.
Luo, W. J., C. F. Zhu, S. Su, D. Li, Y. He, Q. Huang and C. H. Fan (2010). "Self-Catalyzed, Self-Limiting Growth of Glucose Oxidase-Mimicking Gold Nanoparticles." ACS Nano **4**(12): 7451-7458.
Luong, J. H. T. and S. K. Vashist (2017). "Immunosensing procedures for carcinoembryonic antigen using graphene and

nanocomposites." Biosensors & Bioelectronics **89**: 293-304.
Lv, X. C. and J. Weng (2013). "Ternary Composite of Hemin, Gold Nanoparticles and Graphene for Highly Efficient Decomposition of Hydrogen Peroxide." Sci. Rep. **3**: 3285.
Ma, C. Y., W. J. Xue, J. J. Li, W. Xing and Z. P. Hao (2013). "Mesoporous carbon-confined Au catalysts with superior activity for selective oxidation of glucose to gluconic acid." Green Chemistry **15**(4): 1035-1041.
Ma, M., J. Xie, Y. Zhang, Z. P. Chen and N. Gu (2013). "Fe3O4@Pt nanoparticles with enhanced peroxidase-like catalytic activity." Materials Letters **105**: 36-39.
Ma, M., Y. Zhang and N. Cu (2011). "Peroxidase-like catalytic activity of cubic Pt nanocrystals." Colloid. Surface. A **373**(1-3): 6-10.
Ma, X. J., L. Zhang, M. F. Xia, S. Q. Li, X. H. Zhang and Y. D. Zhang (2017). "Mimicking the Active Sites of Organophosphorus Hydrolase on the Backbone of Graphene Oxide to Destroy Nerve Agent Simulants." ACS Appl. Mater. Interfaces **9**(25): 21089-21093.
Ma, X. Q., W. H. Hu, C. X. Guo, L. Yu, L. X. Gao, J. L. Xie and C. M. Li (2014). "DNA-Templated Biomimetic Enzyme Sheets on Carbon Nanotubes to Sensitively In Situ Detect Superoxide Anions Released from Cells." Advanced Functional Materials **24**(37): 5897-5903.
Ma, Y. C., M. Y. Lu, Y. Deng, R. Y. Bai, X. Zhang, D. L. Li, K. L. Zhang, R. Hu and Y. H. Yang (2018). "The Preparation of C-Reactive Protein Immunosensor Based on Nano-Mimetic Enzyme Co3O4." Journal of Biomedical Nanotechnology **14**(6): 1169-1177.
Ma, Y. H., C. F. Yu and X. G. Chen (2014). "A Novel Visual Determination of Catechol Based on Fe_3O_4 Magnetite Nanoparticles as Peroxidase Mimetics." J. Anal. Sci. **30**(5): 709-712.
Ma, Y. H., Z. Y. Zhang, C. L. Ren, G. Y. Liu and X. G. Chen (2012). "A novel colorimetric determination of reduced glutathione in A549 cells based on Fe_3O_4 magnetic nanoparticles as peroxidase mimetics." Analyst **137**(2): 485-489.
Ma, Y. Y., W. Gao, Z. Y. Zhang, S. Zhang, Z. M. Tian, Y. X. Liu, J. C. Ho and Y. Q. Qu (2018). "Regulating the surface of nanoceria and its applications in heterogeneous catalysis." Surface Science Reports **73**(1): 1-36.
Ma, Z., Y. F. Qiu, H. H. Yang, Y. M. Huang, J. J. Liu, Y. Lu, C. Zhang and P. A. Hu (2015). "Effective Synergistic Effect of Dipeptide-Polyoxometalate-Graphene Oxide Ternary Hybrid Materials on Peroxidase-like Mimics with Enhanced Performance." ACS Applied Materials & Interfaces **7**(39): 22036-22045.
Magerusan, L., C. Socaci, F. Pogacean, M. C. Rosu, A. R. Biris, M. Coros, A. Turza, V. Floare-Avram, G. Katona and S. Pruneanu (2016). "Enhancement of peroxidase-like activity of N-doped graphene assembled with iron-tetrapyridylporphyrin." RSC Adv. **6**(83): 79497-79506.
Mahmoudi, M., K. Azadmanesh, M. A. Shokrgozar, W. S. Journeay and S. Laurent (2011). "Effect of Nanoparticles on the Cell Life Cycle." Chemical Reviews **111**(5): 3407-3432.
Maiti, S., C. Pezzato, S. Garcia Martin and L. J. Prins (2014). "Multivalent Interactions Regulate Signal Transduction in a Self-Assembled Hg2+ Sensor." Journal of the American Chemical Society **136**(32): 11288-11291.
Maji, S. K., A. K. Dutta, P. Biswas, D. N. Srivastava, P. Paul, A. Mondal and B. Adhikary (2012). "Synthesis and characterization of FeS nanoparticles obtained from a dithiocarboxylate precursor complex and their photocatalytic, electrocatalytic and biomimic peroxidase behavior." Applied Catalysis a-General **419**: 170-177.
Maji, S. K., A. K. Dutta, S. Dutta, D. N. Srivastava, P. Paul, A. Mondal and B. Adhikary (2012). "Single-source precursor approach for the preparation of CdS nanoparticles and their photocatalytic and intrinsic peroxidase like activity." Applied Catalysis B-Environmental **126**: 265-274.
Maji, S. K., A. K. Dutta, D. N. Srivastava, P. Paul, A. Mondal and B. Adhikary (2012). "Peroxidase-like behavior, amperometric biosensing of hydrogen peroxide and photocatalytic activity by cadmium sulfide nanoparticles." Journal of Molecular Catalysis A-Chemical **358**: 1-9.
Maji, S. K., A. K. Mandal, K. T. Nguyen, P. Borah and Y. L. Zhao (2015). "Cancer Cell Detection and Therapeutics Using Peroxidase-Active Nanohybrid of Gold Nanoparticle-Loaded Mesoporous Silica-Coated Graphene." ACS Applied Materials & Interfaces **7**(18): 9807-9816.
Malvi, B., C. Panda, B. B. Dhar and S. Sen Gupta (2012). "One pot glucose detection by [Fe-III(biuret-amide)] immobilized on mesoporous silica nanoparticles: an efficient HRP mimic." Chem. Commun. **48**(43): 5289-5291.
Mancin, F., L. J. Prins, P. Pengo, L. Pasquato, P. Tecilla and P. Scrimin (2016). "Hydrolytic Metallo-Nanozymes: From Micelles and Vesicles to Gold Nanoparticles." Molecules **21**(8): 1014.
Mancin, F., L. J. Prins and P. Scrimin (2013). "Catalysis on gold-nanoparticle-passivating monolayers." Current Opinion in Colloid & Interface Science **18**(1): 61-69.
Mandoli, C., F. Pagliari, S. Pagliari, G. Forte, P. Di Nardo, S. Licoccia and E. Traversa (2010). "Stem Cell Aligned Growth Induced by CeO2 Nanoparticles in PLGA Scaffolds with Improved Bioactivity for Regenerative Medicine." Advanced

Functional Materials **20**(10): 1617-1624.
Manea, F., F. B. Houillon, L. Pasquato and P. Scrimin (2004). "Nanozymes: Gold-nanoparticle-based transphosphorylation catalysts." Angew. Chem. Int. Ed. **43**(45): 6165-6169.
Mao, W. W., B. Cai, Z. Z. Ye and J. Y. Huang (2017). "Self-assembly vertically cross-linked 3D Bi3Ti2O8F nanosheets for colorimetric and electrochemical mimic peroxidase sensor." Journal of Electroanalytical Chemistry **807**: 76-81.
Marcano, D. C., B. R. Bitner, J. M. Berlin, J. Jarjour, J. M. Lee, A. Jacob, R. H. Fabian, T. A. Kent and J. M. Tour (2013). "Design of Poly(ethylene Glycol)-Functionalized Hydrophilic Carbon Clusters for Targeted Therapy of Cerebrovascular Dysfunction in Mild Traumatic Brain Injury." Journal of Neurotrauma **30**(9): 789-796.
Maroneze, C. M., G. P. dos Santos, V. B. de Moraes, L. P. da Costa and L. T. Kubota (2016). "Multifunctional catalytic platform for peroxidase mimicking, enzyme immobilization and biosensing." Biosensors & Bioelectronics **77**: 746-751.
Martin, M., F. Manea, R. Fiammengo, L. J. Prins, L. Pasquato and P. Scrimin (2007). "Metallodendrimers as Transphosphorylation Catalysts." Journal of the American Chemical Society **129**(22): 6982-6983.
Martinkova, P. and M. Pohanka (2015). "Determination of Peroxidase-Like Activity of Magnetic Particles: Basic Platforms for Peroxidase Biosensors." International Journal of Electrochemical Science **10**(9): 7033-7048.
Masud, M. K., S. Yadav, M. N. Isam, N. Nam-Trung, C. Salomon, R. Kline, H. R. Alamri, Z. A. Alothman, Y. Yamauchi, M. S. A. Hossain and M. J. A. Shiddiky (2017). "Gold-Loaded Nanoporous Ferric Oxide Nanocubes with Peroxidase-Mimicking Activity for Electrocatalytic and Colorimetric Detection of Autoantibody." Analytical Chemistry **89**(20): 11005-11013.
McCarthy, D. L., J. Liu, D. B. Dwyer, J. L. Troiano, S. M. Boyer, J. B. DeCoste, W. E. Bernier and J. W. E. Jones (2017). "Electrospun metal–organic framework polymer composites for the catalytic degradation of methyl paraoxon." New Journal of Chemistry **41**(17): 8748-8753.
McCormack, R. N., P. Mendez, S. Barkam, C. J. Neal, S. Das and S. Seal (2014). "Inhibition of Nanoceria's Catalytic Activity due to Ce^{3+} Site-Specific Interaction with Phosphate Ions." Journal of Physical Chemistry C **118**(33): 18992-19006.
McKeating, K. S., S. Sloan Dennison, D. Graham and K. Faulds (2013). "An investigation into the simultaneous enzymatic and SERRS properties of silver nanoparticles." Analyst **138**(21): 6347-6353.
Melnikova, L., K. Pospiskova, Z. Mitroova, P. Kopcansky and I. Safarik (2014). "Peroxidase-like activity of magnetoferritin." Microchimica Acta **181**(3-4): 295-301.
Meng, X. Q. and K. L. Fan (2018). "Application of Nanozymes in Disease Diagnosis." Progress in Biochemistry and Biophysics **45**(2): 218-236.
Miao, Y. Q., H. Wang, Y. Y. Shao, Z. W. Tang, J. Wang and Y. H. Lin (2009). "Layer-by-layer assembled hybrid film of carbon nanotubes/iron oxide nanocrystals for reagentless electrochemical detection of H_2O_2." Sensors and Actuators B-Chemical **138**(1): 182-188.
Miedziak, P. J., H. Alshammari, S. A. Kondrat, T. J. Clarke, T. E. Davies, M. Morad, D. J. Morgan, D. J. Willock, D. W. Knight, S. H. Taylor and G. J. Hutchings (2014). "Base-free glucose oxidation using air with supported gold catalysts." Green Chemistry **16**(6): 3132-3141.
Mitra, K., A. B. Ghosh, A. Sarkar, N. Saha and A. K. Dutta (2014). "Colorimetric estimation of human glucose level using gamma-Fe(2)O(3) nanoparticles: an easily recoverable effective mimic peroxidase." Biochem. Biophys. Res. Commun. **451**(1): 30-35.
Mo, W. C., J. Zhao, Y. Liu and R. Q. He (2018). "Nanozyme Also Acts in Enzyme-like Denaturation?" Progress in Biochemistry and Biophysics **45**(2): 268-271.
Moglianetti, M., E. De Luca, D. Pedone, R. Marotta, T. Catelani, B. Sartori, H. Amenitsch, S. F. Retta and P. P. Pompa (2016). "Platinum nanozymes recover cellular ROS homeostasis in an oxidative stress-mediated disease model." Nanoscale **8**(6): 3739-3752.
Mohammadpour, Z., A. Safavi and M. Shamsipur (2014). "A new label free colorimetric chemosensor for detection of mercury ion with tunable dynamic range using carbon nanodots as enzyme mimics." Chemical Engineering Journal **255**: 1-7.
Mondal, S. S. and H.-J. Holdt (2016). "Breaking Down Chemical Weapons by Metal–Organic Frameworks." Angew. Chem. Int. Ed. **55**(1): 42-44.
Mondloch, J. E., M. J. Katz, W. C. Isley Iii, P. Ghosh, P. Liao, W. Bury, G. W. Wagner, M. G. Hall, J. B. DeCoste, G. W. Peterson, R. Q. Snurr, C. J. Cramer, J. T. Hupp and O. K. Farha (2015). "Destruction of chemical warfare agents using metal–organic frameworks." Nat. Mater. **14**(5): 512-516.
Monti, D., L. Moretti, S. Salvioli, E. Straface, W. Malorni, R. Pellicciari, G. Schettini, M. Bisaglia, C. Pincelli, C. Fumelli, M. Bonafe and C. Franceschi (2000). "C60 carboxyfullerene exerts a protective activity against oxidative stress-induced

apoptosis in human peripheral blood mononuclear cells." Biochemical and Biophysical Research Communications **277**(3): 711-717.
Montini, T., M. Melchionna, M. Monai and P. Fornasiero (2016). "Fundamentals and Catalytic Applications of CeO2-Based Materials." Chemical Reviews **116**(10): 5987-6041.
Moon, S. Y., E. Proussaloglou, G. W. Peterson, J. B. DeCoste, M. G. Hall, A. J. Howarth, J. T. Hupp and O. K. Farha (2016). "Detoxification of Chemical Warfare Agents Using a Zr-6-Based Metal-Organic Framework/Polymer Mixture." Chemistry-a European Journal **22**(42): 14864-14868.
Moon, S. Y., G. W. Wagner, J. E. Mondloch, G. W. Peterson, J. B. DeCoste, J. T. Hupp and O. K. Farha (2015). "Effective, Facile, and Selective Hydrolysis of the Chemical Warfare Agent VX Using Zr6-Based Metal-Organic Frameworks." Inorg Chem **54**(22): 10829-10833.
Moon, S.-Y., Y. Liu, J. T. Hupp and O. K. Farha (2015). "Instantaneous Hydrolysis of Nerve-Agent Simulants with a Six-Connected Zirconium-Based Metal–Organic Framework." Angew. Chem. Int. Ed. **54**(23): 6795-6799.
Moradi Shoeili, Z. (2017). "Immobilized Cu(II)-Schiff base complex on modified Fe3O4 nanoparticles as catalysts in the oxidation of o-phenylenediamine to 2,3-diaminophenazine." Reac. Kinet. Mech. Cat. **120**(1): 323-332.
Moretti, E. d. S., J. de Fátima Giarola, M. Kuceki, M. C. Prete, A. C. Pereira and C. R. Teixeira Tarley (2016). "A nanocomposite based on multi-walled carbon nanotubes grafted by molecularly imprinted poly(methacrylic acid–hemin) as a peroxidase-like catalyst for biomimetic sensing of acetaminophen." RSC Adv. **6**(34): 28751-28760.
Moriyama, M., S. Metzger, A. J. van der Vlies, H. Uyama, M. Ehrbar and U. Hasegawa (2015). "Inhibition of Angiogenesis by Antioxidant Micelles." Adv. Healthcare Mater. **4**(4): 569-575.
Mu, J. S., Y. He and Y. Wang (2016). "Copper-incorporated SBA-15 with peroxidase-like activity and its application for colorimetric detection of glucose in human serum." Talanta **148**: 22-28.
Mu, J. S., J. Li, X. Zhao, E. C. Yang and X. J. Zhao (2016). "Cobalt-doped graphitic carbon nitride with enhanced peroxidase-like activity for wastewater treatment." RSC Adv. **6**(42): 35568-35576.
Mu, J. S., J. Li, X. Zhao, E. C. Yang and X. J. Zhao (2018). "Novel urchin-like Co9S8 nanomaterials with efficient intrinsic peroxidase-like activity for colorimetric sensing of copper (II) ion." Sensors and Actuators B-Chemical **258**: 32-41.
Mu, J. S., Y. Wang, M. Zhao and L. Zhang (2012). "Intrinsic peroxidase-like activity and catalase-like activity of Co3O4 nanoparticles." Chem. Commun. **48**(19): 2540-2542.
Mu, J. S., L. Zhang, G. Y. Zhao and Y. Wang (2014). "The crystal plane effect on the peroxidase-like catalytic properties of Co3O4 nanomaterials." Physical Chemistry Chemical Physics **16**(29): 15709-15716.
Mu, J. S., L. Zhang, M. Zhao and Y. Wang (2013). "Co_3O_4 nanoparticles as an efficient catalase mimic: Properties, mechanism and its electrocatalytic sensing application for hydrogen peroxide." Journal of Molecular Catalysis A-Chemical **378**: 30-37.
Mu, J. S., L. Zhang, M. Zhao and Y. Wang (2014). "Catalase Mimic Property of Co3O4 Nanomaterials with Different Morphology and Its Application as a Calcium Sensor." Acs Applied Materials & Interfaces **6**(10): 7090-7098.
Mu, J. S., X. Zhao, J. Li, E. C. Yang and X. J. Zhao (2016). "Novel hierarchical NiO nanoflowers exhibiting intrinsic superoxide dismutase-like activity." J. Mater. Chem. B **4**(31): 5217-5221.
Mu, J. S., X. Zhao, J. Li, E. C. Yang and X. J. Zhao (2017). "Coral-like CeO2/NiO nanocomposites with efficient enzyme-mimetic activity for biosensing application." Mater. Sci. Eng. C **74**: 434-442.
Mumtaz, S., L. S. Wang, M. Abdullah, S. Z. Hussain, Z. Iqbal, V. M. Rotello and I. Hussain (2017). "Facile method to synthesize dopamine-capped mixed ferrite nanoparticles and their peroxidase-like activity." Journal of Physics D-Applied Physics **50**(11): 11LT02.
Mumtaz, S., S. Wang, S. Z. Hussain, M. Abdullah, Z. Huma, Z. Iqbal, B. Creran, V. M. Rotello and I. Hussain (2017). "Dopamine coated Fe3O4 nanoparticles as enzyme mimics for the sensitive detection of bacteria." Chem. Commun. **53**(91): 12306-12308.
Munoz, M., Z. M. de Pedro, J. A. Casas and J. J. Rodriguez (2015). "Preparation of magnetite-based catalysts and their application in heterogeneous Fenton oxidation - A review." Applied Catalysis B-Environmental **176**: 249-265.
Muthurasu, A. and V. Ganesh (2016). "Glucose oxidase stabilized fluorescent gold nanoparticles as an ideal sensor matrix for dual mode sensing of glucose." Rsc Advances **6**(9): 7212-7223.
Na, W., Y. Y. Li, Y. Yuan and W. G. Gao (2017). "Facile Synthesis of Co3O4 Nanoparticles and their Biomimetic Activity." Journal of Nano Research **46**: 12-19.
Nadim, A. H., M. A. Al-Ghobashy, M. Nebsena and M. A. Shehata (2015). "Gallic acid magnetic nanoparticles for photocatalytic degradation of meloxicam: synthesis, characterization and application to pharmaceutical wastewater treatment." Rsc Advances **5**(127): 104981-104990.
Najafpour, M. M., S. Madadkhani, Z. Zand, M. Hołyńska and S. I. Allakhverdiev (2016). "Engineered polypeptide around

nano-sized manganese–calcium oxide as an artificial water-oxidizing enzyme mimicking natural photosynthesis: Toward artificial enzymes with highly active site densities." Int. J. Hydrogen Energ. **41**(40): 17826-17836.
Nakamura, E. and H. Isobe (2003). "Functionalized fullerenes in water. The first 10 years of their chemistry, biology, and nanoscience." Accounts of Chemical Research **36**(11): 807-815.
Nandhakumar, P., B. Kim, N. S. Lee, Y. H. Yoon, K. Lee and H. Yang (2018). "Nitrosoreductase-Like Nanocatalyst for Ultrasensitive and Stable Biosensing." Analytical Chemistry **90**(1): 807-813.
Nangia, Y., B. Kumar, J. Kaushal and C. R. Suri (2012). "Palladium@gold bimetallic nanostructures as peroxidase mimic for development of sensitive fluoroimmunoassay." Analytica Chimica Acta **751**: 140-145.
Naseri, M. T., M. Sarabadani, D. Ashrafi, H. Saeidian and M. Babri (2013). "Photoassisted and photocatalytic degradation of sulfur mustard using TiO2 nanoparticles and polyoxometalates." Environmental Science and Pollution Research **20**(2): 907-916.
Nasir, M., M. H. Nawaz, U. Latif, M. Yaqub, A. Hayat and A. Rahim (2017). "An overview on enzyme-mimicking nanomaterials for use in electrochemical and optical assays." Microchimica Acta **184**(2): 323-342.
Natalio, F., R. Andre, A. F. Hartog, B. Stoll, K. P. Jochum, R. Wever and W. Tremel (2012). "Vanadium pentoxide nanoparticles mimic vanadium haloperoxidases and thwart biofilm formation." Nature Nanotechnology **7**(8): 530-535.
Nath, I., J. Chakraborty and F. Verpoort (2016). "Metal organic frameworks mimicking natural enzymes: a structural and functional analogy." Chem. Soc. Rev. **45**(15): 4127-4170.
Nath, S., C. Kaittanis, V. Ramachandran, N. S. Dalal and J. M. Perez (2009). "Synthesis, Magnetic Characterization, and Sensing Applications of Novel Dextran-Coated Iron Oxide Nanorods." Chemistry of Materials **21**(8): 1761-1767.
Neri, S., S. G. Martin, C. Pezzato and L. J. Prins (2017). "Photoswitchable Catalysis by a Nanozyme Mediated by a Light-Sensitive Cofactor." J. Am. Chem. Soc. **139**: 1794-1797.
Ni, P. J., H. C. Dai, Y. L. Wang, Y. J. Sun, Y. Shi, J. T. Hu and Z. Li (2014). "Visual detection of melamine based on the peroxidase-like activity enhancement of bare gold nanoparticles." Biosensors & Bioelectronics **60**: 286-291.
Ni, P. J., Y. J. Sun, H. C. Dai, W. D. Lu, S. Jiang, Y. L. Wang, Z. Li and Z. Li (2017). "Prussian blue nanocubes peroxidase mimetic-based colorimetric assay for screening acetylcholinesterase activity and its inhibitor." Sensors and Actuators B-Chemical **240**: 1314-1320.
Nicolini, V., E. Gambuzzi, G. Malavasi, L. Menabue, M. C. Menziani, G. Lusvardi, A. Pedone, F. Benedetti, P. Luches, S. D'Addato and S. Valeri (2015). "Evidence of Catalase Mimetic Activity in Ce^{3+}/Ce^{4+} Doped Bioactive Glasses." Journal of Physical Chemistry B **119**(10): 4009-4019.
Nie, D. X., G. Y. Shi and Y. Y. Yu (2016). "Fe3O4 Magnetic Nanoparticles as Peroxidase Mimetics Used in Colorimetric Determination of 2,4-Dinitrotoluene." Chinese Journal of Analytical Chemistry **44**(2): 179-184.
Nie, G. D., L. Zhang, J. Y. Lei, L. Yang, Z. Zhang, X. F. Lu and C. Wang (2014). "Monocrystalline VO2 (B) nanobelts: large-scale synthesis, intrinsic peroxidase-like activity and application in biosensing." Journal of Materials Chemistry A **2**(9): 2910-2914.
Nilewski, L. G., W. K. A. Sikkema, T. A. Kent and J. M. Tour (2015). "Carbon nanoparticles and oxidative stress: could an injection stop brain damage in minutes?" Nanomedicine **10**(11): 1677-1679.
Nirala, N. R., S. Abraham, V. Kumar, A. Bansal, A. Srivastava and P. S. Saxena (2015). "Colorimetric detection of cholesterol based on highly efficient peroxidase mimetic activity of graphene quantum dots." Sensors and Actuators B-Chemical **218**: 42-50.
Nirala, N. R., G. Khandelwal, B. Kumar, Vinita, R. Prakash and V. Kumar (2017). "One step electro-oxidative preparation of graphene quantum dots from wood charcoal as a peroxidase mimetic." Talanta **173**: 36-43.
Nirala, N. R., S. Pandey, A. Bansal, V. K. Singh, B. Mukherjee, P. S. Saxena and A. Srivastava (2015). "Different shades of cholesterol: Gold nanoparticles supported on MOS2 nanoribbons for enhanced colorimetric sensing of free cholesterol." Biosensors & Bioelectronics **74**: 207-213.
Nirala, N. R., Vinita and R. Prakash (2018). "Quick colorimetric determination of choline in milk and serum based on the use of MoS2 nanosheets as a highly active enzyme mimetic." Microchimica Acta **185**(4): 224.
Niu, H. Y., D. Zhang, S. X. Zhang, X. L. Zhang, Z. F. Meng and Y. Q. Cai (2011). "Humic acid coated Fe_3O_4 magnetic nanoparticles as highly efficient Fenton-like catalyst for complete mineralization of sulfathiazole." Journal of Hazardous Materials **190**(1-3): 559-565.
Niu, J., A. Azfer, L. M. Rogers, X. Wang and P. E. Kolattukudy (2007). "Cardioprotective effects of cerium oxide nanoparticles in a transgenic murine model of cardiomyopathy." Cardiovascular Research **73**(3): 549-559.
Niu, X. H., Y. F. He, X. Li, H. W. Song, W. C. Zhang, Y. X. Peng, J. M. Pan and F. X. Qiu (2017). "Trace Iodide Dramatically Accelerates the Peroxidase Activity of VOx at ppb-Concentration Levels." ChemistrySelect **2**(33): 10854-10859.
Niu, X. H., Y. F. He, J. M. Pan, X. Li, F. X. Qiu, Y. S. Yan, L. B. Shi, H. L. Zhao and M. B. Lan (2016). "Uncapped

nanobranch-based CuS clews used as an efficient peroxidase mimic enable the visual detection of hydrogen peroxide and glucose with fast response." Anal. Chim. Acta **947**: 42-49.
Niu, X. H., Y. F. He, W. C. Zhang, X. Li, F. X. Qiu and J. M. Pan (2018). "Elimination of background color interference by immobilizing Prussian blue on carbon cloth: A monolithic peroxidase mimic for on-demand photometric sensing." Sensors and Actuators B-Chemical **256**: 151-159.
Niu, X. Y., Y. Y. Xu, Y. L. Dong, L. Y. Qi, S. D. Qi, H. L. Chen and X. G. Chen (2014). "Visual and quantitative determination of dopamine based on CoxFe3-xO4 magnetic nanoparticles as peroxidase mimetics." J. Alloy. Compd. **587**: 74-81.
Nunes, P., A. C. Gomes, M. Pillinger, I. S. Goncalves and M. Abrantes (2015). "Promotion of phosphoester hydrolysis by the Zr-IV-based metal-organic framework UiO-67." Micropor. Mesopor. Mat. **208**: 21-29.
Odrozek, K., K. Maresz, A. Koreniuk, K. Prusik and J. Mrowiec-Bialon (2014). "Amine-stabilized small gold nanoparticles supported on A1SBA-15 as effective catalysts for aerobic glucose oxidation." Applied Catalysis A-General **475**: 203-210.
Oh, S., J. Kim, T. Van Tan, D. K. Lee, S. R. Ahmed, J. C. Hong, J. Lee, E. Y. Park and J. Lee (2018). "Magnetic Nanozyme-Linked Immunosorbent Assay for Ultrasensitive Influenza A Virus Detection." Acs Applied Materials & Interfaces **10**(15): 12534-12543.
Okatsu, H., N. Kinoshita, T. Akita, T. Ishida and M. Haruta (2009). "Deposition of gold nanoparticles on carbons for aerobic glucose oxidation." Applied Catalysis a-General **369**(1-2): 8-14.
Okuda, K., T. Mashino and M. Hirobe (1996). "Superoxide radical quenching and cytochrome c peroxidase-like activity of C60-dimalonic acid, C62(COOH)4." Bioorganic & Medicinal Chemistry Letters **6**(5): 539-542.
Onizawa, S., K. Aoshiba, M. Kajita, Y. Miyamoto and A. Nagai (2009). "Platinum nanoparticle antioxidants inhibit pulmonary inflammation in mice exposed to cigarette smoke." Pulmonary Pharmacology & Therapeutics **22**(4): 340-349.
Oro, D., T. Yudina, G. Fernandez-Varo, E. Casals, V. Reichenbach, G. Casals, B. Gonzalez de la Presa, S. Sandalinas, S. Carvajal, V. Puntes and W. Jimenez (2016). "Cerium oxide nanoparticles reduce steatosis, portal hypertension and display anti-inflammatory properties in rats with liver fibrosis." Journal of Hepatology **64**(3): 691-698.
Ortiz Gomez, I., A. Salinas Castillo, A. Garcia Garcia, J. Antonio Alvarez-Bermejo, I. de Orbe Paya, A. Rodriguez Dieguez and L. Fermin Capitan Vallvey (2018). "Microfluidic paper-based device for colorimetric determination of glucose based on a metal-organic framework acting as peroxidase mimetic." Microchimica Acta **185**(1): 47.
Osuna, S., M. Swart and M. Sola (2010). "On the Mechanism of Action of Fullerene Derivatives in Superoxide Dismutation." Chemistry-A European Journal **16**(10): 3207-3214.
Ouyang, H., X. M. Tu, Z. F. Fu, W. W. Wang, S. F. Fu, C. Z. Zhu, D. Du and Y. H. Lin (2018). "Colorimetric and chemiluminescent dual-readout immunochromatographic assay for detection of pesticide residues utilizing g-C3N4/BiFeO3 nanocomposites." Biosensors & Bioelectronics **106**: 43-49.
Ozel, E., R. Alkasir, K. Ray, K. N Wallace and S. Andreescu (2013). "Comparative Evaluation of Intestinal Nitric Oxide in Embryonic Zebrafish Exposed to Metal Oxide Nanoparticles." Small **9**(24): 4250-4261.
Pagliari, F., C. Mandoli, G. Forte, E. Magnani, S. Pagliari, G. Nardone, S. Licoccia, M. Minieri, P. Di Nardo and E. Traversa (2012). "Cerium Oxide Nanoparticles Protect Cardiac Progenitor Cells from Oxidative Stress." Acs Nano **6**(5): 3767-3775.
Pan, N., L. Y. Wang, L. L. Wu, C. F. Peng and Z. J. Xie (2017). "Colorimetric determination of cysteine by exploiting its inhibitory action on the peroxidase-like activity of Au@Pt core-shell nanohybrids." Microchimica Acta **184**(1): 65-72.
Pan, N., Y. Zhu, L. L. Wu, Z. J. Xie, F. Xue and C. F. Peng (2016). "Highly sensitive colorimetric detection of copper ions based on regulating the peroxidase-like activity of Au@Pt nanohybrids." Analytical Methods **8**(41): 7531-7536.
Pan, W. Y., C. C. Huang, T. T. Lin, H. Y. Hu, W. C. Lin, M. J. Li and H. W. Sung (2016). "Synergistic antibacterial effects of localized heat and oxidative stress caused by hydroxyl radicals mediated by graphene/iron oxide-based nanocomposites." Nanomed.-Nanotechnol. **12**(2): 431-438.
Pan, Y., N. Li, J. S. Mu, R. H. Zhou, Y. Xu, D. Z. Cui, Y. Wang and M. Zhao (2015). "Biogenic magnetic nanoparticles from Burkholderia sp. YN01 exhibiting intrinsic peroxidase-like activity and their applications." Applied Microbiology and Biotechnology **99**(2): 703-715.
Pandey, P. C. and D. Panday (2016). "Tetrahydrofuran and hydrogen peroxide mediated conversion of potassium hexacyanoferrate into Prussian blue nanoparticles: Application to hydrogen peroxide sensing." Electrochimica Acta **190**: 758-765.
Pandey, P. C., D. Panday and G. Pandey (2014). "3-Aminopropyltrimethoxysilane and organic electron donors mediated synthesis of functional amphiphilic gold nanoparticles and their bioanalytical applications." RSC Adv. **4**(105): 60563-60572.

Pandey, P. C. and A. K. Pandey (2013). "Novel synthesis of super peroxidase mimetic polycrystalline mixed metal hexacyanoferrates nanoparticles dispersion." Analyst **138**(8): 2295-2301.
Pandey, P. C., A. Prakash and A. K. Pandey (2014). "Studies on electrochemical and peroxidase mimetic behavior of Prussian blue nanoparticles in presence of Pd-WO3-SiO2 Nanocomposite, bioelectro-catalytic sensing of H2O2." Electrochimica Acta **127**: 132-138.
Pandey, P. C., R. Singh and Y. Pandey (2015). "Controlled synthesis of functional Ag, Ag-Au/Au-Ag nanoparticles and their Prussian blue nanocomposites for bioanalytical applications." Rsc Advances **5**(61): 49671-49679.
Pandian, C. J., R. Palanivel and U. Balasundaram (2017). "Green synthesized nickel nanoparticles for targeted detection and killing of S-typhimurium." J. Photoch. Photobio. B **174**: 58-69.
Panov, G. I., V. I. Sobolev, K. A. Dubkov, V. N. Parmon, N. S. Ovanesyan, A. E. Shilov and A. A. Shteinman (1997). "Iron complexes in zeolites as a new model of methane monooxygenase." Reaction Kinetics and Catalysis Letters **61**(2): 251-258.
Pantu, P., S. Pabchanda and J. Limtrakul (2004). "Theoretical investigation of the selective oxidation of methane to methanol on nanostructured Fe-ZSM-5 by the ONIOM method." Chemphyschem **5**(12): 1901-1906.
Park, C. Y., J. M. Seo, H. Jo, J. Park, K. M. Ok and T. J. Park (2017). "Hexagonal tungsten oxide nanoflowers as enzymatic mimetics and electrocatalysts." Sci. Rep. **7**: 40928.
Park, E. J., J. Choi, Y. K. Park and K. Park (2008). "Oxidative stress induced by cerium oxide nanoparticles in cultured BEAS-2B cells." Toxicology **245**(1-2): 90-100.
Park, H. J., J. K. Jang, S. Y. Kim, J. W. Ha, D. Moon, I. N. Kang, Y. S. Bae, S. Kim and D. H. Hwang (2017). "Synthesis of a Zr-Based Metal-Organic Framework with Spirobifluorenetetrabenzoic Acid for the Effective Removal of Nerve Agent Simulants." Inorg. Chem. **56**(20): 12098-12101.
Park, J. M., H. W. Jung, Y. W. Chang, H. S. Kim, M. J. Kang and J. C. Pyun (2015). "Chemiluminescence lateral flow immunoassay based on Pt nanoparticle with peroxidase activity." Analytica Chimica Acta **853**: 360-367.
Park, K. S., M. I. Kim, D. Y. Cho and H. G. Park (2011). "Label-Free Colorimetric Detection of Nucleic Acids Based on Target-Induced Shielding Against the Peroxidase-Mimicking Activity of Magnetic Nanoparticles." Small **7**(11): 1521-1525.
Parton, R. F., I. F. J. Vankelecom, M. J. A. Casselman, C. P. Bezoukhanova, J. B. Uytterhoeven and P. A. Jacobs (1994). "An efficient mimic of cytochrome P-450 from a zeolite-encaged iron complex in a polymer membrane." Nature **370**(6490): 541-544.
Pasquato, L., P. Pengo and P. Scrimin (2005). "Nanozymes: Functional nanoparticle-based catalysts." Supramolecular Chemistry **17**(1-2): 163-171.
Pasquato, L., F. Rancan, P. Scrimin, F. Mancin and C. Frigeri (2000). "N-methylimidazole-functionalized gold nanoparticles as catalysts for cleavage of a carboxylic acid ester." Chem. Commun. (22): 2253-2254.
Pautler, R., E. Y. Kelly, P. J. J. Huang, J. Cao, B. W. Liu and J. W. Liu (2013). "Attaching DNA to Nanoceria: Regulating Oxidase Activity and Fluorescence Quenching." ACS Applied Materials & Interfaces **5**(15): 6820-6825.
Pedone, D., M. Moglianetti, E. De Luca, G. Bardi and P. P. Pompa (2017). "Platinum nanoparticles in nanobiomedicine." Chemical Society Reviews **46**(16): 4951-4975.
Pelletier, D. A., A. K. Suresh, G. A. Holton, C. K. McKeown, W. Wang, B. Gu, N. P. Mortensen, D. P. Allison, D. C. Joy, M. R. Allison, S. D. Brown, T. J. Phelps and M. J. Doktycz (2010). "Effects of Engineered Cerium Oxide Nanoparticles on Bacterial Growth and Viability." Applied and Environmental Microbiology **76**(24): 7981-7989.
Peng, C. F., Q. L. Pan, Z. J. Xie and F. M. Wan (2014). "Study on detection of Hg(II) based on single nucleic acid/AuNPs/mercury ion enzyme mimetics." J. Instrumental Anal. **33**(11): 1312-1316.
Peng, F. F., Y. Zhang and N. Gu (2008). "Size-dependent peroxidase-like catalytic activity of Fe(3)O(4) nanoparticles." Chinese Chemical Letters **19**(6): 730-733.
Peng, H. P., D. W. Lin, P. Liu, Y. H. Wu, S. H. Li, Y. Lei, W. Chen, Y. Z. Chen, X. H. Lin, X. H. Xia and A. L. Liu (2017). "Highly sensitive and rapid colorimetric sensing platform based on water-soluble WOx quantum dots with intrinsic peroxidase-like activity." Analytica Chimica Acta **992**: 128-134.
Peng, J. and J. Weng (2017). "Enhanced peroxidase-like activity of MoS2/graphene oxide hybrid with light irradiation for glucose detection." Biosens. Bioelectron. **89**(Pt 1): 652-658.
Peng, K. F., H. W. Zhao, P. Xie, S. Hu, Y. L. Yuan, R. Yuan and X. F. Wu (2016). "Impedimetric aptasensor for nuclear factor kappa B with peroxidase-like mimic coupled DNA nanoladders as enhancer." Biosens. Bioelectron. **81**: 1-7.
Peng, X. G., G. P. Wan, L. H. Wu, M. Zeng, S. W. Lin and G. Z. Wang (2018). "Peroxidase-like activity of Au@TiO2 yolk-shell nanostructure and its application for colorimetric detection of H2O2 and glucose." Sensors and Actuators B-Chemical **257**: 166-177.

Peng, Y. F., X. J. Chen, G. S. Yi and Z. Q. Gao (2011). "Mechanism of the oxidation of organic dyes in the presence of nanoceria." Chem. Commun. **47**(10): 2916-2918.
Peng, Y. H., Z. Y. Wang, W. S. Liu, H. L. Zhang, W. Zuo, H. A. Tang, F. J. Chen and B. D. Wang (2015). "Size- and shape-dependent peroxidase-like catalytic activity of MnFe2O4 Nanoparticles and their applications in highly efficient colorimetric detection of target cancer cells." Dalton Transactions **44**(28): 12871-12877.
Pengo, P., L. Baltzer, L. Pasquato and P. Scrimin (2007). "Substrate modulation of the activity of an artificial nanoesterase made of peptide-functionalized gold nanoparticles." Angew. Chem. Int. Ed. **46**(3): 400-404.
Pengo, P., S. Polizzi, L. Pasquato and P. Scrimin (2005). "Carboxylate - Imidazole cooperativity in dipeptide-functionalized gold nanoparticles with esterase-like activity." Journal of the American Chemical Society **127**(6): 1616-1617.
Perez, J. M. (2007). "Iron oxide nanoparticles - Hidden talent." Nature Nanotechnology **2**(9): 535-536.
Perez, J. M., A. Asati, S. Nath and C. Kaittanis (2008). "Synthesis of biocompatible dextran-coated nanoceria with pH-dependent antioxidant properties." Small **4**(5): 552-556.
Perez Lopez, B. and A. Merkoci (2011). "Nanomaterials based biosensors for food analysis applications." Trends in Food Science & Technology **22**(11): 625-639.
Periasamy, A. P., P. Roy, W. P. Wu, Y. H. Huang and H. T. Chang (2016). "Glucose Oxidase and Horseradish Peroxidase Like Activities of Cuprous Oxide/Polypyrrole Composites." Electrochimica Acta **215**: 253-260.
Peterson, G. W., A. X. Lu and T. H. Epps (2017). "Tuning the Morphology and Activity of Electrospun Polystyrene/UiO-66-NH2 Metal-Organic Framework Composites to Enhance Chemical Warfare Agent Removal." ACS Appl. Mater. Interfaces **9**(37): 32248-32254.
Peterson, G. W. and G. W. Wagner (2014). "Detoxification of chemical warfare agents by CuBTC." Journal of Porous Materials **21**(2): 121-126.
Pezzato, C. and L. J. Prins (2015). "Transient signal generation in a self-assembled nanosystem fueled by ATP." Nat. Commun. **6**: 7790.
Pieters, G. and L. J. Prins (2012). "Catalytic self-assembled monolayers on gold nanoparticles." New Journal of Chemistry **36**(10): 1931-1939.
Pirmohamed, T., J. M. Dowding, S. Singh, B. Wasserman, E. Heckert, A. S. Karakoti, J. E. S. King, S. Seal and W. T. Self (2010). "Nanoceria exhibit redox state-dependent catalase mimetic activity." Chem. Commun. **46**(16): 2736-2738.
Plonka, A. M., Q. Wang, W. O. Gordon, A. Balboa, D. Troya, W. Guo, C. H. Sharp, S. D. Senanayake, J. R. Morris, C. L. Hill and A. I. Frenkel (2017). "In Situ Probes of Capture and Decomposition of Chemical Warfare Agent Simulants by Zr-Based Metal Organic Frameworks." J. Am. Chem. Soc. **139**(2): 599-602.
Pogacean, F., C. Socaci, S. Pruneanu, A. R. Biris, M. Coros, L. Magerusan, G. Katona, R. Turcu and G. Borodi (2015). "Graphene based nanomaterials as chemical sensors for hydrogen peroxide - A comparison study of their intrinsic peroxidase catalytic behavior." Sensors and Actuators B-Chemical **213**: 474-483.
Ponnurangam, S., G. D. O'Connell, I. V. Chernyshova, K. Wood, C. T. H. Hung and P. Somasundaran (2014). "Beneficial Effects of Cerium Oxide Nanoparticles in Development of Chondrocyte-Seeded Hydrogel Constructs and Cellular Response to Interleukin Insults." Tissue Engineering. Part A **20**(21-22): 2908-2919.
Pourkhalili, N., A. Hosseini, A. Nili-Ahmadabadi, S. Hassani, M. Pakzad, M. Baeeri, A. Mohammadirad and M. Abdollahi (2011). "Biochemical and cellular evidence of the benefit of a combination of cerium oxide nanoparticles and selenium to diabetic rats." World Journal of Diabetes **2**(11): 204-210.
Pratsinis, A., G. A. Kelesidis, S. Zuercher, F. Krumeich, S. Bolisetty, R. Mezzenga, J. C. Leroux and G. A. Sotiriou (2017). "Enzyme-Mimetic Antioxidant Luminescent Nanoparticles for Highly Sensitive Hydrogen Peroxide Biosensing." ACS Nano **11**(12): 12210-12218.
Praveen Kumar, J., G. K. Prasad, P. V. R. K. Ramacharyulu, P. Garg and K. Ganesan (2013). "Mesoporous CuO-ZnO binary metal oxide nanocomposite for decontamination of sulfur mustard." Mater. Chem. Phys. **142**(2-3): 484-490.
Prins, L. J. (2015). "Emergence of Complex Chemistry on an Organic Monolayer." Accounts of Chemical Research **48**(7): 1920-1928.
Prylutska, S., I. Grynyuk, O. Matyshevska, Y. Prylutskyy, M. Evstigneev, P. Scharff and U. Ritter (2014). "C-60 Fullerene as Synergistic Agent in Tumor-Inhibitory Doxorubicin Treatment." Drugs R D **14**(4): 333-340.
Pulido-Reyes, G., I. Rodea-Palomares, S. Das, T. S. Sakthivel, F. Leganes, R. Rosal, S. Seal and F. Fernandez-Pinas (2015). "Untangling the biological effects of cerium oxide nanoparticles: the role of surface valence states." Sci. Rep. **5**: 15613.
Pullen, S., H. Fei, A. Orthaber, S. M. Cohen and S. Ott (2013). "Enhanced Photochemical Hydrogen Production by a Molecular Diiron Catalyst Incorporated into a Metal–Organic Framework." Journal of the American Chemical Society **135**(45): 16997-17003.

Puvvada, N., P. K. Panigrahi, D. Mandal and A. Pathak (2012). "Shape dependent peroxidase mimetic activity towards oxidation of pyrogallol by H2O2." RSC Advances **2**(8): 3270-3273.
Qi, C., S. F. Cai, X. H. Wang, J. Y. Li, Z. Lian, S. S. Sun, R. Yang and C. Wang (2016). "Enhanced oxidase/peroxidase-like activities of aptamer conjugated MoS2/PtCu nanocomposites and their biosensing application." RSC Adv. **6**(60): 54949-54955.
Qi, Z. W., L. Wang, Q. You and Y. Chen (2017). "PA-Tb-Cu MOF as luminescent nanoenzyme for catalytic assay of hydrogen peroxide." Biosensors & Bioelectronics **96**: 227-232.
Qian, F. M., J. M. Wang, S. Y. Ai and L. F. Li (2015). "As a new peroxidase mimetics: The synthesis of selenium doped graphitic carbon nitride nanosheets and applications on colorimetric detection of H_2O_2 and xanthine." Sensors and Actuators B-Chemical **216**: 418-427.
Qian, J., X. W. Yang, L. Jiang, C. D. Zhu, H. P. Mao and K. Wang (2014). "Facile preparation of Fe3O4 nanospheres/reduced graphene oxide nanocomposites with high peroxidase-like activity for sensitive and selective colorimetric detection of acetylcholine." Sensors and Actuators B-Chemical **201**: 160-166.
Qian, J., X. W. Yang, Z. T. Yang, G. B. Zhu, H. P. Mao and K. Wang (2015). "Multiwalled carbon nanotube@reduced graphene oxide nanoribbon heterostructure: synthesis, intrinsic peroxidase-like catalytic activity, and its application in colorimetric biosensing." J. Mater. Chem. B **3**(8): 1624-1632.
Qiao, F. M., L. J. Chen, X. N. Li, L. F. Li and S. Y. Ai (2014). "Peroxidase-like activity of manganese selenide nanoparticles and its analytical application for visual detection of hydrogen peroxide and glucose." Sensors and Actuators B-Chemical **193**: 255-262.
Qiao, F. M., Q. Q. Qi, Z. Z. Wang, K. Xu and S. Y. Ai (2016). "MnSe-loaded g-C 3 N 4 nanocomposite with synergistic peroxidase-like catalysis: Synthesis and application toward colorimetric biosensing of H 2 O 2 and glucose." Sensors and Actuators B: Chemical **229**: 379-386.
Qiao, F. M., Z. Z. Wang, K. Xu and S. Y. Ai (2015). "Double enzymatic cascade reactions within FeSe-Pt@SiO_2 nanospheres: synthesis and application toward colorimetric biosensing of H_2O_2 and glucose." Analyst **140**(19): 6684-6691.
Qin, F. X., S. Y. Jia, F. F. Wang, S. H. Wu, J. Song and Y. Liu (2013). "Hemin@metal-organic framework with peroxidase-like activity and its application to glucose detection." Catalysis Science & Technology **3**(10): 2761-2768.
Qin, L., X. Y. Wang, Y. F. Liu and H. Wei (2018). "2D-MOF nanozyme sensor arrays for probing phosphates and their enzymatic hydrolysis." Analytical Chemistry **90**(16): 9983-9989.
Qin, W. J., L. Su, C. Yang, Y. H. Ma, H. J. Zhang and X. G. Chen (2014). "Colorimetric Detection of Sulfite in Foods by a TMB-O-2-Co3O4 Nanoparticles Detection System." Journal of Agricultural and Food Chemistry **62**(25): 5827-5834.
Qin, Y., Q. Zhang, Y. D. Li, X. L. Liu, Z. X. Lu, L. Y. Zheng, S. X. Liu, Q. E. Cao and Z. T. Ding (2017). "Copper metal-organic polyhedra nanorods with high intrinsic peroxidase-like activity at physiological pH for bio-sensing." J. Mater. Chem. B **5**(47): 9365-9370.
Qin, Y. F., Z. Y. Qin, Y. N. Liu, M. Cheng, P. F. Qian, Q. Wang and M. F. Zhu (2015). "Superparamagnetic iron oxide coated on the surface of cellulose nanospheres for the rapid removal of textile dye under mild condition." Applied Surface Science **357**: 2103-2111.
Qin, Y. L., M. C. Long, B. H. Tan and B. X. Zhou (2014). "RhB Adsorption Performance of Magnetic Adsorbent Fe3O4/RGO Composite and Its Regeneration through A Fenton-like Reaction." Nano-Micro Lett. **6**(2): 125-135.
Qin, Z. J., Y. Zhao, L. Lin, P. Zou, L. Zhang, H. Chen, Y. Wang, G. T. Wang and Y. S. Zhang (2017). "Core/shell microcapsules consisting of Fe3O4 microparticles coated with nitrogen-doped mesoporous carbon for voltammetric sensing of hydrogen peroxide." Microchimica Acta **184**(11): 4513-4520.
Qiu, N., Y. Liu, M. Xiang, X. M. Lu, Q. Yang and R. Guo (2018). "A facile and stable colorimetric sensor based on three-dimensional graphene/mesoporous Fe3O4 nanohybrid for highly sensitive and selective detection of p-nitrophenol." Sensors and Actuators B-Chemical **266**: 86-94.
Qu, F. L., T. Li and M. H. Yang (2011). "Colorimetric platform for visual detection of cancer biomarker based on intrinsic peroxidase activity of graphene oxide." Biosensors & Bioelectronics **26**(9): 3927-3931.
Qu, J. Y., Y. Dong, Y. Wang, T. F. Lou and X. P. Du (2014). "Determination of hydrogen peroxide using a biosensor based on Fe3O4 magnetic nanoparticles and horseradish peroxidase with graphene-chitosan composite." Micro & Nano Letters **9**(9): 572-576.
Qu, K. G., P. Shi, J. S. Ren and X. G. Qu (2014). "Nanocomposite Incorporating V2O5 Nanowires and Gold Nanoparticles for Mimicking an Enzyme Cascade Reaction and Its Application in the Detection of Biomolecules." Chemistry-a European Journal **20**(24): 7501-7506.
Qu, R., L. L. Shen, Z. H. Chai, C. Jing, Y. F. Zhang, Y. L. An and L. Q. Shi (2014). "Hemin-Block Copolymer Micelle as an

Artificial Peroxidase and Its Applications in Chromogenic Detection and Biocatalysis." Acs Applied Materials & Interfaces **6**(21): 19207-19216.
Qu, R., L. L. Shen, A. T. Qu, R. L. Wang, Y. L. An and L. Q. Shi (2015). "Artificial Peroxidase/Oxidase Multiple Enzyme System Based on Supramolecular Hydrogel and Its Application as a Biocatalyst for Cascade Reactions." ACS Applied Materials & Interfaces **7**(30): 16694-16705.
Qu, R., H. Shi, R. Wang, T. Cheng, R. Ma, Y. An and L. Shi (2017). "Hemin-micelles immobilized in alginate hydrogels as artificial enzymes with peroxidase-like activity and substrate selectivity." Biomater. Sci. **5**(3): 570-577.
Quick, K. L., S. S. Ali, R. Arch, C. Xiong, D. Wozniak and L. L. Dugan (2008). "A carboxyfullerene SOD mimetic improves cognition and extends the lifespan of mice." Neurobiology of Aging **29**(1): 117-128.
Ragavan, K. V. and N. K. Rastogi (2016). "Graphene-copper oxide nanocomposite with intrinsic peroxidase activity for enhancement of chemiluminescence signals and its application for detection of Bisphenol-A." Sensors and Actuators B-Chemical **229**: 570-580.
Ragg, R., F. Natalio, M. N. Tahir, H. Janssen, A. Kashyap, D. Strand, S. Strand and W. Tremel (2014). "Molybdenum Trioxide Nanoparticles with Intrinsic Sulfite Oxidase Activity." Acs Nano **8**(5): 5182-5189.
Ragg, R., A. M. Schilmann, K. Korschelt, C. Wieseotte, M. Kluenker, M. Viel, L. Voelker, S. Preiss, J. Herzberger, H. Frey, K. Heinze, P. Bluemler, M. N. Tahir, F. Natalio and W. Tremel (2016). "Intrinsic superoxide dismutase activity of MnO nanoparticles enhances the magnetic resonance imaging contrast." J. Mater. Chem. B **4**(46): 7423-7428.
Ragg, R., M. N. Tahir and W. Tremel (2016). "Solids Go Bio: Inorganic Nanoparticles as Enzyme Mimics." European Journal of Inorganic Chemistry(13-14): 1906-1915.
Rahimi Nasrabadi, M., F. Mizani, M. Hosseini, A. H. Keihan and M. R. Ganjali (2017). "Detection of hydrogen peroxide and glucose by using Tb-2(MoO4)(3) nanoplates as peroxidase mimics." Spectrochim. Acta. A **186**: 82-88.
Ramacharyulu, P. V. R. K., J. Praveen Kumar, G. K. Prasad, B. Singh, B. Sreedhar and K. Dwivedi (2014). "Sunlight assisted photocatalytic detoxification of sulfur mustard on vanadium ion doped titania nanocatalysts." Journal of Molecular Catalysis A: Chemical **387**: 38-44.
Rastogi, L., D. Karunasagar, R. B. Sashidhar and A. Giri (2017). "Peroxidase-like activity of gum kondagogu reducedstabilizedpalladium nanoparticles and its analytical application for colorimetricdetection of glucose in biological samples." Sensors and Actuators B: Chemical **240**: 1182-1188.
Rauf, S., M. A. H. Nawaz, N. Muhammad, R. Raza, S. A. Shahid, J. L. Marty and A. Hayat (2017). "Protic ionic liquids as a versatile modulator and stabilizer in regulating artificial peroxidase activity of carbon materials for glucose colorimetric sensing." Journal of Molecular Liquids **243**: 333-340.
Ray, C., S. Dutta, S. Sarkar, R. Sahoo, A. Roy and T. Pal (2014). "Intrinsic peroxidase-like activity of mesoporous nickel oxide for selective cysteine sensing." J. Mater. Chem. B **2**(36): 6097-6105.
Ren, C. X., X. G. Hu and Q. X. Zhou (2018). "Graphene Oxide Quantum Dots Reduce Oxidative Stress and Inhibit Neurotoxicity In Vitro and In Vivo through Catalase-Like Activity and Metabolic Regulation." Adv. Sci. **5**(5): 1700595.
Ren, H. J., T. G. Ma, J. Zhao and R. Zhou (2018). "V-c-Functionalized Fe3O4 Nanocomposites as Peroxidase-like Mimetics for H2O2 and Glucose Sensing." Chemical Research in Chinese Universities **34**(2): 260-268.
Ren, X. L., J. Liu, J. Ren, F. Q. Tang and X. W. Meng (2015). "One-pot synthesis of active copper-containing carbon dots with laccase-like activities." Nanoscale **7**(46): 19641-19646.
Ren, X. L., X. W. Meng, J. Ren and F. Q. Tang (2016). "Graphitic carbon nitride nanosheets with tunable optical properties and their superoxide dismutase mimetic ability." RSC Adv. **6**(95): 92839-92844.
Ren, X. N., M. Xia, Q. Z. Yan and C. C. Ge (2017). "Large scale and controllable preparation of W2C nanorods or WC nanodots with peroxidase-like catalytic activity." Chinese Phys. B **26**(4): 048103.
Reuillard, B., S. Gentil, M. Carriere, A. Le Goff and S. Cosnier (2015). "Biomimetic versus enzymatic high-potential electrocatalytic reduction of hydrogen peroxide on a functionalized carbon nanotube electrode." Chemical Science **6**(9): 5139-5143.
Rhadfi, T., J. Y. Piquemal, L. Sicard, F. Herbst, E. Briot, M. Benedetti and A. Atlamsani (2010). "Polyol-made Mn(3)O(4) nanocrystals as efficient Fenton-like catalysts." Applied Catalysis a-General **386**(1-2): 132-139.
Roonasi, P. and A. Y. Nezhad (2016). "A comparative study of a series of ferrite nanoparticles as heterogeneous catalysts for phenol removal at neutral pH." Mater. Chem. Phys. **172**: 143-149.
Rossi, L. M., N. J. S. Costa, F. P. Silva and R. V. Goncalves (2013). "Magnetic nanocatalysts: supported metal nanoparticles for catalytic applications." Nanotechnology Reviews **2**(5): 597-614.
Roy, A., R. Sahoo, C. Ray, S. Dutta and T. Pal (2016). "Soft template induced phase selective synthesis of Fe2O3 nanomagnets: one step towards peroxidase-mimic activity allowing colorimetric sensing of thioglycolic acid." RSC Advances **6**(38): 32308-32318.

Roy, P., L.-C. Ho, P. Prakash, Y.-S. Lin, M.-F. Huang and H.-T. Chang (2015). "Graphene-ZnO-Au nanocomposites based photocatalytic oxidation of benzoic acid." Sci. Lett. J. **4**: 120.
Roy, P., Z. H. Lin, C. T. Liang and H. T. Chang (2012). "Synthesis of enzyme mimics of iron telluride nanorods for the detection of glucose." Chem. Commun. **48**(34): 4079-4081.
S. R. Ahmed, K. Takemeura, T.-C. Li, N. Kitamoto, T. Tanaka, T. Suzuki and E. Y. Park (2017). "Size-controlled preparation of peroxidase-like graphene-gold nanoparticle hybrids for the visible detection of norovirus-like particles." Biosensors and Bioelectronics **87**: 558-565.
Sadeghi, S., E. Fooladi and M. Malekaneh (2015). "A New Amperometric Biosensor Based on Fe3O4/Polyaniline/Laccase/Chitosan Biocomposite-Modified Carbon Paste Electrode for Determination of Catechol in Tea Leaves." Applied Biochemistry and Biotechnology **175**(3): 1603-1616.
Saeed, M. and L. Y. Deng (2016). "Carbon nanotube enhanced PVA-mimic enzyme membrane for post-combustion CO2 capture." Int. J. Greenh. Gas Con. **53**: 254-262.
Sahoo, P. C., Y. N. Jang and S. W. Lee (2013). "Enhanced biomimetic CO2 sequestration and CaCO3 crystallization using complex encapsulated metal organic framework." Journal of Crystal Growth **373**: 96-101.
Salarizadeh, N., M. Sadri, H. Hosseini and R. H. Sajedi (2017). "Synthesis and physicochemical characterization of NixZnx-Fe2O4/MWCNT nanostructures as enzyme mimetics with peroxidase-like catalytic activity." Carbon Lett. **24**(1): 103-110.
Salarizadeh, N., M. Sadri and R. H. Sajedi (2018). "Synthesis and catalytic evaluation of Fe3O4/MWCNTs nanozyme as recyclable peroxidase mimetics: Biochemical and physicochemical characterization." Applied Organometallic Chemistry **32**(2): e4018.
Salvio, R. and A. Cincotti (2014). "Guanidine based self-assembled monolayers on Au nanoparticles as artificial phosphodiesterases." Rsc Advances **4**(54): 28678-28682.
Samuel, E. L. G., M. T. Duong, B. R. Bitner, D. C. Marcano, J. M. Tour and T. A. Kent (2014). "Hydrophilic carbon clusters as therapeutic, high-capacity antioxidants." Trends in Biotechnology **32**(10): 501-505.
Samuel, E. L. G., D. C. Marcano, V. Berka, B. R. Bitner, G. Wu, A. Potter, R. H. Fabian, R. G. Pautler, T. A. Kent, A.-L. Tsai and J. M. Tour (2015). "Highly efficient conversion of superoxide to oxygen using hydrophilic carbon clusters." Proceedings of the National Academy of Sciences of the United States of America **112**(8): 2343-2348.
Sang, J. L., R. L. Wu, P. P. Guo, J. Du, S. M. Xu and J. D. Wang (2016). "Affinity-tuned peroxidase-like activity of hydrogel-supported Fe3O4 nanozyme through alteration of crosslinking concentration." Journal of Applied Polymer Science **133**(8): 43065.
Sang, Y. J., Y. Y. Huang, W. Li, J. S. Ren and X. G. Qu (2018). "Bioinspired Design of Fe3+-Doped Mesoporous Carbon Nanospheres for Enhanced Nanozyme Activity." Chemistry-a European Journal **24**(28): 7259-7263.
Saraf, S., C. J. Neal, S. Das, S. Barkam, R. McCormack and S. Seal (2014). "Understanding the Adsorption Interface of Polyelectrolyte Coating on Redox Active Nanoparticles Using Soft Particle Electrokinetics and Its Biological Activity." Acs Applied Materials & Interfaces **6**(8): 5472-5482.
Sardesai, N. P., D. Andreescu and S. Andreescu (2013). "Electroanalytical Evaluation of Antioxidant Activity of Cerium Oxide Nanoparticles by Nanoparticle Collisions at Microelectrodes." Journal of the American Chemical Society **135**(45): 16770-16773.
Sardesai, N. P., M. Ganesana, A. Karimi, J. C. Leiter and S. Andreescu (2015). "Platinum-Doped Ceria Based Biosensor for in Vitro and in Vivo Monitoring of Lactate during Hypoxia." Analytical Chemistry **87**(5): 2996-3003.
Sasan, K., Q. Lin, C. Mao and P. Feng (2014). "Incorporation of iron hydrogenase active sites into a highly stable metal–organic framework for photocatalytic hydrogen generation." Chem. Commun. **50**(72): 10390-10393.
Savelli, C. and R. Salvio (2015). "Guanidine-Based Polymer Brushes Grafted onto Silica Nanoparticles as Efficient Artificial Phosphodiesterases." Chemistry-a European Journal **21**(15): 5856-5863.
Schubert, D., R. Dargusch, J. Raitano and S. W. Chan (2006). "Cerium and yttrium oxide nanoparticles are neuroprotective." Biochemical and Biophysical Research Communications **342**(1): 86-91.
Selvaraj, V., N. Nepal, S. Rogers, N. D. P. K. Manne, R. Arvapalli, K. M. Rice, S. Asano, E. Fankhanel, J. J. Ma, T. Shokuhfar, M. Maheshwari and E. R. Blough (2015). "Inhibition of MAP kinase/NF-kB mediated signaling and attenuation of lipopolysaccharide induced severe sepsis by cerium oxide nanoparticles." Biomaterials **59**: 160-171.
Sennuga, A., J. van Marwijk and C. G. Whiteley (2012). "Ferroxidase activity of apoferritin is increased in the presence of platinum nanoparticles." Nanotechnology **23**(3): 035102.
Shah, J., R. Purohit, R. Singh, A. S. Karakoti and S. Singh (2015). "ATP-enhanced peroxidase-like activity of gold nanoparticles." Journal of Colloid and Interface Science **456**: 100-107.
Shah, J. and S. Singh (2018). "Unveiling the role of ATP in amplification of intrinsic peroxidase-like activity of gold

nanoparticles." 3 Biotech. **8**(1): 67.
Shah, V., S. Shah, H. Shah, F. J. Rispoli, K. T. McDonnell, S. Workeneh, A. Karakoti, A. Kumar and S. Seal (2012). "Antibacterial Activity of Polymer Coated Cerium Oxide Nanoparticles." PLoS One **7**(10): e47827.
Shamsipur, M., A. Safavi and Z. Mohammadpour (2014). "Indirect colorimetric detection of glutathione based on its radical restoration ability using carbon nanodots as nanozymes." Sensors and Actuators B-Chemical **199**: 463-469.
Sharma, B., A. K. Dangi and P. Shukla (2018). "Contemporary enzyme based technologies for bioremediation: A review." J. Environ. Manage. **210**: 10-22.
Sharma, P. K., G. Gupta, A. K. Nigam, P. Pandey, M. Boopathi, K. Ganesan and B. Singh (2013). "Photoelectrocatalytic degradation of blistering agent sulfur mustard to non-blistering substances using pPy/NiOBPC nanocomposite." Journal of Molecular Catalysis a-Chemical **366**: 368-374.
Sharma, T. K., R. Ramanathan, R. Rakwal, G. K. Agrawal and V. Bansal (2015). "Moving forward in plant food safety and security through NanoBioSensors: Adopt or adapt biomedical technologies?" Proteomics **15**(10): 1680-1692.
Sharma, T. K., R. Ramanathan, P. Weerathunge, M. Mohammadtaheri, H. K. Daima, R. Shukla and V. Bansal (2014). "Aptamer-mediated 'turn-off/turn-on' nanozyme activity of gold nanoparticles for kanamycin detection." Chem. Commun. **50**(100): 15856-15859.
Sharma, V. and S. M. Mobin (2017). "Cytocompatible peroxidase mimic CuO:graphene nanosphere composite as colorimetric dual sensor for hydrogen peroxide and cholesterol with its logic gate implementation." Sensors and Actuators B: Chemical **240**: 338-348.
Shcherbakov, A. B., N. M. Zholobak, A. E. Baranchikov, A. V. Ryabova and V. K. Ivanov (2015). "Cerium fluoride nanoparticles protect cells against oxidative stress." Mater. Sci. Eng. C **50**: 151-159.
Sheet, D., P. Halder and T. K. Paine (2013). "Enhanced Reactivity of a Biomimetic Iron(II) α-Keto Acid Complex through Immobilization on Functionalized Gold Nanoparticles." Angew. Chem. Int. Ed. **52**(50): 13314-13318.
Shen, W., C. L. Lim and Z. Q. Gao (2013). "A ferrofluid-based homogeneous assay for highly sensitive and selective detection of single-nucleotide polymorphisms." Chem. Commun. **49**(73): 8114-8116.
Shen, X. H., Q. Wang, Y. H. Liu, W. X. Xue, L. Ma, S. H. Feng, M. M. Wan, F. H. Wang and C. Mao (2016). "Manganese Phosphate Self-assembled Nanoparticle Surface and Its application for Superoxide Anion Detection." Sci. Rep. **6**: 28989.
Shen, X. M., X. J. Gao and X. F. Gao (2018). "Theoretical Studies on The Mechanisms of The Enzyme-like Activities of Precious-metal and Carbon Nanomaterials." Progress in Biochemistry and Biophysics **45**(2): 204-217.
Shen, X. M., W. Q. Liu, X. J. Gao, Z. H. Lu, X. C. Wu and X. F. Gao (2015). "Mechanisms of Oxidase and Superoxide Dismutation-like Activities of Gold, Silver, Platinum, and Palladium, and Their Alloys: A General Way to the Activation of Molecular Oxygen." Journal of the American Chemical Society **137**(50): 15882-15891.
Shi, L. L., K. Z. Liu, X. H. Zou, M. S. Yin and Z. H. Suo (2010). "Selective Oxidation of Glucose in the Presence of PVP-Protected Colloidal Gold Solutions." Chinese Journal of Catalysis **31**(6): 661-665.
Shi, W. B., Q. L. Wang, Y. J. Long, Z. L. Cheng, S. H. Chen, H. Z. Zheng and Y. M. Huang (2011). "Carbon nanodots as peroxidase mimetics and their applications to glucose detection." Chem. Commun. **47**(23): 6695-6697.
Shi, W. B., X. D. Zhang, S. H. He and Y. M. Huang (2011). "$CoFe_2O_4$ magnetic nanoparticles as a peroxidase mimic mediated chemiluminescence for hydrogen peroxide and glucose." Chem. Commun. **47**(38): 10785-10787.
Shi, W. B., X. D. Zhang, S. H. He, J. Li and Y. M. Huang (2013). "Fast screening of the nanoparticles-based enzyme mimetics by a chemiluminescence method." Sci. Sin. Chim. **43**(11): 1591-1598.
Shi, W. J., H. Fan, S. Y. Ai and L. S. Zhu (2015). "Honeycomb-like nitrogen-doped porous carbon supporting Pt nanoparticles as enzyme mimic for colorimetric detection of cholesterol." Sensors and Actuators B-Chemical **221**: 1515-1522.
Shi, W. J., H. Fan, S. Y. Ai and L. S. Zhu (2015). "Pd nanoparticles supported on nitrogen, sulfur-doped three-dimensional hierarchical nanostructures as peroxidase-like catalysts for colorimetric detection of xanthine." Rsc Advances **5**(41): 32183-32190.
Shi, Y., J. Huang, J. N. Wang, P. Su and Y. Yang (2015). "A magnetic nanoscale Fe3O4/P beta-CD composite as an efficient peroxidase mimetic for glucose detection." Talanta **143**: 457-463.
Shi, Y., P. Su, Y. Y. Wang and Y. Yang (2014). "Fe3O4 peroxidase mimetics as a general strategy for the fluorescent detection of H2O2-involved systems." Talanta **130**: 259-264.
Shibuya, S., Y. Ozawa, K. Watanabe, N. Izuo, T. Toda, K. Yokote and T. Shimizu (2014). "Palladium and Platinum Nanoparticles Attenuate Aging-Like Skin Atrophy via Antioxidant Activity in Mice." PLoS One **9**(10): e109288.
Shin, H. Y., S. Cho and M. I. Kim (2017). "Enzyme-Free Colorimetric Detection of Glucose Using a Composite Entrapping Gold and Magnetic Nanoparticles Within an Agarose Gel Matrix." Journal of Nanoscience and

Nanotechnology **17**(11): 7971-7977.
Shin, H. Y., B. G. Kim, S. Cho, J. Lee, H. B. Na and M. I. Kim (2017). "Visual determination of hydrogen peroxide and glucose by exploiting the peroxidase-like activity of magnetic nanoparticles functionalized with a poly(ethylene glycol) derivative." Microchimica Acta **184**(7): 2115-2122.
Shin, J., S. Lee and M. Cha (2017). "Neuroprotective effect of single-wall carbon nanotubes with built-in peroxidase-like activity against beta-amyloid-induced neurotoxicity." Med. Chem. Commun. **8**(3): 625-632.
Shin, S., H. Yoon and J. Jang (2008). "Polymer-encapsulated iron oxide nanoparticles as highly efficient Fenton catalysts." Catalysis Communications **10**(2): 178-182.
Shu, J., Z. L. Qiu, Q. H. Wei, J. Y. Zhuang and D. P. Tang (2015). "Cobalt-Porphyrin-Platinum-Functionalized Reduced Graphene Oxide Hybrid Nanostructures: A Novel Peroxidase Mimetic System For Improved Electrochemical Immunoassay." Sci. Rep. **5**: 15113.
Shutov, R. V., A. Guerreiro, E. Moczko, I. P. de Vargas-Sansalvador, I. Chianella, M. J. Whitcombe and S. A. Piletsky (2014). "Introducing MINA -The Molecularly Imprinted Nanoparticle Assay." Small **10**(6): 1086-1089.
Silva, G. A. (2006). "Nanomedicine - Seeing the benefits of ceria." Nature Nanotechnology **1**(2): 92-94.
Silva, V. B., T. S. Rodrigues, P. H. C. Camargo and E. S. Orth (2017). "Detoxification of organophosphates using imidazole-coated Ag, Au and AgAu nanoparticles." RSC Advances **7**(65): 40711-40719.
Sims, C. M., S. K. Hanna, D. A. Heller, C. P. Horoszko, M. E. Johnson, A. R. M. Bustos, V. Reipa, K. R. Riley and B. C. Nelson (2017). "Redox-active nanomaterials for nanomedicine applications." Nanoscale **9**(40): 15226-15251.
Singh, A., S. Patra, J. A. Lee, K. H. Park and H. Yang (2011). "An artificial enzyme-based assay: DNA detection using a peroxidase-like copper-creatinine complex." Biosensors & Bioelectronics **26**(12): 4798-4803.
Singh, M., P. Weerathunge, P. D. Liyanage, E. Mayes, R. Ramanathan and V. Bansal (2017). "Competitive Inhibition of the Enzyme-Mimic Activity of Gd-Based Nanorods toward Highly Specific Colorimetric Sensing of L-Cysteine." Langmuir **33**(38): 10006-10015.
Singh, N., M. Geethika, S. M. Eswarappa and G. Mugesh (2018). "Manganese-Based Nanozymes: Multienzyme Redox Activity and Effect on the Nitric Oxide Produced by Endothelial Nitric Oxide Synthase." Chemistry-A European Journal **24**(33): 8393-8403.
Singh, N., M. A. Savanur, S. Srivastava, P. D'Silva and G. Mugesh (2017). "A Redox Modulatory Mn3O4 Nanozyme with Multi-Enzyme Activity Provides Efficient Cytoprotection to Human Cells in a Parkinson's Disease Model." Angew. Chem. Int. Ed. **56**(45): 14267-14271.
Singh, R., R. Belgamwar, M. Dhiman and V. Polshettiwar (2018). "Dendritic fibrous nano-silica supported gold nanoparticles as an artificial enzyme." J. Mater. Chem. B **6**(11): 1600-1604.
Singh, R. and S. Singh (2015). "Role of phosphate on stability and catalase mimetic activity of cerium oxide nanoparticles." Colloid. Surface. B **132**: 78-84.
Singh, S. (2016). "Cerium oxide based nanozymes: Redox phenomenon at biointerfaces." Biointerphases **11**(4): 04B202.
Singh, S., T. Dosani, A. S. Karakoti, A. Kumar, S. Seal and W. T. Self (2011). "A phosphate-dependent shift in redox state of cerium oxide nanoparticles and its effects on catalytic properties." Biomaterials **32**(28): 6745-6753.
Singh, S., A. Kumar, A. Karakoti, S. Seal and W. T. Self (2010). "Unveiling the mechanism of uptake and sub-cellular distribution of cerium oxide nanoparticles." Molecular Biosystems **6**(10): 1813-1820.
Singh, S., K. Mitra, A. Shukla, R. Singh, R. K. Gundampati, N. Misra, P. Maiti and B. Ray (2017). "Brominated Graphene as Mimetic Peroxidase for Sulfide Ion Recognition." Anal. Chem. **89**(1): 783-791.
Singh, V. V., B. Jurado-Sanchez, S. Sattayasamitsathit, J. Orozco, J. Li, M. Galarnyk, Y. Fedorak and J. Wang (2015). "Multifunctional Silver-Exchanged Zeolite Micromotors for Catalytic Detoxification of Chemical and Biological Threats." Advanced Functional Materials **25**(14): 2147-2155.
Sitharaman, B., S. Asokan, I. Rusakova, M. S. Wong and L. J. Wilson (2004). "Nanoscale aggregation properties of neuroprotective carboxyfullerene (C-3) in aqueous solution." Nano Letters **4**(9): 1759-1762.
Sloan Dennison, S., N. C. Shand, D. Graham and K. Faulds (2017). "Resonance Raman detection of antioxidants using an iron oxide nanoparticle catalysed decolourisation assay." Analyst **142**(24): 4715-4720.
Sloan-Dennison, S., S. Laing, N. C. Shand, D. Graham and K. Faulds (2017). "A novel nanozyme assay utilising the catalytic activity of silver nanoparticles and SERRS." Analyst **142**(13): 2484-2490.
Snyder, B. E. R., P. Vanelderen, M. L. Bols, S. D. Hallaert, L. H. Bottger, L. Ungur, K. Pierloot, R. A. Schoonheydt, B. F. Sels and E. I. Solomon (2016). "The active site of low-temperature methane hydroxylation in iron-containing zeolites." Nature **536**(7616): 317-321.
Sobanska, K., P. Pietrzyk and Z. Sojka (2017). "Generation of Reactive Oxygen Species via Electroprotic Interaction of

H2O2 with ZrO2 Gel: Ionic Sponge Effect and pH-Switchable Peroxidase- and Catalase-Like Activity." ACS Catalysis **7**(4): 2935-2947.
Socaci, C., F. Pogacean, A. R. Bins, M. Coros, M. C. Rosu, L. Magerusan, G. Katona and S. Pruneanu (2016). "Graphene oxide vs. reduced graphene oxide as carbon support in porphyrin peroxidase biomimetic nanomaterials." Talanta **148**: 511-517.
Soh, M., D. W. Kang, H. G. Jeong, D. Kim, D. Y. Kim, W. Yang, C. Song, S. Baik, I. Y. Choi, S. K. Ki, H. J. Kwon, T. Kim, C. K. Kim, S. H. Lee and T. Hyeon (2017). "Ceria-Zirconia Nanoparticles as an Enhanced Multi-Antioxidant for Sepsis Treatment." Angew. Chem. Int. Ed. **56**(38): 11399-11403.
Son, D., J. Lee, D. J. Lee, R. Ghaffari, S. Yun, S. J. Kim, J. E. Lee, H. R. Cho, S. Yoon, S. Yang, S. Lee, S. Qiao, D. Ling, S. Shin, J.-K. Song, J. Kim, T. Kim, H. Lee, J. Kim, M. Soh, N. Lee, C. S. Hwang, S. Nam, N. Lu, T. Hyeon, S. H. Choi and D.-H. Kim (2015). "Bioresorbable Electronic Stent Integrated with Therapeutic Nanoparticles for Endovascular Diseases." ACS Nano **9**(6): 5937-5946.
Song, C. O., J. W. Lee, H. S. Choi and J. K. Kang (2013). "Two-step synthesis of agglomeration-free peroxidase-like Co3O4 nanoparticles-carbon nitride nanotube hybrids enabling a high redox activity." Rsc Advances **3**(43): 20179-20185.
Song, H. P., J. Y. Jang, S. H. Bae, S. B. Choi, B. J. Yu and M. I. Kim (2018). "Convenient Colorimetric Detection of Thrombin via Aptamer-Mediated Inhibition and Restoration of the Oxidase Activity of Nanoceria." Journal of Nanoscience and Nanotechnology **18**(9): 6570-6574.
Song, H. P., Y. Lee, B. Vu Khac Hoang, Y. K. Oh, H. G. Park, M. I. Kim and Y. C. Lee (2018). "Effective Peroxidase-Like Activity of Co-Aminoclay CoAC and Its Application for Glucose Detection." Sensors **18**(2): 457.
Song, L. N., C. Huang, W. Zhang, M. Ma, Z. W. Chen, N. Gu and Y. Zhang (2016). "Graphene oxide-based Fe2O3 hybrid enzyme mimetic with enhanced peroxidase and catalase-like activities." Colloid. Surface. A **506**: 747-755.
Song, S. Q., H. X. Yang, R. C. Rao, H. D. Liu and A. M. Zhang (2010). "High catalytic activity and selectivity for hydroxylation of benzene to phenol over multi-walled carbon nanotubes supported Fe3O4 catalyst." Applied Catalysis a-General **375**(2): 265-271.
Song, S. S., Y. Liu, A. X. Song, Z. D. Zhao, H. S. Lu and J. C. Hao (2017). "Peroxidase mimetic activity of Fe3O4 nanoparticle prepared based on magnetic hydrogels for hydrogen peroxide and glucose detection." Journal of Colloid and Interface Science **506**: 46-57.
Song, W., G. D. Nie, W. Ji, Y. Z. Jiang, X. F. Lu, B. Zhao and Y. Ozaki (2016). "Synthesis of bifunctional reduced graphene oxide/CuS/Au composite nanosheets for in situ monitoring of a peroxidase-like catalytic reaction by surface-enhanced Raman spectroscopy." RSC Advances **6**(59): 54456-54462.
Song, Y. J., Y. Chen, L. Y. Feng, J. S. Ren and X. G. Qu (2011). "Selective and quantitative cancer cell detection using target-directed functionalized graphene and its synergetic peroxidase-like activity." Chem. Commun. **47**(15): 4436-4438.
Song, Y. J., K. G. Qu, C. Xu, J. S. Ren and X. G. Qu (2010). "Visual and quantitative detection of copper ions using magnetic silica nanoparticles clicked on multiwalled carbon nanotubes." Chem. Commun. **46**(35): 6572-6574.
Song, Y. J., K. G. Qu, C. Zhao, J. S. Ren and X. G. Qu (2010). "Graphene Oxide: Intrinsic Peroxidase Catalytic Activity and Its Application to Glucose Detection." Advanced Materials **22**(19): 2206-2210.
Song, Y. J., X. H. Wang, C. Zhao, K. G. Qu, J. S. Ren and X. G. Qu (2010). "Label-Free Colorimetric Detection of Single Nucleotide Polymorphism by Using Single-Walled Carbon Nanotube Intrinsic Peroxidase-Like Activity." Chemistry-a European Journal **16**(12): 3617-3621.
Song, Y. J., Y. C. Wang and L. D. Qin (2013). "A multistage volumetric bar chart chip for visualized quantification of DNA." J. Am. Chem. Soc. **135**(45): 16785-16788.
Song, Y. J., W. L. Wei and X. G. Qu (2011). "Colorimetric Biosensing Using Smart Materials." Advanced Materials **23**(37): 4215-4236.
Song, Y. J., X. F. Xia, X. F. Wu, P. Wang and L. D. Qin (2014). "Integration of Platinum Nanoparticles with a Volumetric Bar-Chart Chip for Biomarker Assays." Angew. Chem. Int. Ed. **53**(46): 12451-12455.
Song, Y. J., C. Xu, W. L. Wei, J. S. Ren and X. G. Qu (2011). "Light regulation of peroxidase activity by spiropyran functionalized carbon nanotubes used for label-free colorimetric detection of lysozyme." Chem. Commun. **47**(32): 9083-9085.
Song, Y. W., M. G. Zhao, H. Li, X. T. Wang, Y. F. Cheng, L. J. Ding, S. S. Fan and S. G. Chen (2018). "Facile preparation of urchin-like NiCo2O4 microspheres as oxidase mimetic for colormetric assay of hydroquinone." Sensors and Actuators B-Chemical **255**: 1927-1936.
Stengl, V., T. M. Grygar, F. Oplustil and M. Olsanska (2013). "Decontamination of Sulfur Mustard from Printed Circuit

Board Using Zr-Doped Titania Suspension." Industrial & Engineering Chemistry Research **52**(9): 3436-3440.
Su, C. K. and J. C. Chen (2017). "Reusable, 3D-printed, peroxidase mimic-incorporating multi-well plate for high-throughput glucose determination." Sensors and Actuators B-Chemical **247**: 641-647.
Su, H., D. D. Liu, M. Zhao, W. L. Hu, S. S. Xue, Q. Cao, X. Y. Le, L. N. Ji and Z. W. Mao (2015). "Dual-Enzyme Characteristics of Polyvinylpyrrolidone-Capped Iridium Nanoparticles and Their Cellular Protective Effect against H2O2-Induced Oxidative Damage." Acs Applied Materials & Interfaces **7**(15): 8233-8242.
Su, L., W. P. Dong, C. K. Wu, Y. J. Gong, Y. Zhang, L. Li, G. J. Mao and S. L. Feng (2017). "The peroxidase and oxidase-like activity of NiCo2O4 mesoporous spheres: Mechanistic understanding and colorimetric biosensing." Analytica Chimica Acta **951**: 124-132.
Su, L., J. Feng, X. M. Zhou, C. L. Ren, H. H. Li and X. G. Chen (2012). "Colorimetric Detection of Urine Glucose Based ZnFe2O4 Magnetic Nanoparticles." Analytical Chemistry **84**(13): 5753-5758.
Su, L., W. J. Qin, H. G. Zhang, Z. U. Rahman, C. L. Ren, S. D. Ma and X. G. Chen (2015). "The peroxidase/catalase-like activities of MFe_2O_4 (M = Mg, Ni, Cu) MNPs and their application in colorimetric biosensing of glucose." Biosensors & Bioelectronics **63**: 384-391.
Su, L., X. A. Yu, Y. X. Cai, P. H. Kang, W. J. Qin, W. P. Dong, G. J. Mao and S. L. Feng (2017). "Evaluation of fluorogenic substrates for Ni/Co LDHs peroxidase mimic and application for determination of inhibitory effects of antioxidant." Analytica Chimica Acta **987**: 98-104.
Su, L., X. A. Yu, W. J. Qin, W. P. Dong, C. K. Wu, Y. Zhang, G. J. Mao and S. L. Feng (2017). "One-step analysis of glucose and acetylcholine in water based on the intrinsic peroxidase-like activity of Ni/Co LDHs microspheres." J. Mater. Chem. B **5**(1): 116-122.
Su, L. J., Y. H. Xiong, H. G. Yang, P. Zhang and F. G. Ye (2016). "Prussian blue nanoparticles encapsulated inside a metal–organic framework via in situ growth as promising peroxidase mimetics for enzyme inhibitor screening." J. Mater. Chem. B **4**(1): 128-134.
Sui, N., F. Y. Liu, K. Wang, F. X. Xie, L. N. Wang, J. J. Tang, M. H. Liu and W. W. Yu (2017). "Nano Au-Hg amalgam for Hg2+ and H2O2 detection." Sensors and Actuators B-Chemical **252**: 1010-1015.
Sun, C. L., X. L. Chen, J. Xu, M. J. Wei, J. J. Wang, X. G. Mi, X. H. Wang, Y. Wu and Y. Liu (2013). "Fabrication of an inorganic-organic hybrid based on an iron-substituted polyoxotungstate as a peroxidase for colorimetric immunoassays of H2O2 and cancer cells." Journal of Materials Chemistry A **1**(15): 4699-4705.
Sun, C. W., H. Li and L. Q. Chen (2012). "Nanostructured ceria-based materials: synthesis, properties, and applications." Energy & Environmental Science **5**(9): 8475-8505.
Sun, H. J., N. Gao, K. Dong, J. S. Ren and X. G. Qu (2014). "Graphene Quantum Dots-Band-Aids Used for Wound Disinfection." ACS Nano **8**(6): 6202-6210.
Sun, H. J., A. D. Zhao, N. Gao, K. Li, J. S. Ren and X. G. Qu (2015). "Deciphering a Nanocarbon-Based Artificial Peroxidase: Chemical Identification of the Catalytically Active and Substrate-Binding Sites on Graphene Quantum Dots." Angew. Chem. Int. Ed. **54**(24): 7176-7180.
Sun, H. J., Y. Zhou, J. S. Ren and X. G. Qu (2018). "Carbon Nanozymes: Enzymatic Properties, Catalytic Mechanism, and Applications." Angew. Chem. Int. Ed. **57**(30): 9224-9237.
Sun, H. Y., X. L. Jiao, Y. Y. Han, Z. Jiang and D. R. Chen (2013). "Synthesis of Fe3O4-Au Nanocomposites with Enhanced Peroxidase-Like Activity." European Journal of Inorganic Chemistry(1): 109-114.
Sun, H. Y. and W. Y. Zhu (2016). "Co3O4 mirobelts Preparation with the electrospinning technique and its investigation in peroxidase-like activity." Applied Surface Science **399**: 298-304.
Sun, L. F., Y. Y. Ding, Y. L. Jiang and Q. Y. Liu (2017). "Montmorillonite-loaded ceria nanocomposites with superior peroxidase-like activity for rapid colorimetric detection of H2O2." Sensors and Actuators B-Chemical **239**: 848-856.
Sun, Q., Y. Hong, Q. H. Liu and L. F. Dong (2018). "Synergistic operation of photocatalytic degradation and Fenton process by magnetic Fe3O4 loaded TiO2." Applied Surface Science **430**: 399-406.
Sun, R. L., Y. Wang, Y. N. Ni and S. Kokot (2014). "Spectrophotometric analysis of phenols, which involves a hemin-graphene hybrid nanoparticles with peroxidase-like activity." Journal of Hazardous Materials **266**: 60-67.
Sun, W., X. M. Ju, Y. Y. Zhang, X. H. Sun, G. J. Li and Z. F. Sun (2013). "Application of carboxyl functionalized graphene oxide as mimetic peroxidase for sensitive voltammetric detection of H2O2 with 3,3 ',5,5 '-tetramethylbenzidine." Electrochemistry Communications **26**: 113-116.
Sun, X. L., S. J. Guo, C. S. Chung, W. L. Zhu and S. H. Sun (2013). "A Sensitive H2O2 Assay Based on Dumbbell-like PtPd-Fe3O4 Nanoparticles." Advanced Materials **25**(1): 132-136.
Sun, X. T., Y. Zhang, D. H. Zheng, S. Yue, C. G. Yang and Z. R. Xu (2017). "Multitarget sensing of glucose and cholesterol based on Janus hydrogel microparticles." Biosensors & Bioelectronics **92**: 81-86.

Sun, Y. H., J. Wang, W. Li, J. L. Zhang, Y. D. Zhang and Y. Fu (2015). "DNA-stabilized bimetallic nanozyme and its application on colorimetric assay of biothiols." Biosensors & Bioelectronics **74**: 1038-1046.
Sun, Y. H., C. Q. Zhao, N. Gao, J. S. Ren and X. G. Qu (2017). "Stereoselective nanozyme based on ceria nanoparticles engineered with amino acids." Chemistry-A European Journal **23**(72): 18146-18150.
Sun, Z., Q. S. Zhao, G. H. Zhang, Y. Li, G. L. Zhang, F. B. Zhang and X. B. Fan (2015). "Exfoliated MoS2 supported Au-Pd bimetallic nanoparticles with core-shell structures and superior peroxidase-like activities." Rsc Advances **5**(14): 10352-10357.
Sun, Z. Z., N. Zhang, Y. M. Si, S. Li, J. W. Wen, X. B. Zhu and H. Wang (2014). "High-throughput colorimetric assays for mercury(II) in blood and wastewater based on the mercury-stimulated catalytic activity of small silver nanoparticles in a temperature-switchable gelatin matrix." Chem. Commun. **50**(65): 9196-9199.
Surgutskaya, N. S., M. E. Trusova, G. B. Slepchenko, A. S. Minin, A. G. Pershina, M. A. Uimin, A. E. Yermakov and P. S. Postnikov (2017). "Iron-core/carbon-shell nanoparticles with intrinsic peroxidase activity: new platform for mimetic glucose detection." Analytical Methods **9**(16): 2433-2439.
Syedmoradi, L., M. Daneshpour, M. Alvandipour, F. A. Gomez, H. Hajghassem and K. Omidfar (2017). "Point of care testing: The impact of nanotechnology." Biosensors & Bioelectronics **87**: 373-387.
Szymanski, C. J., P. Munusamy, C. Mihai, Y. Xie, D. Hu, M. K. Gilles, T. Tyliszczak, S. Thevuthasan, D. R. Baer and G. Orr (2015). "Shifts in oxidation states of cerium oxide nanoparticles detected inside intact hydrated cells and organelles." Biomaterials **62**: 147-154.
Taghdisi, S. M., N. M. Danesh, P. Lavaee, A. S. Emrani, M. Ramezani and K. Abnous (2015). "A novel colorimetric triple-helix molecular switch aptasensor based on peroxidase-like activity of gold nanoparticles for ultrasensitive detection of lead(II)." Rsc Advances **5**(54): 43508-43514.
Takamiya, M., Y. Miyamoto, T. Yamashita, K. Deguchi, Y. Ohta and K. Abe (2012). "STRONG NEUROPROTECTION WITH A NOVEL PLATINUM NANOPARTICLE AGAINST ISCHEMIC STROKE- AND TISSUE PLASMINOGEN ACTIVATOR-RELATED BRAIN DAMAGES IN MICE." Neuroscience **221**: 47-55.
Tan, B., H. M. Zhao, W. H. Wu, X. Liu, Y. B. Zhang and X. Quan (2017). "Fe3O4-AuNPs anchored 2D metal-organic framework nanosheets with DNA regulated switchable peroxidase-like activity." Nanoscale **9**(47): 18699-18710.
Tan, H. L., Q. Li, Z. C. Zhou, C. J. Ma, Y. H. Song, F. G. Xu and L. Wang (2015). "A sensitive fluorescent assay for thiamine based on metal-organic frameworks with intrinsic peroxidase-like activity." Analytica Chimica Acta **856**: 90-95.
Tan, H. L., C. J. Ma, L. Gao, Q. Li, Y. H. Song, F. G. Xu, T. Wang and L. Wang (2014). "Metal-Organic Framework-Derived Copper Nanoparticle@Carbon Nanocomposites as Peroxidase Mimics for Colorimetric Sensing of Ascorbic Acid." Chemistry-a European Journal **20**(49): 16377-16383.
Tan, L., J. Wan, W. Guo, C. Ou, T. Liu, C. Fu, Q. Zhang, X. Ren, X. J. Liang, J. Ren, L. Li and X. Meng (2018). "Renal-clearable quaternary chalcogenide nanocrystal for photoacoustic/magnetic resonance imaging guided tumor photothermal therapy." Biomaterials **159**: 108-118.
Tanaka, S., Y. V. Kaneti, R. Bhattacharjee, M. N. Islam, R. Nakahata, N. Abdullah, S.-i. Yusa, N. Nam-Trung, M. J. A. Shiddiky, Y. Yamauchi and M. S. A. Hossain (2018). "Mesoporous Iron Oxide Synthesized Using Poly(styrene-b-acrylic acid-b-ethylene glycol) Block Copolymer Micelles as Templates for Colorimetric and Electrochemical Detection of Glucose." Acs Applied Materials & Interfaces **10**(1): 1039-1049.
Tang, D. S., J. J. Liu, X. M. Yan and L. T. Kang (2016). "Graphene oxide derived graphene quantum dots with different photoluminescence properties and peroxidase-like catalytic activity." RSC Adv. **6**(56): 50609-50617.
Tang, X. K., Q. M. Feng, K. Liu, Z. S. Li and H. Wang (2018). "Fabrication of magnetic Fe3O4/silica nanofiber composites with enhanced Fenton-like catalytic performance for Rhodamine B degradation." Journal of Materials Science **53**(1): 369-384.
Tang, X. Q., Y. D. Zhang, Z. W. Jiang, D. M. Wang, C. Z. Huang and Y. F. Li (2018). "Fe3O4 and metal organic framework MIL-101(Fe) composites catalyze luminol chemiluminescence for sensitively sensing hydrogen peroxide and glucose." Talanta **179**: 43-50.
Tang, Y., Z. Y. Qiu, Z. B. Xu and L. Z. Gao (2018). "Antibacterial Mechanism and Applications of Nanozymes." Progress in Biochemistry and Biophysics **45**(2): 118-128.
Tang, Y. R., Y. Zhang, R. Liu, Y. Y. Su and Y. Lu (2013). "Application of NaYF4 :Yb, Er Nanoparticles as Peroxidase Mimetics in Uric Acid Detection." Chinese Journal of Analytical Chemistry **41**(3): 330-336.
Tang, Z. W., H. Wu, Y. Y. Zhang, Z. H. Li and Y. H. Lin (2011). "Enzyme-Mimic Activity of Ferric Nano-Core Residing in Ferritin and Its Biosensing Applications." Analytical Chemistry **83**(22): 8611-8616.
Tangchaikeeree, T., D. Polpanich, A. Elaissari and K. Jangpatarapongsa (2017). "Magnetic particles for in vitro molecular diagnosis: From sample preparation to integration into microsystems." Colloid. Surface. B **158**: 1-8.

Tao, Y., E. G. Ju, J. S. Ren and X. G. Qu (2014). "Polypyrrole nanoparticles as promising enzyme mimics for sensitive hydrogen peroxide detection." Chem. Commun. **50**(23): 3030-3032.
Tao, Y., E. G. Ju, J. S. Ren and X. G. Qu (2015). "Bifunctionalized Mesoporous Silica-Supported Gold Nanoparticles: Intrinsic Oxidase and Peroxidase Catalytic Activities for Antibacterial Applications." Advanced Materials **27**(6): 1097-1104.
Tao, Y., M. Li, B. Kim and D. T. Auguste (2017). "Incorporating gold nanoclusters and target-directed liposomes as a synergistic amplified colorimetric sensor for HER2-positive breast cancer cell detection." Theranostics **7**(4): 899-911.
Tao, Y., Y. H. Lin, Z. Z. Huang, J. S. Ren and X. G. Qu (2013). "Incorporating Graphene Oxide and Gold Nanoclusters: A Synergistic Catalyst with Surprisingly High Peroxidase-Like Activity Over a Broad pH Range and its Application for Cancer Cell Detection." Advanced Materials **25**(18): 2594-2599.
Tao, Y., Y. H. Lin, J. S. Ren and X. G. Qu (2013). "A dual fluorometric and colorimetric sensor for dopamine based on BSA-stabilized Au nanoclusters." Biosensors & Bioelectronics **42**: 41-46.
Tarnuzzer, R. W., J. Colon, S. Patil and S. Seal (2005). "Vacancy engineered ceria nanostructures for protection from radiation-induced cellular damage." Nano Letters **5**(12): 2573-2577.
Thawari, A. G. and C. P. Rao (2016). "Peroxidase-like Catalytic Activity of Copper-Mediated Protein−Inorganic Hybrid Nanoflowers and Nanofibers of β-Lactoglobulin and α-Lactalbumin: Synthesis, Spectral Characterization, Microscopic Features, and Catalytic Activity." ACS Appl. Mater. Interfaces **8**: 10392-10402.
Thiramanas, R., K. Jangpatarapongsa, P. Tangboriboonrat and D. Polpanich (2013). "Detection of Vibrio cholerae Using the Intrinsic Catalytic Activity of a Magnetic Polymeric Nanoparticle." Analytical Chemistry **85**(12): 5996-6002.
Tian, J. Q., Q. Liu, A. M. Asiri, A. H. Qusti, A. O. Al-Youbi and X. P. Sun (2013). "Ultrathin graphitic carbon nitride nanosheets: a novel peroxidase mimetic, Fe doping-mediated catalytic performance enhancement and application to rapid, highly sensitive optical detection of glucose." Nanoscale **5**(23): 11604-11609.
Tian, J. Q., S. Liu, Y. L. Luo and X. P. Sun (2012). "Fe(III)-based coordination polymer nanoparticles: peroxidase-like catalytic activity and their application to hydrogen peroxide and glucose detection." Catalysis Science & Technology **2**(2): 432-436.
Tian, L., J. X. Qi, O. Oderinde, C. Yao, W. Song and Y. H. Wang (2018). "Planar intercalated copper (II) complex molecule as small molecule enzyme mimic combined with Fe3O4 nanozyme for bienzyme synergistic catalysis applied to the microRNA biosensor." Biosensors & Bioelectronics **110**: 110-117.
Tian, L., J. X. Qi, K. Qian, O. Oderinde, Y. Y. Cai, C. Yao, W. Song and Y. H. Wang (2018). "An ultrasensitive electrochemical cytosensor based on the magnetic field assisted binanozymes synergistic catalysis of Fe3O4 nanozyme and reduced graphene oxide/molybdenum disulfide nanozyme." Sensors and Actuators B-Chemical **260**: 676-684.
Tian, L., J. X. Qi, K. Qian, O. Oderinde, Q. Y. Liu, C. Yao, W. Song and Y. H. Wang (2018). "Copper (II) oxide nanozyme based electrochemical cytosensor for high sensitive detection of circulating tumor cells in breast cancer." Journal of Electroanalytical Chemistry **812**: 1-9.
Tian, R., J. H. Sun, Y. F. Qi, B. Y. Zhang, S. L. Guo and M. M. Zhao (2017). "Influence of VO2 Nanoparticle Morphology on the Colorimetric Assay of H2O2 and Glucose." Nanomaterials **7**(11): 347.
Tian, T., L. H. Ai, X. M. Liu, L. L. Li, J. Li and J. Jiang (2015). "Synthesis of Hierarchical FeWO4 Architectures with {100}-Faceted Nanosheet Assemblies as a Robust Biomimetic Catalyst." Industrial & Engineering Chemistry Research **54**(4): 1171-1178.
Tian, X. K., X. Wang, C. Dai, Y. Li, C. Yang, Z. X. Zhou and Y. X. Wang (2017). "Visual and quantitative detection of glucose based on the intrinsic peroxidase-like activity of CoSe2/rGO nanohybrids." Sensors and Actuators B-Chemical **245**: 221-229.
Tian, Z. M., J. Li, Z. Y. Zhang, W. Gao, X. M. Zhou and Y. Q. Qu (2015). "Highly sensitive and robust peroxidase-like activity of porous nanorods of ceria and their application for breast cancer detection." Biomaterials **59**: 116-124.
Tiano, A. L., G. C. Papaefthymiou, C. S. Lewis, J. Han, C. Zhang, Q. Li, C. Y. Shi, A. M. M. Abeykoon, S. J. L. Billinge, E. Stach, J. Thomas, K. Guerrero, P. Munayco, J. Munayco, R. B. Scorzelli, P. Burnham, A. J. Viescas and S. S. Wong (2015). "Correlating Size and Composition-Dependent Effects with Magnetic, Mossbauer, and Pair Distribution Function Measurements in a Family of Catalytically Active Ferrite Nanoparticles." Chemistry of Materials **27**(10): 3572-3592.
Tokuyama, H., S. Yamago, E. Nakamura, T. Shiraki and Y. Sugiura (1993). "PHOTOINDUCED BIOCHEMICAL-ACTIVITY OF FULLERENE CARBOXYLIC-ACID." Journal of the American Chemical Society **115**(17): 7918-7919.
Tonga, G. Y., Y. D. Jeong, B. Duncan, T. Mizuhara, R. Mout, R. Das, S. T. Kim, Y. C. Yeh, B. Yan, S. Hou and V. M. Rotello (2015). "Supramolecular regulation of bioorthogonal catalysis in cells using nanoparticle-embedded transition metal catalysts." Nat. Chem. **7**(7): 597-603.

Tsai, Y. Y., J. Oca-Cossio, S. M. Lin, K. Woan, P. C. Yu and W. Sigmund (2008). "Reactive oxygen species scavenging properties of ZrO_2-CeO_2 solid solution nanoparticles." Nanomedicine **3**(5): 637-645.
Tsekhmistrenko, O. S., S. I. Tsekhmistrenko, V. S. Bityutskyy, O. M. Melnichenko and O. A. Oleshko (2018). "BIOMIMETIC AND ANTIOXIDANT ACTIVITY OF NANO-CRYSTALLINE CERIUM DIOXIDE." World of Medicine and Biology(1): 196-201.
Tseng, C. W., H. Y. Chang, J. Y. Chang and C. C. Huang (2012). "Detection of mercury ions based on mercury-induced switching of enzyme-like activity of platinum/gold nanoparticles." Nanoscale **4**(21): 6823-6830.
Tuli, H. S., D. Kashyap, S. K. Bedi, P. Kumar, G. Kumar and S. S. Sandhu (2015). "Molecular aspects of metal oxide nanoparticle (MO-NPs) mediated pharmacological effects." Life Sciences **143**: 71-79.
Ueno, T., S. Abe, N. Yokoi and Y. Watanabe (2007). "Coordination design of artificial metalloproteins utilizing protein vacant space." Coordination Chemistry Reviews **251**(21-24): 2717-2731.
Valekar, A. H., B. S. Batule, M. I. Kim, K. H. Cho, D. Y. Hong, U. H. Lee, J. S. Chang, H. G. Park and Y. K. Hwang (2018). "Novel amine-functionalized iron trimesates with enhanced peroxidase-like activity and their applications for the fluorescent assay of choline and acetylcholine." Biosensors & Bioelectronics **100**: 161-168.
Valgimigli, L., A. Baschieri and R. Amorati (2018). "Antioxidant activity of nanomaterials." J. Mater. Chem. B **6**(14): 2036-2051.
Vallabani, N. V. S., A. S. Karakoti and S. Singh (2017). "ATP-mediated intrinsic peroxidase-like activity of Fe3O4-based nanozyme: One step detection of blood glucose at physiological pH." Colloid. Surface. B **153**: 52-60.
Van Tan, T., J. Kim, L. T. Tufa, S. Oh, J. Kwon and J. Lee (2018). "Magnetoplasmonic Nanomaterials for Biosensing/Imaging and in Vitro/in Vivo Biousability." Analytical Chemistry **90**(1): 225-239.
Vazquez-Gonzalez, M., W. C. Liao, R. Gazelles, S. Wang, X. Yu, V. Gutkin and I. Willner (2017). "Mimicking Horseradish Peroxidase Functions Using Cu2+-Modified Carbon Nitride Nanoparticles or Cu2+-Modified Carbon Dots as Heterogeneous Catalysts." Acs Nano **11**(3): 3247-3253.
Vazquez-Gonzalez, M., R. M. Torrente-Rodriguez, A. Kozell, W. C. Liao, A. Cecconello, S. Campuzano, J. M. Pingarron and I. Willner (2017). "Mimicking Peroxidase Activities with Prussian Blue Nanoparticles and Their Cyanometalate Structural Analogues." Nano Letters **17**(8): 4958-4963.
Verma, A. K., A. K. Srivastava, B. Singh, D. Shah, S. Shrivastava and C. K. P. Shinde (2013). "Alumina-supported oxime for the degradation of sarin and diethylchlorophosphate." Chemosphere **90**(8): 2254-2260.
Vernekar, A. A., T. Das, S. Ghosh and G. Mugesh (2016). "A Remarkably Efficient MnFe2O4-based Oxidase Nanozyme." Chem.-Asian. J. **11**(1): 72-76.
Vernekar, A. A., T. Das and G. Mugesh (2016). "Vacancy Engineered Nanoceria Enzyme Mimetic Hotspots for the Degradation of Nerve Agents." Angew. Chem. Int. Ed. **55**(4): 1412-1416.
Vernekar, A. A. and G. Mugesh (2012). "Hemin-Functionalized Reduced Graphene Oxide Nanosheets Reveal Peroxynitrite Reduction and Isomerization Activity." Chem.- Eur. J. **18**(47): 15122-15132.
Vernekar, A. A., D. Sinha, S. Srivastava, P. U. Paramasivam, P. D'Silva and G. Mugesh (2014). "An antioxidant nanozyme that uncovers the cytoprotective potential of vanadia nanowires." Nat. Commun. **5**: 5301.
Vinita, N. R. Nirala and R. Prakash (2018). "One step synthesis of AuNPs@MoS2-QDs composite as a robust peroxidase- mimetic for instant unaided eye detection of glucose inserum, saliva and tear." Sensors and Actuators B-Chemical **263**: 109-119.
Wagner, G. W., G. W. Peterson and J. J. Mahle (2012). "Effect of Adsorbed Water and Surface Hydroxyls on the Hydrolysis of VX, GD, and HD on Titania Materials: The Development of Self-Decontaminating Paints." Industrial & Engineering Chemistry Research **51**(9): 3598-3603.
Wan, D., W. B. Li, G. H. Wang, K. Chen, L. L. Lu and Q. Hu (2015). "Adsorption and heterogeneous degradation of rhodamine B on the surface of magnetic bentonite material." Applied Surface Science **349**: 988-996.
Wan, D., W. B. Li, G. H. Wang, L. L. Lu and X. B. Wei (2017). "Degradation of p-Nitrophenol using magnetic Fe-0/Fe3O4/Coke composite as a heterogeneous Fenton-like catalyst." Science of the Total Environment **574**: 1326-1334.
Wan, D., W. B. Li, G. H. Wang and X. B. Wei (2016). "Shape-Controllable Synthesis of Peroxidase-Like Fe3O4 Nanoparticles for Catalytic Removal of Organic Pollutants." Journal of Materials Engineering and Performance **25**(10): 4333-4340.
Wan, D., G. H. Wang, W. B. Li and X. B. Wei (2017). "Investigation into the morphology and structure of magnetic bentonite nanocomposites with their catalytic activity." Applied Surface Science **413**: 398-407.
Wan, L. B., Z. L. Chen, C. X. Huang and X. T. Shen (2017). "Core-shell molecularly imprinted particles." TrAC Trend. Anal. Chem. **95**: 110-121.

Wan, L. J., J. H. Liu and X. J. Huang (2014). "Novel magnetic nickel telluride nanowires decorated with thorns: synthesis and their intrinsic peroxidase-like activity for detection of glucose." Chem. Commun. **50**(88): 13589-13591.
Wan, S. L., Q. X. Wang, H. H. Ye, M. J. Kim and X. H. Xia (2018). "Pd-Ru Bimetallic Nanocrystals with a Porous Structure and Their Enhanced Catalytic Properties." Particle & Particle Systems Characterization **35**(5): 1700386.
Wan, W. L., Y. J. Lin, H. L. Chen, C. C. Huang, P. C. Shih, Y. R. Bow, W. T. Chia and H. W. Sung (2017). "In Situ Nanoreactor for Photosynthesizing H2 Gas To Mitigate Oxidative Stress in Tissue Inflammation." J. Am. Chem. Soc. **139**(37): 12923-12926.
Wan, Y., P. Qi, D. Zhang, J. J. Wu and Y. Wang (2012). "Manganese oxide nanowire-mediated enzyme-linked immunosorbent assay." Biosensors & Bioelectronics **33**(1): 69-74.
Wang, B., P. Ju, D. Zhang, X. X. Han, L. Zheng, X. F. Yin and C. J. Sun (2016). "Colorimetric detection of H2O2 using flower-like Fe2(MoO4)3 microparticles as a peroxidase mimic." Microchimica Acta **183**(11): 3025-3033.
Wang, B., F. Liu, Y. Y. Wu, Y. F. Chen, B. Weng and C. M. Li (2018). "Synthesis of catalytically active multielement-doped carbon dots and application for colorimetric detection of glucose." Sensors and Actuators B-Chemical **255**: 2601-2607.
Wang, C., Y. Shi, Y. Y. Dan, X. G. Nie, J. Li and X. H. Xia (2017). "Enhanced Peroxidase-Like Performance of Gold Nanoparticles by Hot Electrons." Chemistry-a European Journal **23**(28): 6717-6723.
Wang, C., J. Wu, C. Zong, H. X. Ju and F. Yan (2011). "Highly sensitive rapid chemiluminescent immunoassay using the DNAzyme label for signal amplification." Analyst **136**(20): 4295-4300.
Wang, C. H., J. Gao, Y. L. Cao and H. L. Tan (2018). "Colorimetric logic gate for alkaline phosphatase based on copper (II)-based metal-organic frameworks with peroxidase-like activity." Analytica Chimica Acta **1004**: 74-81.
Wang, C. I., W. T. Chen and H. T. Chang (2012). "Enzyme Mimics of Au/Ag Nanoparticles for Fluorescent Detection of Acetylcholine." Analytical Chemistry **84**(22): 9706-9712.
Wang, C. Q., J. Qian, K. Wang, X. W. Yang, Q. Liu, N. Hao, C. K. Wang, X. Y. Dong and X. Y. Huang (2016). "Colorimetric aptasensing of ochratoxin A using Au@Fe3O4 nanoparticles as signal indicator and magnetic separator." Biosensors & Bioelectronics **77**: 1183-1191.
Wang, C. S., C. Liu, J. B. Luo, Y. P. Tian and N. D. Zhou (2016). "Direct electrochemical detection of kanamycin based on peroxidase-like activity of gold nanoparticles." Anal. Chim. Acta **936**: 75-82.
Wang, F., E. Ju, Y. Guan, J. Ren and X. Qu (2017). "Light-Mediated Reversible Modulation of ROS Level in Living Cells by Using an Activity-Controllable Nanozyme." Small **13**(25): 1603051.
Wang, F. M., Y. Zhang, Z. Du, J. S. Ren and X. G. Qu (2018). "Designed heterogeneous palladium catalysts for reversible light-controlled bioorthogonal catalysis in living cells." Nat. Commun. **9**: 1209.
Wang, G., C. Sharp, A. M. Plonka, Q. Wang, A. I. Frenkel, W. Guo, C. Hill, C. Smith, J. Kollar, D. Troya and J. R. Morris (2017). "Mechanism and Kinetics for Reaction of the Chemical Warfare Agent Simulant, DMMP(g), with Zirconium(IV) MOFs: An Ultrahigh-Vacuum and DFT Study." Journal of Physical Chemistry C **121**(21): 11261-11272.
Wang, G. H., J. Z. Zhang, X. He, Z. Y. Zhang and Y. L. Zhao (2017). "Ceria Nanoparticles as Enzyme Mimetics." Chinese Journal of Chemistry **35**(6): 791-800.
Wang, G. L., L. Y. Jin, Y. M. Dong, X. M. Wu and Z. J. Li (2015). "Intrinsic enzyme mimicking activity of gold nanoclusters upon visible light triggering and its application for colorimetric trypsin detection." Biosensors & Bioelectronics **64**: 523-529.
Wang, G. L., L. Y. Jin, X. M. Wu, Y. M. Dong and Z. J. Li (2015). "Label-free colorimetric sensor for mercury(II) and DNA on the basis of mercury(II) switched-on the oxidase-mimicking activity of silver nanoclusters." Analytica Chimica Acta **871**: 1-8.
Wang, G. L., K. L. Liu, J. X. Shu, T. T. Gu, X. M. Wu, Y. M. Dong and Z. J. Li (2015). "A novel photoelectrochemical sensor based on photocathode of PbS quantum dots utilizing catalase mimetics of bio-bar-coded platinum nanoparticles/G-quadruplex/hemin for signal amplification." Biosensors & Bioelectronics **69**: 106-112.
Wang, G. L., X. F. Xu, L. H. Cao, C. H. He, Z. J. Li and C. Zhang (2014). "Mercury(II)-stimulated oxidase mimetic activity of silver nanoparticles as a sensitive and selective mercury(II) sensor." Rsc Advances **4**(12): 5867-5872.
Wang, G. L., X. F. Xu, L. Qiu, Y. M. Dong, Z. J. Li and C. Zhang (2014). "Dual Responsive Enzyme Mimicking Activity of AgX (X = Cl, Br, I) Nanoparticles and Its Application for Cancer Cell Detection." Acs Applied Materials & Interfaces **6**(9): 6434-6442.
Wang, G. L., X. F. Xu, X. M. Wu, G. X. Cao, Y. M. Dong and Z. J. Li (2014). "Visible-Light-Stimulated Enzymelike Activity of Graphene Oxide and Its Application for Facile Glucose Sensing." Journal of Physical Chemistry C **118**(48): 28109-28117.
Wang, H. and Y. M. Huang (2011). "Prussian-blue-modified iron oxide magnetic nanoparticles as effective

peroxidase-like catalysts to degrade methylene blue with H_2O_2." Journal of Hazardous Materials **191**(1-3): 163-169.
Wang, H., H. Jiang, S. Wang, W. B. Shi, J. C. He, H. Liu and Y. M. Huang (2014). "Fe3O4-MWCNT magnetic nanocomposites as efficient peroxidase mimic catalysts in a Fenton-like reaction for water purification without pH limitation." Rsc Advances **4**(86): 45809-45815.
Wang, H., W. Jiang, Y. Wang, X. Liu, J. Yao, L. Yuan, Z. Wu, D. Li, B. Song and H. Chen (2013). "Catalase-like and Peroxidase-like Catalytic Activities of Silicon Nanowire Arrays." Langmuir **29**(1): 3-7.
Wang, H., P. H. Li, D. Q. Yu, Y. Zhang, Z. Z. Wang, C. Q. Liu, H. Qiu, Z. Liu, J. S. Ren and X. G. Qu (2018). "Unraveling the Enzymatic Activity of Oxygenated Carbon Nanotubes and Their Application in the Treatment of Bacterial Infections." Nano Lett. **18**(6): 3344-3351.
Wang, H., S. Li, Y. M. Si, Z. Z. Sun, S. Y. Li and Y. H. Lin (2014). "Recyclable enzyme mimic of cubic Fe3O4 nanoparticles loaded on graphene oxide-dispersed carbon nanotubes with enhanced peroxidase-like catalysis and electrocatalysis." J. Mater. Chem. B **2**(28): 4442-4448.
Wang, H., S. Li, Y. M. Si, N. Zhang, Z. Z. Sun, H. Wu and Y. H. Lin (2014). "Platinum nanocatalysts loaded on graphene oxide-dispersed carbon nanotubes with greatly enhanced peroxidase-like catalysis and electrocatalysis activities." Nanoscale **6**(14): 8107-8116.
Wang, H., C. Q. Liu, Z. Liu, J. S. Ren and X. G. Qu (2018). "Specific Oxygenated Groups Enriched Graphene Quantum Dots as Highly Efficient Enzyme Mimics." Small **14**(13): 1703710.
Wang, J. (2012). "Electrochemical biosensing based on noble metal nanoparticles." Microchimica Acta **177**(3-4): 245-270.
Wang, J. J., D. X. Han, X. H. Wang, B. Qi and M. S. Zhao (2012). "Polyoxometalates as peroxidase mimetics and their applications in H_2O_2 and glucose detection." Biosensors & Bioelectronics **36**(1): 18-21.
Wang, J. N., P. Su, D. Li, T. Wang and Y. Yang (2017). "Fabrication of CeO2/rGO Nanocomposites with Oxidase-like Activity and Their Application in Colorimetric Sensing of Ascorbic Acid." Chemical Research in Chinese Universities **33**(4): 540-545.
Wang, J. X., Y. Zhuo, Y. Zhou, R. Yuan and Y. Q. Chai (2015). "Electrochemiluminescence immunosensor based on multifunctional luminol-capped AuNPs@Fe3O4 nanocomposite for the detection of mucin-1." Biosensors & Bioelectronics **71**: 407-413.
Wang, K. C., D. W. Feng, T. F. Liu, J. Su, S. Yuan, Y. P. Chen, M. Bosch, X. D. Zou and H. C. Zhou (2014). "A Series of Highly Stable Mesoporous Metalloporphyrin Fe-MOFs." Journal of the American Chemical Society **136**(40): 13983-13986.
Wang, K. Y., J. Z. Song, X. J. Duan, J. S. Mu and Y. Wang (2017). "Perovskite LaCoO3 nanoparticles as enzyme mimetics: their catalytic properties, mechanism and application in dopamine biosensing." New Journal of Chemistry **41**(16): 8554-8560.
Wang, L., L. F. Miao, H. Yang, J. Yu, Y. Z. Xie, L. J. Xu and Y. H. Song (2017). "A novel nanoenzyme based on Fe3O4 nanoparticles@thionine-imprinted polydopamine for electrochemical biosensing." Sensors and Actuators B-Chemical **253**: 108-114.
Wang, L., Z. J. Wang, X. M. Li, Y. Zhang, M. Yin, J. Li, H. Y. Song, J. Y. Shi, D. S. Ling, L. H. Wang, N. Chen and C. H. Fan (2018). "Deciphering active biocompatibility of iron oxide nanoparticles from their intrinsic antagonism." Nano Research **11**(5): 2746-2755.
Wang, L., H. Yang, J. He, Y. Y. Zhang, J. Yu and Y. H. Song (2016). "Cu-Hemin Metal-Organic-Frameworks/Chitosan-Reduced Graphene Oxide Nanocomposites with Peroxidase-Like Bioactivity for Electrochemical Sensing." Electrochimica Acta **213**: 691-697.
Wang, L., W. Yang, T. F. Li, D. Li, Z. M. Cui, Y. Wang, S. L. Ji, Q. X. Song, C. Shu and L. Ding (2017). "Colorimetric determination of thrombin by exploiting a triple enzyme-mimetic activity and dual-aptamer strategy." Microchimica Acta **184**(9): 3145-3151.
Wang, L., Y. J. Ye, X. P. Lu, Y. Wu, L. L. Sun, H. L. Tan, F. G. Xu and Y. H. Song (2013). "Prussian blue nanocubes on nitrobenzene-functionalized reduced graphene oxide and its application for H2O2 biosensing." Electrochimica Acta **114**: 223-232.
Wang, L. H., Y. Zeng, A. G. Shen, X. D. Zhou and J. M. Hu (2015). "Three dimensional nano-assemblies of noble metal nanoparticle-infinite coordination polymers as specific oxidase mimetics for degradation of methylene blue without adding any cosubstrate." Chem. Commun. **51**(11): 2052-2055.
Wang, L. J., Y. Min, D. D. Xu, F. J. Yu, W. Z. Zhou and A. Cuschieri (2014). "Membrane lipid peroxidation by the peroxidase-like activity of magnetite nanoparticles." Chem. Commun. **50**(76): 11147-11150.
Wang, L. Y., M. F. Huo, Y. Chen and J. L. Shi (2018). "Iron-engineered mesoporous silica nanocatalyst with

biodegradable and catalytic framework for tumor-specific therapy." Biomaterials **163**: 1-13.
Wang, L. Y., M. F. Huo, Y. Chen and J. L. Shi (2018). "Tumor Microenvironment-Enabled Nanotherapy." Adv. Healthcare Mater. **7**(8): 1701156.
Wang, M. Q., C. Ye, S. J. Bao, M. W. Xu, Y. Zhang, L. Wang, X. Q. Ma, J. Guo and C. M. Li (2017). "Nanostructured cobalt phosphates as excellent biomimetic enzymes to sensitively detect superoxide anions released from living cells." Biosensors & Bioelectronics **87**: 998-1004.
Wang, M. Y., G. Siddiqui, O. J. R. Gustafsson, A. Kakinen, I. Javed, N. H. Voelcker, D. J. Creek, P. C. Ke and T. P. Davis (2017). "Plasma Proteome Association and Catalytic Activity of Stealth Polymer-Grafted Iron Oxide Nanoparticles." Small **13**(36): 1701528.
Wang, N., Z. W. Han, H. Fan and S. Y. Ai (2015). "Copper nanoparticles modified graphitic carbon nitride nanosheets as a peroxidase mimetic for glucose detection." RSC Advances **5**(111): 91302-91307.
Wang, N., B. C. Li, F. M. Qiao, J. C. Sun, H. Fan and S. Y. Ai (2015). "Humic acid-assisted synthesis of stable copper nanoparticles as a peroxidase mimetic and their application in glucose detection." J. Mater. Chem. B **3**(39): 7718-7723.
Wang, N., L. H. Zhu, D. L. Wang, M. Q. Wang, Z. F. Lin and H. Q. Tang (2010). "Sono-assisted preparation of highly-efficient peroxidase-like Fe_3O_4 magnetic nanoparticles for catalytic removal of organic pollutants with H_2O_2." Ultrasonics Sonochemistry **17**(3): 526-533.
Wang, N., L. H. Zhu, M. Q. Wang, D. L. Wang and H. Q. Tang (2010). "Sono-enhanced degradation of dye pollutants with the use of H(2)O(2) activated by Fe(3)O(4) magnetic nanoparticles as peroxidase mimetic." Ultrasonics Sonochemistry **17**(1): 78-83.
Wang, Q., R. C. Chapleski, Jr., A. M. Plonka, W. O. Gordon, W. Guo, N. P. Thuy-Duong, C. H. Sharp, N. S. Marinkovic, S. D. Senanayake, J. R. Morris, C. L. Hill, D. Troya and A. I. Frenkel (2017). "Atomic-Level Structural Dynamics of Polyoxoniobates during DMMP Decomposition." Sci. Rep. **7**: 773.
Wang, Q., S. W. Liu, H. Y. Sun and Q. F. Lu (2014). "Synthesis and Intrinsic Peroxidase-Like Activity of Sisal-Like Cobalt Oxide Architectures." Industrial & Engineering Chemistry Research **53**(19): 7917-7922.
Wang, Q., H. Wei, Z. Zhang, E. Wang and S. Dong (2018). "Nanozyme: An emerging alternative to natural enzyme for biosensing and immunoassay." TrAC Trend. Anal. Chem. **105**: 218-224.
Wang, Q. B., J. P. Lei, S. Y. Deng, L. Zhang and H. X. Ju (2013). "Graphene-supported ferric porphyrin as a peroxidase mimic for electrochemical DNA biosensing." Chem. Commun. **49**(9): 916-918.
Wang, Q. Q., L. L. Zhang, C. S. Shang, Z. Q. Zhang and S. J. Dong (2016). "Triple-enzyme mimetic activity of nickel-palladium hollow nanoparticles and their application in colorimetric biosensing of glucose." Chem. Commun. **52**(31): 5410-5413.
Wang, Q. Q., X. P. Zhang, L. Huang, Z. Q. Zhang and S. J. Dong (2017). "GOx@ZIF-8(NiPd) Nanoflower: An Artificial Enzyme System for Tandem Catalysis." Angew. Chem. Int. Ed. **56**(50): 16082-16085.
Wang, Q. Q., X. P. Zhang, L. Huang, Z. Q. Zhang and S. J. Dong (2017). "One-Pot Synthesis of Fe3O4 Nanoparticle Loaded 3D Porous Graphene Nanocomposites with Enhanced Nanozyme Activity for Glucose Detection." ACS Applied Materials & Interfaces **9**(8): 7465-7471.
Wang, Q. W., B. Chen, M. Cao, J. F. Sun, H. Wu, P. Zhao, J. Xing, Y. Yang, X. Q. Zhang, M. Ji and N. Gu (2016). "Response of MAPK pathway to iron oxide nanoparticles in vitro treatment promotes osteogenic differentiation of hBMSCs." Biomaterials **86**: 11-20.
Wang, S., L. Bromberg, H. Schreuder-Gibson and T. A. Hatton (2013). "Organophophorous ester degradation by chromium(III) terephthalate metal-organic framework (MIL-101) chelated to N, N-dimethylaminopyridine and related aminopyridines." ACS Applied Materials and Interfaces **5**(4): 1269-1278.
Wang, S., R. Cazelles, W. C. Liao, M. Vázquez-González, A. Zoabi, R. Abu-Reziq and I. Willner (2017). "Mimicking Horseradish Peroxidase and NADH Peroxidase by Heterogeneous Cu2-Modified Graphene Oxide Nanoparticles." Nano Letters **17**(3): 2043-2048.
Wang, S., W. Chen, A. L. Liu, L. Hong, H. H. Deng and X. H. Lin (2012). "Comparison of the Peroxidase-Like Activity of Unmodified, Amino-Modified, and Citrate-Capped Gold Nanoparticles." ChemPhysChem **13**(5): 1199-1204.
Wang, S. N., P. C. Liu, Y. M. Qin, Z. J. Chen and J. C. Shen (2016). "Rapid synthesis of protein conjugated gold nanoclusters and their application in tea polyphenol sensing." Sensors and Actuators B-chemical **223**: 178-185.
Wang, S. Q., W. F. Deng, L. Yang, Y. M. Tan, Q. J. Xie and S. Z. Yao (2017). "Copper-Based Metal Organic Framework Nanoparticles with Peroxidase-Like Activity for Sensitive Colorimetric Detection of Staphylococcus aureus." ACS Applied Materials & Interfaces **9**(29): 24440-24445.
Wang, S. S., Z. P. Chen, J. Choo and L. X. Chen (2016). "Naked-eye sensitive ELISA-like assay based on gold-enhanced peroxidase-like immunogold activity." Analytical and Bioanalytical Chemistry **408**(4): 1015-1022.

Wang, T., Y. C. Fu, L. Y. Chai, L. Chao, L. J. Bu, Y. Meng, C. Chen, M. Ma, Q. J. Xie and S. Z. Yao (2014). "Filling Carbon Nanotubes with Prussian Blue Nanoparticles of High Peroxidase- Like Catalytic Activity for Colorimetric Chemoand Biosensing." Chemistry-a European Journal **20**(9): 2623-2630.
Wang, T., P. Su, F. Y. Lin, Y. Yang and Y. Yang (2018). "Self-sacrificial template synthesis of mixed-valence-state cobalt nanomaterials with high catalytic activities for colorimetric detection of glutathione." Sensors and Actuators B-Chemical **254**: 329-336.
Wang, T., J. N. Wang, Y. Yang, P. Su and Y. Yang (2017). "Co3O4/Reduced Graphene Oxide Nanocomposites as Effective Phosphotriesterase Mimetics for Degradation and Detection of Paraoxon." Industrial & Engineering Chemistry Research **56**(34): 9762-9769.
Wang, W., X. P. Jiang and K. Z. Chen (2012). "$CePO_4$:Tb,Gd hollow nanospheres as peroxidase mimic and magnetic-fluorescent imaging agent." Chem. Commun. **48**(54): 6839-6841.
Wang, W., X. P. Jiang and K. Z. Chen (2012). "Iron phosphate microflowers as peroxidase mimic and superoxide dismutase mimic for biocatalysis and biosensing." Chem. Commun. **48**(58): 7289-7291.
Wang, W., T. L. Li and Y. Liu (2012). Preparation and analysis of magnetic nanoparticles used as highly active catalysts over a wide pH range. Advanced Materials Research. Stafa-Zurich, Trans Tech Publications Ltd. **424-425:** 1057-1061.
Wang, W., Y. Liu, T. L. Li and M. H. Zhou (2014). "Heterogeneous Fenton catalytic degradation of phenol based on controlled release of magnetic nanoparticles." Chemical Engineering Journal **242**: 1-9.
Wang, W., Q. Mao, H. H. He and M. H. Zhou (2013). "Fe3O4 nanoparticles as an efficient heterogeneous Fenton catalyst for phenol removal at relatively wide pH values." Water Science and Technology **68**(11): 2367-2373.
Wang, W., Y. Wang, Y. Liu and T. L. Li (2012). "Synthesis of Novel pH-Responsive Magnetic Nanocomposites as Highly Efficient Heterogeneous Fenton Catalysts." Chemistry Letters **41**(9): 897-899.
Wang, X., D. P. Liu, J. Q. Li, J. M. Zhen and H. J. Zhang (2015). "Clean synthesis of Cu2O@CeO2 core@shell nanocubes with highly active interface." NPG Asia Mater. **7**: e158.
Wang, X., L. Qin, M. Zhou, Z. Lou and H. Wei (2018). "Nanozyme Sensor Arrays for Detecting Versatile Analytes from Small Molecules to Proteins and Cells." Analytical Chemistry **90**(19): 11696-11702.
Wang, X. H., Q. S. Han, S. F. Cai, T. Wang, C. Qi, R. Yang and C. Wang (2017). "Excellent peroxidase mimicking property of CuO/Pt nanocomposites and their application as an ascorbic acid sensor." Analyst **142**(13): 2500-2506.
Wang, X. H., K. G. Qu, B. L. Xu, J. S. Ren and X. G. Qu (2011). "Multicolor luminescent carbon nanoparticles: Synthesis, supramolecular assembly with porphyrin, intrinsic peroxidase-like catalytic activity and applications." Nano Research **4**(9): 908-920.
Wang, X. P., C. Hou, W. Qiu, Y. P. Ke, Q. C. Xu, X. Y. Liu and Y. H. Lin (2017). "Protein-Directed Synthesis of Bifunctional Adsorbent-Catalytic Hemin-Graphene Nanosheets for Highly Efficient Removal of Dye Pollutants via Synergistic Adsorption and Degradation." ACS Applied Materials & Interfaces **9**(1): 684-692.
Wang, X. Q., Q. Tu, B. Zhao, Y. F. An, J. C. Wang, W. M. Liu, M. S. Yuan, S. M. Ahmed, J. Xu, R. Liu, Y. R. Zhang and J. Y. Wang (2013). "Effects of poly(L-lysine)-modified Fe3O4 nanoparticles on endogenous reactive oxygen species in cancer stem cells." Biomaterials **34**(4): 1155-1169.
Wang, X. S., H. Huang, G. Q. Li, Y. Liu, J. L. Huang and D. P. Yang (2014). "Hydrothermal synthesis of 3D hollow porous Fe3O4 microspheres towards catalytic removal of organic pollutants." Nanoscale Res. Lett. **9**(1): 648.
Wang, X. X., Q. Wu, Z. Shan and Q. M. Huang (2011). "BSA-stabilized Au clusters as peroxidase mimetics for use in xanthine detection." Biosensors & Bioelectronics **26**(8): 3614-3619.
Wang, X. Y., W. Cao, L. Qin, T. S. Lin, W. Chen, S. C. Lin, J. Yao, X. Z. Zhao, M. Zhou, C. Hang and H. Wei (2017). "Boosting the Peroxidase-Like Activity of Nanostructured Nickel by Inducing Its 3+Oxidation State in LaNiO3 Perovskite and Its Application for Biomedical Assays." Theranostics **7**(8): 2277-2286.
Wang, X. Y., W. J. Guo, Y. H. Hu, J. J. Wu and H. Wei (2016). Nanozymes: Next Wave of Artificial Enzymes, Springer.
Wang, X. Y., Y. H. Hu and H. Wei (2016). "Nanozymes in bionanotechnology: from sensing to therapeutics and beyond." Inorganic Chemistry Frontiers **3**(1): 41-60.
Wang, X. Y., Y. C. Zhang, T. F. Li, W. D. Tian, Q. Zhang and Y. Y. Cheng (2013). "Generation 9 Polyamidoamine Dendrimer Encapsulated Platinum Nanoparticle Mimics Catalase Size, Shape, and Catalytic Activity." Langmuir **29**(17): 5262-5270.
Wang, Y., C. He, W. Li, J. Zhang and Y. Fu (2017). "Catalytic Performance of Oligonucleotide-Templated Pt Nanozyme Evaluated by Laccase Substrates." Catalysis Letters **147**(8): 2144-2152.
Wang, Y., S. Van de Vyver, K. K. Sharma and Y. Roman-Leshkov (2014). "Insights into the stability of gold nanoparticles supported on metal oxides for the base-free oxidation of glucose to gluconic acid." Green Chemistry **16**(2): 719-726.
Wang, Y., D. Zhang and J. Wang (2018). "Metastable alpha-AgVO3 microrods as peroxidase mimetics for colorimetric

determination of H2O2." Microchimica Acta **185**(1): 1.
Wang, Y., D. Zhang and Z. B. Xiang (2015). "Synthesis of alpha-MnSe crystal as a robust peroxidase mimic." Materials Research Bulletin **67**: 152-157.
Wang, Y., D. Zhang and Z. B. Xiang (2016). "Synthesis and intrinsic enzyme-like activity of beta-MnOOH nanoplates." Journal of the Taiwan Institute of Chemical Engineers **59**: 547-552.
Wang, Y., Y. J. Zhu, A. Binyam, M. S. Liu, Y. N. Wu and F. T. Li (2016). "Discovering the enzyme mimetic activity of metal-organic framework (MOF) for label-free and colorimetric sensing of biomolecules." Biosens. Bioelectron. **86**: 432-438.
Wang, Y. H., B. Zhou, S. Wu, K. M. Wang and X. X. He (2015). "Colorimetric detection of hydrogen peroxide and glucose using the magnetic mesoporous silica nanoparticles." Talanta **134**: 712-717.
Wang, Y. L., S. H. Chen, F. Ni, F. Gao and M. G. Li (2009). "Peroxidase-Like Layered Double Hydroxide Nanoflakes for Electrocatalytic Reduction of H_2O_2." Electroanalysis **21**(19): 2125-2132.
Wang, Y. L., P. J. Ni, S. Jiang, W. D. Lu, Z. Li, H. M. Liu, J. Lin, Y. J. Sun and Z. Li (2018). "Highly sensitive fluorometric determination of oxytetracycline based on carbon dots and Fe3O4 MNPs." Sensors and Actuators B-Chemical **254**: 1118-1124.
Wang, Y. L., Y. G. Wang, X. H. Pang, B. Du, H. Li, D. Wu and Q. Wei (2015). "Ultrasensitive sandwich-type electrochemical immunosensor based on dual signal amplification strategy using multifunctional graphenena nocomposites as labels for quantitative detection of tissue polypeptide antigen." Sensors and Actuators B-Chemical **214**: 124-131.
Wang, Y. M., J. W. Liu, G. B. Adkins, W. Shen, M. P. Trinh, L. Y. Duan, J. H. Jiang and W. Zhong (2017). "Enhancement of the Intrinsic Peroxidase-Like Activity of Graphitic Carbon Nitride Nanosheets by ssDNAs and Its Application for Detection of Exosomes." Analytical Chemistry **89**(22): 12327-12333.
Wang, Y. M., J. W. Liu, J. H. Jiang and W. Zhong (2017). "Cobalt oxyhydroxide nanoflakes with intrinsic peroxidase catalytic activity and their application to serum glucose detection." Analytical and Bioanalytical Chemistry **409**(17): 4225-4232.
Wang, Y. W., S. Tang, H. H. Yang and H. Song (2016). "A novel colorimetric assay for rapid detection of cysteine and Hg(2)(+) based on gold clusters." Talanta **146**: 71-74.
Wang, Y. W., M. L. Wang, L. X. Wang, H. Xu, S. R. Tang, H. H. Yang, L. Zhang and H. B. Song (2017). "A Simple Assay for Ultrasensitive Colorimetric Detection of Ag+ at Picomolar Levels Using Platinum Nanoparticles." Sensors **17**(11): 2521.
Wang, Y. X., X. Zhang, Z. M. Luo, X. Huang, C. L. Tan, H. Li, B. Zheng, B. Li, Y. Huang, J. Yang, Y. Zong, Y. B. Ying and H. Zhang (2014). "Liquid-phase growth of platinum nanoparticles on molybdenum trioxide nanosheets: an enhanced catalyst with intrinsic peroxidase-like catalytic activity." Nanoscale **6**(21): 12340-12344.
Wang, Y. Z., W. J. Qi and Y. J. Song (2016). "Antibody-free detection of protein phosphorylation using intrinsic peroxidase-like activity of platinum/carbon dot hybrid nanoparticles." Chem. Commun. **52**(51): 7994-7997.
Wang, Z., K. Dong, Z. Liu, Y. Zhang, Z. Chen, H. Sun, J. Ren and X. Qu (2017). "Activation of biologically relevant levels of reactive oxygen species by Au/g-C3N4 hybrid nanozyme for bacteria killing and wound disinfection." Biomaterials **113**: 145-157.
Wang, Z. B., X. C. Lv and J. Weng (2013). "High peroxidase catalytic activity of exfoliated few-layer graphene." Carbon **62**: 51-60.
Wang, Z. F., X. Yang, J. Feng, Y. J. Tang, Y. Y. Jiang and N. Y. He (2014). "Label-free detection of DNA by combining gated mesoporous silica and catalytic signal amplification of platinum nanoparticles." Analyst **139**(23): 6088-6091.
Wang, Z. F., X. Yang, J. J. Yang, Y. Y. Jiang and N. Y. He (2015). "Peroxidase-like activity of mesoporous silica encapsulated Pt nanoparticle and its application in colorimetric immunoassay." Analytica Chimica Acta **862**: 53-63.
Wang, Z. F., S. Zheng, J. Cai, P. Wang, J. Feng, X. Yang, L. M. Zhang, M. Ji, F. G. Wu, N. Y. He and N. Wan (2013). "Fluorescent Artificial Enzyme-Linked Immunoassay System Based on Pd/C Nanocatalyst and Fluorescent Chemodosimeter." Analytical Chemistry **85**(23): 11602-11609.
Wang, Z. L., H. Y. Liu, S. H. Yang, T. Wang, C. Liu and Y. C. Cao (2012). "Nanoparticle-based artificial RNA silencing machinery for antiviral therapy." Proceedings of the National Academy of Sciences of the United States of America **109**(31): 12387-12392.
Wang, Z. Z., S. K. Wang, Z. H. Lu and X. F. Gao (2015). "Syntheses, Structures and Antioxidant Activities of Fullerenols: Knowledge Learned at the Atomistic Level." Journal of Cluster Science **26**(2): 375-388.
Wason, M. S., J. Colon, S. Das, S. Seal, J. Turkson, J. Zhao and C. H. Baker (2013). "Sensitization of pancreatic cancer cells to radiation by cerium oxide nanoparticle-induced ROS production." Nanomedicine **9**: 558-569.
Weaver, J. D. and C. L. Stabler (2015). "Antioxidant cerium oxide nanoparticle hydrogels for cellular encapsulation."

Acta Biomaterialia **16**: 136-144.
Weerathunge, P., R. Ramanathan, R. Shukla, T. K. Sharma and V. Bansal (2014). "Aptamer-Controlled Reversible Inhibition of Gold Nanozyme Activity for Pesticide Sensing." Analytical Chemistry **86**(24): 11937-11941.
Weerathunge, P., T. K. Sharma, R. Ramanathan and V. Bansal (2017). Nanozyme-Based Environmental Monitoring. Advanced Environmental Analysis: Applications of Nanomaterials, Volume 2. C. M. Hussain and B. Kharisov. **10:** 108-132.
Wei, H. and E. K. Wang (2008). "Fe3O4 magnetic nanoparticles as peroxidase mimetics and their applications in H2O2 and glucose detection." Analytical Chemistry **80**(6): 2250-2254.
Wei, H. and E. K. Wang (2013). "Nanomaterials with enzyme-like characteristics (nanozymes): next-generation artificial enzymes." Chemical Society Reviews **42**(14): 6060-6093.
Wei, J. P., X. L. Chen, S. G. Shi, S. G. Mo and N. F. Zheng (2015). "An investigation of the mimetic enzyme activity of two-dimensional Pd-based nanostructures." Nanoscale **7**(45): 19018-19026.
Wei, S. L., J. W. Li and Y. Liu (2015). "Colourimetric assay for beta-estradiol based on the peroxidase-like activity of Fe3O4@mSiO(2)@HP-beta-CD nanoparticles." Rsc Advances **5**(130): 107670-107679.
Wen, Y. J., L. Y. Yan and Y. C. Ling (2018). "The designing strategies of graphene-based peroxidase mimetic materials." Science China-Chemistry **61**(3): 266-275.
Witte, P., F. Beuerle, U. Hartnagel, R. Lebovitz, A. Savouchkina, S. Sali, D. Guldi, N. Chronakis and A. Hirsch (2007). "Water solubility, antioxidant activity and cytochrome C binding of four families of exohedral adducts of C-60 and C-70." Organic & Biomolecular Chemistry **5**(22): 3599-3613.
Wong, L. L., Q. N. Pye, L. Chen, S. Seal and J. F. McGinnis (2015). "Defining the Catalytic Activity of Nanoceria in the P23H-1 Rat, a Photoreceptor Degeneration Model." PLoS One **10**(3): e0121977.
Wong, Y.-M., Y. Hoshino, K. Sudesh, Y. Miura and K. Numata (2015). "Optimization of Poly(N-isopropylacrylamide) as an Artificial Amidase." Biomacromolecules **16**(1): 411-421.
Woo, M. A., M. I. Kim, J. H. Jung, K. S. Park, T. S. Seo and H. G. Park (2013). "A Novel Colorimetric Immunoassay Utilizing the Peroxidase Mimicking Activity of Magnetic Nanoparticles." International Journal of Molecular Sciences **14**(5): 9999-10014.
Wu, C. W., S. G. Harroun, C. W. Lien, H. T. Chang, B. Unnikrishnan, I. P. J. Lai, J. Y. Chang and C. C. Huang (2016). "Self-templated formation of aptamer-functionalized copper oxide nanorods with intrinsic peroxidase catalytic activity for protein and tumor cell detection." Sensors and Actuators B-Chemical **227**: 100-107.
Wu, D., X. Deng, X. M. Huang, K. Wang and Q. Y. Liu (2013). "Low-Cost Preparation of Photoluminescent Carbon Nanodots and Application as Peroxidase Mimetics in Colorimetric Detection of H2O2 and Glucose." Journal of Nanoscience and Nanotechnology **13**(10): 6611-6616.
Wu, G. W., S. B. He, H. P. Peng, H. H. Deng, A. L. Liu, X. H. Lin, X. H. Xia and W. Chen (2014). "Citrate-Capped Platinum Nanoparticle as a Smart Probe for Ultrasensitive Mercury Sensing." Analytical Chemistry **86**(21): 10955-10960.
Wu, G. W., Y. M. Shen, X. Q. Shi, H. H. Deng, X. Q. Zheng, H. P. Peng, A. L. Liu, X. H. Xia and W. Chen (2017). "Bimetallic Bi/Pt peroxidase mimic and its bioanalytical applications." Analytica Chimica Acta **971**: 88-96.
Wu, J., S. Li and H. Wei (2018). "Integrated nanozymes: facile preparation and biomedical applications." Chem. Commun. **54**(50): 6520-6530.
Wu, J., S. Li and H. Wei (2018). "Multifunctional nanozymes: enzyme-like catalytic activity combined with magnetism and surface plasmon resonance." Nanoscale Horiz. **3**(4): 367-382.
Wu, J. J., K. Qin, D. Yuan, J. Tan, L. Qin, X. J. Zhang and H. Wei (2018). "Rational Design of Au@Pt Multibranched Nanostructures as Bifunctional Nanozymes." Acs Applied Materials & Interfaces **10**(15): 12954-12959.
Wu, L., W. M. Yin, X. C. Tan, P. Wang, F. Ding, H. Zhang, B. R. Wang, W. Y. Zhang and H. Y. Han (2017). "Direct reduction of HAuCl4 for the visual detection of intracellular hydrogen peroxide based on Au-Pt/SiO2 nanospheres." Sensors and Actuators B-Chemical **248**: 367-373.
Wu, L. L., Z. J. Qian, Z. J. Xie, Y. Y. Zhang and C. F. Peng (2017). "Colorimetric Detection of Copper Ions Based on Surface Modification of Silver /Platinum Cluster Nanoenzyme." Chin. J. Anal. Chem. **45**(04): 471-476.
Wu, L. L., L. Y. Wang, Z. J. Xie, N. Pan and C. F. Peng (2016). "Colorimetric assay of L-cysteine based on peroxidase-mimicking DNA-Ag/Pt nanoclusters." Sensors and Actuators B-Chemical **235**: 110-116.
Wu, L. L., L. Y. Wang, Z. J. Xie, F. Xue and C. F. Peng (2016). "Colorimetric detection of Hg2+based on inhibiting the peroxidase-like activity of DNA–Ag/Pt nanoclusters." RSC Adv. **6**(79): 75384-75389.
Wu, M. Y., S. J. Meng, Q. Wang, W. L. Si, W. Huang and X. C. Dong (2015). "Nickel-Cobalt Oxide Decorated Three-Dimensional Graphene as an Enzyme Mimic for Glucose and Calcium Detection." ACS Applied Materials & Interfaces **7**(38): 21089-21094.

Wu, Q., J. Rong, Z. Shan, H. Y. Chen and W. S. Yang (2009). "Effects of aqueous-organic solvents on peroxidase mimetic activity of Fe3O4 magnetic nanoparticles." Chin. J. Biotech. **25**(12): 1976-1982.
Wu, Q. W., G. Wei, Z. B. Xu, J. Han, J. Q. Xi, L. Fan and L. Z. Gao (2018). "Mechanistic Insight into the Light-Irradiated Carbon Capsules as an Antibacterial Agent." ACS Applied Materials & Interfaces **10**(30): 25026-25036.
Wu, R. F., Y. Chong, G. Fang, X. M. Jiang, Y. Pan, C. Y. Chen, J. J. Yin and C. C. Ge (2018). "Synthesis of Pt Hollow Nanodendrites with Enhanced Peroxidase-Like Activity against Bacterial Infections: Implication for Wound Healing." Advanced Functional Materials **28**(28): 1801484.
Wu, S. J., N. Duan, Y. T. Qiu, J. H. Li and Z. P. Wang (2017). "Colorimetric aptasensor for the detection of Salmonella enterica serovar typhimurium using ZnFe2O4-reduced graphene oxide nanostructures as an effective peroxidase mimetics." International Journal of Food Microbiology **261**: 42-48.
Wu, S. Y., H. Huang, X. Feng, C. C. Du and W. B. Song (2017). "Facile visual colorimetric sensor based on iron carbide nanoparticles encapsulated in porous nitrogen-rich graphene." Talanta **167**: 385-391.
Wu, X. C., Y. Zhang, T. Han, H. X. Wu, S. W. Guo and J. Y. Zhang (2014). "Composite of graphene quantum dots and Fe3O4 nanoparticles: peroxidase activity and application in phenolic compound removal." Rsc Advances **4**(7): 3299-3305.
Wu, X. J., T. M. Chen, J. X. Wang and G. W. Yang (2018). "Few-layered MoSe2 nanosheets as an efficient peroxidase nanozyme for highly sensitive colorimetric detection of H2O2 and xanthine." J. Mater. Chem. B **6**(1): 105-111.
Wu, Y. H., L. Chu, W. Liu, L. Jiang, X. Y. Chen, Y. H. Wang and Y. L. Zhao (2017). "The screening of metal ion inhibitors for glucose oxidase based on the peroxidase-like activity of nano-Fe3O4." RSC Advances **7**(75): 47309-47315.
Wu, Y. H., M. J. Song, Z. A. Xin, X. Q. Zhang, Y. Zhang, C. Y. Wang, S. Y. Li and N. Gu (2011). "Ultra-small particles of iron oxide as peroxidase for immunohistochemical detection." Nanotechnology **22**(22): 225703.
Wu, Y. S., F. F. Huang and Y. W. Lin (2013). "Fluorescent Detection of Lead in Environmental Water and Urine Samples Using Enzyme Mimics of Catechin-Synthesized Au Nanoparticles." Acs Applied Materials & Interfaces **5**(4): 1503-1509.
Wu, Y. Z., Y. J. Ma, G. H. Xu, F. D. Wei, Y. S. Ma, Q. Song, X. Wang, T. Tang, Y. Y. Song, M. L. Shi, X. M. Xu and Q. Hu (2017). "Metal-organic framework coated Fe3O4 magnetic nanoparticles with peroxidase-like activity for colorimetric sensing of cholesterol." Sensors and Actuators B-Chemical **249**: 195-202.
Wu, Z. F., Z. Wang, Y. Zhang, Y. L. Ma, C. Y. He, H. Li, L. Chen, Q. S. Huo, L. Wang and Z. Q. Li (2016). "Amino acids-incorporated nanoflowers with an intrinsic peroxidase-like activity." Sci. Rep. **6**: 22412.
Wu, Z. L., J. J. Wu, X. Y. Sun, B. Liu and J. S. Shen (2017). "Fluorescence sensing of formaldehyde based on the catalytic reaction of MnO_2 nanowires modulated by different crystal structures." Sci. Sin. Chim. **47**(10): 1226-1232.
Xia, M. F., C. X. Zhuo, X. J. Ma, X. H. Zhang, H. M. Sun, Q. G. Zhai and Y. D. Zhang (2017). "Assembly of the active center of organophosphorus hydrolase in metal-organic frameworks via rational combination of functional ligands." Chem. Commun. **53**(82): 11302-11305.
Xia, X. H., J. T. Zhang, N. Lu, M. J. Kim, K. S. Ghale, Y. Xu, E. McKenzie, J. B. Liu and H. H. Yet (2015). "Pd-Ir Core-Shell Nanocubes: A Type of Highly Efficient and Versatile Peroxidase Mimic." Acs Nano **9**(10): 9994-10004.
Xia, Y. K., M. M. Liu, L. L. Wang, A. Yan, W. H. He, M. Chen, J. M. Lan, J. X. Xu, L. H. Guan and J. H. Chen (2017). "A visible and colorimetric aptasensor based on DNA-capped single-walled carbon nanotubes for detection of exosomes." Biosens. Bioelectron. **92**: 8-15.
Xiang, Z. B., Y. Wang, P. Ju and D. Zhang (2016). "Optical determination of hydrogen peroxide by exploiting the peroxidase-like activity of AgVO3 nanobelts." Microchimica Acta **183**(1): 457-463.
Xie, J. X., H. Y. Cao, H. Jiang, Y. J. Chen, W. B. Shi, H. Z. Zheng and Y. M. Huang (2013). "Co3O4-reduced graphene oxide nanocomposite as an effective peroxidase mimetic and its application in visual biosensing of glucose." Analytica Chimica Acta **796**: 92-100.
Xie, J. X., X. D. Zhang, H. Jiang, S. Wang, H. Liu and Y. M. Huang (2014). "V2O5 nanowires as a robust and efficient peroxidase mimic at high temperature in aqueous media." Rsc Advances **4**(50): 26046-26049.
Xie, J. X., X. D. Zhang, H. Wang, H. Z. Zheng and Y. M. Huang (2012). "Analytical and environmental applications of nanoparticles as enzyme mimetics." TrAC Trend. Anal. Chem. **39**: 114-129.
Xing, Z. C., J. Q. Tian, A. M. Asiri, A. H. Qusti, A. O. Al-Youbi and X. P. Sun (2014). "Two-dimensional hybrid mesoporous Fe2O3-graphene nanostructures: A highly active and reusable peroxidase mimetic toward rapid, highly sensitive optical detection of glucose." Biosensors & Bioelectronics **52**: 452-457.
Xiong, B., R. L. Xu, R. Zhou, Y. He and E. S. Yeung (2014). "Preventing UV induced cell damage by scavenging reactive oxygen species with enzyme-mimic Au-Pt nanocomposites." Talanta **120**: 262-267.
Xiong, F., H. Wang, Y. D. Feng, Y. M. Li, X. Q. Hua, X. Y. Pang, S. Zhang, L. Song, Y. Zhang and N. Gu (2015). "Cardioprotective activity of iron oxide nanoparticles." Sci. Rep. **5**: 8579.

Xiong, Y. H., S. H. Chen, F. G. Ye, L. J. Su, C. Zhang, S. F. Shen and S. L. Zhao (2015). "Synthesis of a mixed valence state Ce-MOF as an oxidase mimetic for the colorimetric detection of biothiols." Chem. Commun. **51**(22): 4635-4638.
Xiong, Z. W., H. X. Zhong, S. Zheng, P. X. Deng, N. Li, W. Yun and L. Z. Yang (2018). "A visual detection of bisphenol A based on peroxidase-like activity of hemin-graphene composites and aptamer." Analytical Methods **10**(21): 2450-2455.
Xu, C., W. Bing, F. M. Wang, J. S. Ren and X. G. Qu (2017). "Versatile Dual Photoresponsive System for Precise Control of Chemical Reactions." ACS Nano **11**(8): 7770-7780.
Xu, C., Y. H. Lin, J. S. Wang, L. Wu, W. L. Wei, J. S. Ren and X. G. Qu (2013). "Nanoceria-Triggered Synergetic Drug Release Based on CeO_2-Capped Mesoporous Silica Host-Guest Interactions and Switchable Enzymatic Activity and Cellular Effects of CeO_2." Adv. Healthcare Mater. **2**(12): 1591-1599.
Xu, C., Z. Liu, L. Wu, J. S. Ren and X. G. Qu (2014). "Nucleoside Triphosphates as Promoters to Enhance Nanoceria Enzyme-like Activity and for Single- Nucleotide Polymorphism Typing." Advanced Functional Materials **24**(11): 1624-1630.
Xu, C. and X. G. Qu (2014). "Cerium oxide nanoparticle: a remarkably versatile rare earth nanomaterial for biological applications." NPG Asia Mater. **6**: e90.
Xu, C. and X. G. Qu (2014). "Recent progress of rare earth cerium oxide nanoparticles applied in biology." Sci. Sin. Chim. **44**(04): 506-520
Xu, C., C. Q. Zhao, M. Li, L. Wu, J. S. Ren and X. G. Qu (2014). "Artificial Evolution of Graphene Oxide Chemzyme with Enantioselectivity and Near-Infrared Photothermal Effect for Cascade Biocatalysis Reactions." Small **10**(9): 1841-1847.
Xu, H. H., H. H. Deng, X. Q. Lin, Y. Y. Wu, X. L. Lin, H. P. Peng, A. L. Liu, X. H. Xia and W. Chen (2017). "Colorimetric glutathione assay based on the peroxidase-like activity of a nanocomposite consisting of platinum nanoparticles and graphene oxide." Microchimica Acta **184**(10): 3945-3951.
Xu, H. Y., M. M. Liang, Y. Zhang and Q. B. Wang (2018). "Application research on nanozymes in AML therapy and diagnosis (National Key Research and Development Program)." Prog. Biochem. Biophys. **45**(02): 277-278.
Xu, H. Y., T. N. Shi, H. Zhao, L. G. Jin, F. C. Wang, C. Y. Wang and S. Y. Qi (2016). "Heterogeneous Fenton-like discoloration of methyl orange using Fe3O4/MWCNTs as catalyst: process optimization by response surface methodology." Front. Mater. Sci. **10**(1): 45-55.
Xu, J., J. Wu, C. Zong, H. X. Ju and F. Yan (2013). "Manganese Porphyrin-dsDNA Complex: A Mimicking Enzyme for Highly Efficient Bioanalysis." Analytical Chemistry **85**(6): 3374-3379.
Xu, J. J., M. M. Wang, L. Z. Liu, F. Li and J. S. Tian (2018). "Analysis of alkaline phosphatase activity of magnetosome." J. China Agric. Univ. **23**(4): 8-13.
Xu, K. R., Z. M. Zhong, H. D. Xu, X. Wang, M. Zhao and C. D. Wu (2017). "Highly Efficient Aerobic Oxidation of Arylalkanes with a Biomimetic Catalyst Platform." Chinese J. Appl. Chem. **34**(09): 1079-1085.
Xu, L. J. and J. L. Wang (2012). "Magnetic Nanoscaled Fe3O4/CeO2 Composite as an Efficient Fenton-Like Heterogeneous Catalyst for Degradation of 4-Chlorophenol." Environmental Science & Technology **46**(18): 10145-10153.
Xu, Q., H. Yuan, X. L. Dong, Y. Zhang, M. Asif, Z. H. Dong, W. S. He, J. H. Ren, Y. M. Sun and F. Xiao (2018). "Dual nanoenzyme modified microelectrode based on carbon fiber coated with AuPd alloy nanoparticles decorated graphene quantum dots assembly for electrochemical detection in clinic cancer samples." Biosensors & Bioelectronics **107**: 153-162.
Xu, S. D., W. D. Li, X. Xu and H. D. Wang (2018). "Spectrophotometric Determination of Glucose in Blood Based on the Catalytic Reaction of Copper Nanoparticles on Polydopamine Spheres." Phys. Testing Chem. Anal. Part B (Chem. Anal.) **54**(1): 18-23.
Xu, S. J., Y. Q. Wang, D. Y. Zhou, M. Kuang, D. Fang, W. H. Yang, S. J. Wei and L. Ma (2016). "A novel chemiluminescence sensor for sensitive detection of cholesterol based on the peroxidase-like activity of copper nanoclusters." Sci. Rep. **6**: 39157.
Xu, W. J., S. Y. Xue, H. Y. Yi, P. Jing, Y. Q. Chai and R. Yuan (2015). "A sensitive electrochemical aptasensor based on the co-catalysis of hemin/G-quadruplex, platinum nanoparticles and flower-like MnO2 nanosphere functionalized multi-walled carbon nanotubes." Chem. Commun. **51**(8): 1472-1474.
Xu, X. W. and X. R. Yang (2011). "Facile colorimetric detection of glucose based on an organic Fenton reaction." Analytical Methods **3**(5): 1056-1059.
Xu, Z. Q., J. Y. Lan, J. C. Jin, P. Dong, F. L. Jiang and Y. Liu (2015). "Highly Photoluminescent Nitrogen-Doped Carbon Nanodots and Their Protective Effects against Oxidative Stress on Cells." ACS Applied Materials & Interfaces **7**(51): 28346-28352.

Xue, T., S. Jiang, Y. Q. Qu, Q. Su, R. Cheng, S. Dubin, C. Y. Chiu, R. Kaner, Y. Huang and X. F. Duan (2012). "Graphene-Supported Hemin as a Highly Active Biomimetic Oxidation Catalyst." Angew. Chem. Int. Ed. **51**(16): 3822-3825.
Xue, T., B. Peng, M. Xue, X. Zhong, C. Y. Chiu, S. Yang, Y. Q. Qu, L. Y. Ruan, S. Jiang, S. Dubin, R. B. Kaner, J. I. Zink, M. E. Meyerhoff, X. F. Duan and Y. Huang (2014). "Integration of molecular and enzymatic catalysts on graphene for biomimetic generation of antithrombotic species." Nat. Commun. **5**: 3200.
Xue, Y., Q. F. Luan, D. Yang, X. Yao and K. B. Zhou (2011). "Direct Evidence for Hydroxyl Radical Scavenging Activity of Cerium Oxide Nanoparticles." Journal of Physical Chemistry C **115**(11): 4433-4438.
Yamakoshi, Y., S. Sueyoshi, K. Fukuhara and N. Miyata (1998). "center dot OH and O-2(center dot-) generation in aqueous C-60 and C-70 solutions by photoirradiation: An EPR study." Journal of the American Chemical Society **120**(47): 12363-12364.
Yamakoshi, Y. N., T. Yagami, S. Sueyoshi and N. Miyata (1996). "Acridine adduct of 60 fullerene with enhanced DNA-cleaving activity." Journal of Organic Chemistry **61**(21): 7236-7237.
Yan, J., Y. F. Huang, C. H. Zhang, Z. Z. Fang, W. H. Bai, M. M. Yan, C. Zhu and A. L. Chen (2017). "Aptamer based photometric assay for the antibiotic sulfadimethoxine based on the inhibition and reactivation of the peroxidase-like activity of gold nanoparticles." Microchimica Acta **184**(1): 59-63.
Yan, X. F., K. F. Gan, B. Z. Tian, J. L. Zhang, L. Z. Wang and D. L. Lu (2018). "Photo-fenton refreshable Fe3O4@HCS adsorbent for the elimination of tetracycline hydrochloride." Research on Chemical Intermediates **44**(1): 1-11.
Yan, X. Y. (2018). "Nanozyme: a New Type of Artificial Enzyme." Progress in Biochemistry and Biophysics **45**(2): 101-104.
Yan, X. Y., Y. Gu, C. Li, L. Tang, B. Zheng, Y. R. Li, Z. Q. Zhang and M. Yang (2016). "Synergetic catalysis based on the proline tailed metalloporphyrin with graphene sheet as efficient mimetic enzyme for ultrasensitive electrochemical detection of dopamine." Biosensors & bioelectronics **77**: 1032-1038.
Yan, Z. Y., Q. Q. Niu, M. Y. Mou, Y. Wu, X. X. Liu and S. H. Liao (2017). "A novel colorimetric method based on copper nanoclusters with intrinsic peroxidase-like for detecting xanthine in serum samples." Journal of Nanoparticle Research **19**(7): 235.
Yang, B., J. P. Li, H. Deng and L. M. Zhang (2016). "Progress of Mimetic Enzymes and Their Applications in Chemical Sensors." Critical Reviews in Analytical Chemistry **46**(6): 469-481.
Yang, B. W., Y. Chen and J. L. Shi (2018). "Nanozymes in Catalytic Cancer Theranostics." Progress in Biochemistry and Biophysics **45**(2): 237-255.
Yang, C. H., J. J. Du, Q. Peng, R. R. Qiao, W. Chen, C. Xu, Z. G. Shuai and M. Y. Gao (2009). "Polyaniline/Fe(3)O(4) Nanoparticle Composite: Synthesis and Reaction Mechanism." Journal of Physical Chemistry B **113**(15): 5052-5058.
Yang, F., S. L. Hu, Y. Zhang, X. W. Cai, Y. Huang, F. Wang, S. Wen, G. J. Teng and N. Gu (2012). "A Hydrogen Peroxide-Responsive O2 Nanogenerator for Ultrasound and Magnetic-Resonance Dual Modality Imaging." Advanced Materials **24**(38): 5205-5211.
Yang, H. G., Y. H. Xiong, P. Zhang, L. J. Su and F. G. Ye (2015). "Colorimetric detection of mercury ions using MnO2 nanorods as enzyme mimics." Analytical Methods **7**(11): 4596-4601.
Yang, H. G., R. Yang, P. Zhang, Y. M. Qin, T. Chen and F. G. Ye (2017). "A bimetallic (Co/2Fe) metal-organic framework with oxidase and peroxidase mimicking activity for colorimetric detection of hydrogen peroxide." Microchimica Acta **184**(12): 4629-4635.
Yang, H. G., J. Q. Zha, P. Zhang, Y. M. Qin, T. Chen and F. G. Ye (2017). "Fabrication of CeVO4 as nanozyme for facile colorimetric discrimination of hydroquinone from resorcinol and catechol." Sensors and Actuators B-Chemical **247**: 469-478.
Yang, H. G., J. Q. Zha, P. Zhang, Y. H. Xiong, L. J. Su and F. G. Ye (2016). "Sphere-like CoS with nanostructures as peroxidase mimics for colorimetric determination of H2O2 and mercury ions." Rsc Advances **6**(71): 66963-66970.
Yang, H. K., J. Y. Xiao, L. Su, T. Feng, Q. Y. Lv and X. J. Zhang (2017). "Oxidase-mimicking activity of the nitrogen-doped Fe3C@C composites." Chem. Commun. **53**(27): 3882-3885.
Yang, J. E., Y. X. Lu, L. Ao, F. Y. Wang, W. J. Jing, S. C. Zhang and Y. Y. Liu (2017). "Colorimetric sensor array for proteins discrimination based on the tunable peroxidase-like activity of AuNPs-DNA conjugates." Sensors and Actuators B: Chemical **245**: 66-73.
Yang, J. J., J. T. Cao, Y. L. Wang, H. Wang, Y. M. Liu and S. H. Ma (2017). "Sandwich-like electrochemiluminescence aptasensor based on dual quenching effect from hemin-graphene nanosheet and enzymatic biocatalytic precipitation for sensitive detection of carcinoembryonic antigen." Journal of Electroanalytical Chemistry **787**: 88-94.
Yang, L. Q., X. Y. Liu, Q. J. Lu, N. Huang, M. L. Liu, Y. Y. Zhang and S. Z. Yao (2016). "Catalytic and peroxidase-like

activity of carbon based-AuPd bimetallic nanocomposite produced using carbon dots as the reductant." Anal. Chim. Acta **930**: 23-30.
Yang, L. Q., X. L. Ren, F. Q. Tang and L. Zhang (2009). "A practical glucose biosensor based on Fe(3)O(4) nanoparticles and chitosan/nafion composite film." Biosensors & Bioelectronics **25**(4): 889-895.
Yang, M. Z., Y. P. Guan, Y. Yang, T. T. Xia, W. B. Xiong, N. Wang and C. Guo (2013). "Peroxidase-like activity of amino-functionalized magnetic nanoparticles and their applications in immunoassay." Journal of Colloid and Interface Science **405**: 291-295.
Yang, Q. M., S. Y. Lu, B. L. Shen, S. J. Bao and Y. S. Liu (2018). "An iron hydroxyl phosphate microoctahedron catalyst as an efficient peroxidase mimic for sensitive and colorimetric quantification of H2O2 and glucose." New Journal of Chemistry **42**(9): 6803-6809.
Yang, R., S. F. Cai and C. Wang (2018). "Two-dimentional Transition-metal Dichalcogenide Nanocomposites as Novel Enzyme Mimics: An Overview." Progress in Biochemistry and Biophysics **45**(2): 170-192.
Yang, S. T., L. J. Yang, X. Y. Liu, J. R. Xie, X. L. Zhang, B. W. Yu, R. H. Wu, H. L. Li, L. Y. Chen and J. H. Liu (2015). "TiO2-doped Fe3O4 nanoparticles as high-performance Fenton-like catalyst for dye decoloration." Sci. China Tech. Sci. **58**(5): 858-863.
Yang, W., T. Huang, M. Zhao, F. Luo, W. Weng, Q. Wei, Z. Lin and G. Chen (2017). "High peroxidase-like activity of iron and nitrogen co-doped carbon dots and its application in immunosorbent assay." Talanta **164**: 1-6.
Yang, W. S., J. H. Hao, Z. Zhang, B. P. Lu, B. L. Zhang and J. L. Tang (2014). "CoxFe3-xO4 hierarchical nanocubes as peroxidase mimetics and their applications in H2O2 and glucose detection." Rsc Advances **4**(67): 35500-35504.
Yang, W. S., J. H. Hao, Z. Zhang and B. L. Zhang (2015). "Metal-organic frameworks-derived synthesis of porous FeP nanocubes: An effective peroxidase mimetic." Journal of Colloid and Interface Science **460**: 55-60.
Yang, X., L. N. Wang, G. Z. Zhou, N. Sui, Y. X. Gu and J. Wan (2015). "Electrochemical Detection of H2O2 Based on Fe3O4 Nanoparticles with Graphene Oxide and Polyamidoamine Dendrimer." Journal of Cluster Science **26**(3): 789-798.
Yang, X. L., Y. P. Wan, X. G. Qiao, V. Arlet and X. D. Li (2010). "Transcriptional alteration of matrix-related gene expression in cultured human disc cells by nanoparticles of a bismethanophosphonate fullerene." Cell Biology International **34**(8): 837-844.
Yang, Y. C., Y. T. Wang and W. L. Tseng (2017). "Amplified Peroxidase-Like Activity in Iron Oxide Nanoparticles Using Adenosine Monophosphate: Application to Urinary Protein Sensing." ACS Appl. Mater. Interfaces **9**(11): 10069-10077.
Yang, Y. S., Z. Mao, W. J. Huang, L. H. Liu, J. L. Li, J. L. Li and Q. Z. Wu (2016). "Redox enzyme-mimicking activities of CeO2 nanostructures: Intrinsic influence of exposed facets." Sci. Rep. **6**: 35344.
Yang, Z. H., Y. Q. Chai, R. Yuan, Y. Zhuo, Y. Li, J. Han and N. Liao (2014). "Hollow platinum decorated Fe3O4 nanoparticles as peroxidase mimetic couple with glucose oxidase for pseudobienzyme electrochemical immunosensor." Sensors and Actuators B-Chemical **193**: 461-466.
Yang, Z. T., J. Qian, X. W. Yang, D. Jiang, X. J. Du, K. Wang, H. P. Mao and K. Wang (2015). "A facile label-free colorimetric aptasensor for acetamiprid based on the peroxidase-like activity of hemin-functionalized reduced graphene oxide." Biosensors & Bioelectronics **65**: 39-46.
Yang, Z. Y., S. L. Luo, H. Li, S. W. Dong, J. He, H. Jiang, R. Li and X. C. Yang (2014). "Alendronate as a robust anchor for ceria nanoparticle surface coating: facile binding and improved biological properties." Rsc Advances **4**(104): 59965-59969.
Yang, Z. Z., F. Q. Ma, Y. Zhu, S. H. Chen, C. Wang and X. F. Lu (2017). "A facile synthesis of CuFe2O4/Cu9S8/PPy ternary nanotubes as peroxidase mimics for the sensitive colorimetric detection of H2O2 and dopamine." Dalton Transactions **46**(34): 11171-11179.
Yang, Z. Z., C. Wang and X. F. Lu (2018). "Conducting polymer-based peroxidase mimics: synthesis, synergistic enhanced properties and applications." Science China-Materials **61**(5): 653-670.
Yang, Z. Z., Z. Zhang, Y. Z. Jiang, M. Q. Chi, G. D. Nie, X. F. Lu and C. Wang (2016). "Palladium nanoparticles modified electrospun CoFe2O4 nanotubes with enhanced peroxidase-like activity for colorimetric detection of hydrogen peroxide." RSC Adv. **6**(40): 33636-33642.
Yang, Z. Z., Y. Zhu, M. Q. Chi, C. Wang, Y. Wei and X. F. Lu (2018). "Fabrication of cobalt ferrite/cobalt sulfide hybrid nanotubes with enhanced peroxidase-like activity for colorimetric detection of dopamine." Journal of Colloid and Interface Science **511**: 383-391.
Yang, Z. Z., Y. Zhu, G. D. Nie, M. X. Li, C. Wang and X. F. Lu (2017). "FeCo nanoparticles-embedded carbon nanofibers as robust peroxidase mimics for sensitive colorimetric detection of L-cysteine." Dalton Transactions **46**(28): 8942-8949.

Yao, J., Y. Cheng, M. Zhou, S. Zhao, S. C. Lin, X. Y. Wang, J. J. Wu, S. R. Li and H. Wei (2018). "ROS scavenging Mn3O4 nanozymes for in vivo anti-inflammation." Chemical Science **9**(11): 2927-2933.
Yao, W. T., H. Z. Zhu, W. G. Li, H. B. Yao, Y. C. Wu and S. H. Yu (2013). "Intrinsic Peroxidase Catalytic Activity of Fe_7S_8 Nanowires Templated from $[Fe_{16}S_{20}]$/Diethylenetriamine Hybrid Nanowires." ChemPlusChem **78**(7): 723-727.
Yapar, S., M. Oikonomou, A. H. Velders and S. Kubik (2015). "Dipeptide recognition in water mediated by mixed monolayer protected gold nanoparticles." Chem. Commun. **51**(75): 14247-14250.
Ye, H., K. Yang, J. Tao, Y. Liu, Q. Zhang, S. Habibi, Z. Nie and X. Xia (2017). "An Enzyme-Free Signal Amplification Technique for Ultrasensitive Colorimetric Assay of Disease Biomarkers." ACS Nano **11**(2): 2052-2059.
Ye, H. H., Y. Z. Liu, A. Chhabra, E. Lilla and X. H. Xia (2017). "Polyvinylpyrrolidone (PVP)-Capped Pt Nanocubes with Superior Peroxidase-Like Activity." ChemNanoMat **3**(1): 33-38.
Ye, H. H., J. Mohar, Q. X. Wang, M. Catalano, M. J. Kim and X. H. Xia (2016). "Peroxidase-like properties of Ruthenium nanoframes." Sci. Bull. **61**(22): 1739-1745.
Ye, X. Y., Z. M. Liu, Z. G. Wang, X. J. Huang and Z. K. Xu (2009). "Preparation and characterization of magnetic nanofibrous composite membranes with catalytic activity." Materials Letters **63**(21): 1810-1813.
Ye, Y. M., L. L. Xiao, B. He, Q. Zhang, T. Nie, X. R. Yang, D. B. Wu, H. L. Cheng, P. Li and Q. G. Wang (2017). "Oxygen-tuned nanozyme polymerization for the preparation of hydrogels with printable and antibacterial properties." J. Mater. Chem. B **5**(7): 1518-1524.
Yin, H. M., C. Q. Zhou, C. X. Xu, P. P. Liu, X. H. Xu and Y. Ding (2008). "Aerobic oxidation of D-glucose on support-free nanoporous gold." Journal of Physical Chemistry C **112**(26): 9673-9678.
Yin, J. F., H. Q. Cao and Y. X. Lu (2012). "Self-assembly into magnetic Co(3)O(4) complex nanostructures as peroxidase." Journal of Materials Chemistry **22**(2): 527-534.
Yin, J. J., F. Lao, P. P. Fu, W. G. Wamer, Y. L. Zhao, P. C. Wang, Y. Qiu, B. Y. Sun, G. M. Xing, J. Q. Dong, X. J. Liang and C. Y. Chen (2009). "The scavenging of reactive oxygen species and the potential for cell protection by functionalized fullerene materials." Biomaterials **30**(4): 611-621.
Yin, W. Y., J. Yu, F. T. Lv, L. Yan, L. R. Zheng, Z. J. Gu and Y. L. Zhao (2016). "Functionalized Nano-MoS2 with Peroxidase Catalytic and Near-Infrared Photothermal Activities for Safe and Synergetic Wound Antibacterial Applications." Acs Nano **10**(12): 11000-11011.
Yoshihisa, Y., Q. L. Zhao, M. A. Hassan, Z. L. Wei, M. Furuichi, Y. Miyamoto, T. Kondo and T. Shimizu (2011). "SOD/catalase mimetic platinum nanoparticles inhibit heat-induced apoptosis in human lymphoma U937 and HH cells." Free Radical Research **45**(3): 326-335.
Yoshizawa, K., Y. Shiota, T. Yumura and T. Yamabe (2000). "Direct methane-methanol and benzene-phenol conversions on Fe-ZSM-5 zeolite: Theoretical predictions on the reaction pathways and energetics." Journal of Physical Chemistry B **104**(4): 734-740.
You, J. G., Y. W. Liu, C. Y. Lu, W. L. Tseng and C. J. Yu (2017). "Colorimetric assay of heparin in plasma based on the inhibition of oxidaselike activity of citrate-capped platinum nanoparticles." Biosensors & Bioelectronics **92**: 442-448.
Yousefinejad, S., H. Rasti, M. Hajebi, M. Kowsari, S. Sadravi and F. Honarasa (2017). "Design of C-dots/Fe3O4 magnetic nanocomposite as an efficient new nanozyme and its application for determination of H2O2 in nanomolar level." Sensors and Actuators B-Chemical **247**: 691-696.
Yu, C. J., T. H. Chen, J. Y. Jiang and W. L. Tseng (2014). "Lysozyme-directed synthesis of platinum nanoclusters as a mimic oxidase." Nanoscale **6**(16): 9618-9624.
Yu, C. J., C. Y. Lin, C. H. Liu, T. L. Cheng and W. L. Tseng (2010). "Synthesis of poly(diallyldimethylammonium chloride)-coated Fe(3)O(4) nanoparticles for colorimetric sensing of glucose and selective extraction of thiol." Biosensors & Bioelectronics **26**(2): 913-917.
Yu, F. Q., Y. Z. Huang, A. J. Cole and V. C. Yang (2009). "The artificial peroxidase activity of magnetic iron oxide nanoparticles and its application to glucose detection." Biomaterials **30**(27): 4716-4722.
Yu, J., D. Q. Ma, L. Q. Mei, Q. Gao, W. Y. Yin, X. Zhang, L. Yan, Z. J. Gu, X. Y. Ma and Y. L. Zhao (2018). "Peroxidase-like activity of MoS2 nanoflakes with different modifications and their application for H2O2 and glucose detection." J. Mater. Chem. B **6**(3): 487-498.
Yu, J., X. Y. Ma, W. Y. Yin and Z. J. Gu (2016). "Synthesis of PVP-functionalized ultra-small MoS2 nanoparticles with intrinsic peroxidase-like activity for H2O2 and glucose detection." Rsc Advances **6**(84): 81174-81183.
Yu, Q., H. Liu and H. Chen (2014). "Vertical SiNWAs for biomedical and biotechnology applications." J. Mater. Chem. B **2**(45): 7849-7860.
Yu, T. J., W. Wang, J. P. Chen, Y. Zeng, Y. Y. Li, G. Q. Yang and Y. Li (2012). "Dendrimer-Encapsulated Pt Nanoparticles: An Artificial Enzyme for Hydrogen Production." Journal of Physical Chemistry C **116**(19): 10516-10521.

Yu, Z., Y. Park, L. Chen, B. Zhao, Y. M. Jung and Q. Cong (2015). "Preparation of a Superhydrophobic and Peroxidase-like Activity Array Chip for H2O2 Sensing by Surface-Enhanced Raman Scattering." Acs Applied Materials & Interfaces **7**(42): 23472-23480.
Yuan, F., H. M. Zhao, M. Liu and X. Quan (2015). "Visible assay for glycosylase based on intrinsic catalytic ability of graphene/gold nanoparticles hybrids." Biosensors & Bioelectronics **68**: 7-13.
Yuan, F., H. M. Zhao, H. M. Zang, F. Ye and X. Quan (2016). "Three-Dimensional Graphene Supported Bimetallic Nanocomposites with DNA Regulated-Flexibly Switchable Peroxidase-Like Activity." ACS Appl. Mater. Interfaces **8**(15): 9855-9864.
Yuan, L., S. L. Liu, W. W. Tu, Z. S. Zhang, J. C. Bao and Z. H. Dai (2014). "Biomimetic Superoxide Dismutase Stabilized by Photopolymerization for Superoxide Anions Biosensing and Cell Monitoring." Analytical Chemistry **86**(10): 4783-4790.
Zaramella, D., P. Scrimin and L. J. Prins (2012). "Self-Assembly of a Catalytic Multivalent Peptide-Nanoparticle Complex." Journal of the American Chemical Society **134**(20): 8396-8399.
Zarif, F., S. Rauf, M. Z. Qureshi, N. S. Shah, A. Hayat, N. Muhammad, A. Rahim, M. H. Nawaz and M. Nasir (2018). "Ionic liquid coated iron nanoparticles are promising peroxidase mimics for optical determination of H2O2." Microchimica Acta **185**(6): 302.
Zaupa, G., C. Mora, R. Bonomi, L. J. Prins and P. Scrimin (2011). "Catalytic Self-Assembled Monolayers on Au Nanoparticles: The Source of Catalysis of a Transphosphorylation Reaction." Chemistry-a European Journal **17**(17): 4879-4889.
Zaupa, G., L. J. Prins and P. Scrimin (2009). "Resin-supported catalytic dendrimers as multivalent artificial metallonucleases." Bioorganic & Medicinal Chemistry Letters **19**(14): 3816-3820.
Zaupa, G., P. Scrimin and L. J. Prins (2008). "Origin of the dendritic effect in multivalent enzyme-like catalysts." Journal of the American Chemical Society **130**(17): 5699-5709.
Zeb, A., S. Sahar, U. Y. Qazi, A. H. Odda, N. Ullah, Y.-N. Liu, I. A. Qazi and A.-W. Xu (2018). "Intrinsic peroxidase-like activity and enhanced photo-Fenton reactivity of iron-substituted polyoxometallate nanostructures." Dalton Transactions **47**(21): 7344-7352.
Zeng, D. D., W. J. Luo, J. Li, H. J. Liu, H. W. Ma, Q. Huang and C. H. Fan (2012). "Gold nanoparticles-based nanoconjugates for enhanced enzyme cascade and glucose sensing." Analyst **137**(19): 4435-4439.
Zeng, F., Y. Wu, X. Li, X. Ge, Q. Guo, X. Lou, Z. Cao, B. Hu, N. J. Long, Y. Mao and C. Li (2018). "Custom-Made Ceria Nanoparticles Show a Neuroprotective Effect by Modulating Phenotypic Polarization of the Microglia." Angew. Chem. Int. Ed. **57**(20): 5808-5812.
Zeng, H. H., W. B. Qiu, L. Zhang, R. P. Liang and J. D. Qiu (2016). "Lanthanide Coordination Polymer Nanoparticles as an Excellent Artificial Peroxidase for Hydrogen Peroxide Detection." Anal. Chem. **88**: 6342-6348.
Zeng, T., X. L. Zhang, S. H. Wang, Y. R. Ma, H. Y. Niu and Y. Q. Cai (2014). "Assembly of a Nanoreactor System with Confined Magnetite Core and Shell for Enhanced Fenton-Like Catalysis." Chemistry-a European Journal **20**(21): 6474-6481.
Zeng, Y., F. F. Miao, Z. Y. Zhao, Y. T. Zhu, T. Liu, R. S. Chen, S. M. Liu, Z. S. Lv and F. Liang (2017). "Low-Cost Nanocarbon-Based Peroxidases from Graphite and Carbon Fibers." Applied Sciences-Basel **7**(9): 924.
Zhan, L., C. M. Li, W. B. Wu and C. Z. Huang (2014). "A colorimetric immunoassay for respiratory syncytial virus detection based on gold nanoparticles-graphene oxide hybrids with mercury-enhanced peroxidase-like activity." Chem. Commun. **50**(78): 11526-11528.
Zhan, L., Y. Zhang, Q. L. Zeng, Z. D. Liu and C. Z. Huang (2014). "Facile one-pot synthesis of folic acid-modified graphene to improve the performance of graphene-based sensing strategy." Journal of Colloid and Interface Science **426**: 293-299.
Zhan, P. F., J. Y. Wang, Z. G. Wang and B. Q. Ding (2014). "Engineering the pH-Responsive Catalytic Behavior of AuNPs by DNA." Small **10**(2): 399-406.
Zhan, P. F., Z. G. Wang, N. Li and B. Q. Ding (2015). "Engineering Gold Nanoparticles with DNA Ligands for Selective Catalytic Oxidation of Chiral Substrates." Acs Catalysis **5**(3): 1489-1498.
Zhan, T. R., J. X. Kang, X. J. Li, L. Pan, G. J. Li and W. G. Hou (2018). "NiFe layered double hydroxide nanosheets as an efficiently mimic enzyme for colorimetric determination of glucose and H2O2." Sensors and Actuators B-Chemical **255**: 2635-2642.
Zhang, C., W. B. Bu, D. L. Ni, S. J. Zhang, Q. Li, Z. W. Yao, J. W. Zhang, H. L. Yao, Z. Wang and J. L. Shi (2016). "Synthesis of Iron Nanometallic Glasses and Their Application in Cancer Therapy by a Localized Fenton Reaction." Angew. Chem. Int. Ed. **55**(6): 2101-2106.
Zhang, D., Y. X. Zhao, Y. J. Gao, F. P. Gao, Y. S. Fan, X. J. Li, Z. Y. Duan and H. Wang (2013). "Anti-bacterial and in vivo

tumor treatment by reactive oxygen species generated by magnetic nanoparticles." J. Mater. Chem. B **1**(38): 5100-5107.
Zhang, D. Y., Z. Chen, H. Omar, L. Deng and N. M. Khashab (2015). "Colorimetric Peroxidase Mimetic Assay for Uranyl Detection in Sea Water." Acs Applied Materials & Interfaces **7**(8): 4589-4594.
Zhang, F. T., X. Long, D. W. Zhang, Y. L. Sun, Y. L. Zhou, Y. R. Ma, L. M. Qi and X. X. Zhang (2014). "Layered double hydroxide-hemin nanocomposite as mimetic peroxidase and its application in sensing." Sensors and Actuators B-Chemical **192**: 150-156.
Zhang, G. Y., S. Y. Deng, W. R. Cai, S. Cosnier, X. J. Zhang and D. Shan (2015). "Magnetic Zirconium Hexacyanoferrate(II) Nanoparticle as Tracing Tag for Electrochemical DNA Assay." Analytical Chemistry **87**(17): 9093-9100.
Zhang, H., T. Watanabe, M. Okumura, M. Haruta and N. Toshima (2012). "Catalytically highly active top gold atom on palladium nanocluster." Nat. Mater. **11**: 49-52.
Zhang, H. J., L. L. Lu, Y. N. Cao, S. Du, Z. Cheng and S. W. Zhang (2014). "Fabrication of catalytically active Au/Pt/Pd trimetallic nanoparticles by rapid injection of NaBH4." Materials Research Bulletin **49**: 393-398.
Zhang, H. J. and N. Toshima (2013). "Glucose oxidation using Au-containing bimetallic and trimetallic nanoparticles." Catalysis Science & Technology **3**(2): 268-278.
Zhang, H. Y., S. Pokhrel, Z. X. Ji, H. Meng, X. Wang, S. J. Lin, C. H. Chang, L. J. Li, R. B. Li, B. B. Sun, M. Y. Wang, Y. P. Liao, R. Liu, T. Xia, L. Maedler and A. E. Nel (2014). "PdO Doping Tunes Band-Gap Energy Levels as Well as Oxidative Stress Responses to a Co_3O_4 p-Type Semiconductor in Cells and the Lung." Journal of the American Chemical Society **136**(17): 6406-6420.
Zhang, J., J. W. Ma, X. B. Fan, W. C. Peng, G. L. Zhang, F. B. Zhang and Y. Li (2017). "Graphene supported Au-Pd-Fe3O4 alloy trimetallic nanoparticles with peroxidase-like activities as mimic enzyme." Catalysis Communications **89**: 148-151.
Zhang, J. B., J. Zhuang, L. Z. Gao, Y. Zhang, N. Gu, J. Feng, D. L. Yang, J. D. Zhu and X. Y. Yan (2008). "Decomposing phenol by the hidden talent of ferromagnetic nanoparticles." Chemosphere **73**(9): 1524-1528.
Zhang, J. J., P. Q. Dai, C. Li, N. W. Li, G. F. Cheng, P. G. He and Y. Z. Fang (2014). "A Symmetrically Split G-quadruplex DNAzymes Biosensor Based on Magnetic Nanoparticles for the Rapid Detection of Hg2+." ACTA CHIMICA SINICA **72**(9): 1029-1035.
Zhang, J. W., H. T. Zhang, Z. Y. Du, X. Q. Wang, S. H. Yua and H. L. Jiang (2014). "Water-stable metal-organic frameworks with intrinsic peroxidase-like catalytic activity as a colorimetric biosensing platform." Chem. Commun. **50**(9): 1092-1094.
Zhang, K., X. N. Hu, J. B. Liu, J. J. Yin, S. A. Hou, T. Wen, W. W. He, Y. L. Ji, Y. T. Guo, Q. Wang and X. C. Wu (2011). "Formation of PdPt Alloy Nanodots on Gold Nanorods: Tuning Oxidase-like Activities via Composition." Langmuir **27**(6): 2796-2803.
Zhang, K., Z. Yang, X. D. Meng, Y. Cao, Y. D. Zhang, W. H. Dai, H. T. Lu, Z. F. Yu, H. F. Dong and X. J. Zhang (2018). "Peroxidase-like Fe3O4 nanocomposite for activatable reactive oxygen species generation and cancer theranostics." Mater. Chem. Front. **2**(6): 1184-1194.
Zhang, K., W. Zuo, Z. Y. Wang, J. Liu, T. R. Li, B. D. Wang and Z. Y. Yang (2015). "A simple route to CoFe2O4 nanoparticles with shape and size control and their tunable peroxidase-like activity." Rsc Advances **5**(14): 10632-10640.
Zhang, L., X. Hai, C. Xia, X. W. Chen and J. H. Wang (2017). "Growth of CuO nanoneedles on graphene quantum dots as peroxidase mimics for sensitive colorimetric detection of hydrogen peroxide and glucose." Sensors and Actuators B-Chemical **248**: 374-384.
Zhang, L., Y. C. Zhu, Y. Y. Liang, W. W. Zhao, J. J. Xu and H. Y. Chen (2018). "Semiconducting CuO Nanotubes: Synthesis, Characterization, and Bifunctional Photocathodic Enzymatic Bioanalysis." Analytical Chemistry **90**(8): 5439-5444.
Zhang, L. B., L. Laug, W. Munchgesang, E. Pippel, U. Gosele, M. Brandsch and M. Knez (2010). "Reducing Stress on Cells with Apoferritin-Encapsulated Platinum Nanoparticles." Nano Letters **10**(1): 219-223.
Zhang, L. H., S. J. Guo and S. J. Dong (2009). "Nanoreactor of Fe3O4@SiO2 Core-Shell Structure with Nanochannels for Efficient Catalysis." Journal of Biomedical Nanotechnology **5**(5): 586-590.
Zhang, L. L., L. Han, P. Hu, L. Wang and S. J. Dong (2013). "TiO2 nanotube arrays: intrinsic peroxidase mimetics." Chem. Commun. **49**(89): 10480-10482.
Zhang, L. N., H. H. Deng, F. L. Lin, X. W. Xu, S. H. Weng, A. L. Liu, X. H. Lin, X. H. Xia and W. Chen (2014). "In Situ Growth of Porous Platinum Nanoparticles on Graphene Oxide for Colorimetric Detection of Cancer Cells." Analytical Chemistry **86**(5): 2711-2718.
Zhang, L. Y., M. X. Chen, Y. L. Jiang, M. M. Chen, Y. N. Ding and Q. Y. Liu (2017). "A facile preparation of

montmorillonite-supported copper sulfide nanocomposites and their application in the detection of H2O2." Sensors and Actuators B-Chemical **239**: 28-35.
Zhang, L. Y., C. Fan, M. Liu, F. J. Liu, S. S. Bian, S. Y. Du, S. Y. Zhu and H. Wang (2018). "Biominerized gold-Hemin@MOF composites with peroxidase-like and gold catalysis activities: A high-throughput colorimetric immunoassay for alpha-fetoprotein in blood by ELISA and gold-catalytic silver staining." Sensors and Actuators B-Chemical **266**: 543-552.
Zhang, L. Y., S. Li, M. M. Dong, Y. Jiang, R. Li, S. Zhang, X. X. Lv, L. J. Chen and H. Wang (2017). "Reconstituting redox active centers of heme-containing proteins with biomineralized gold toward peroxidase mimics with strong intrinsic catalysis and electrocatalysis for H2O2 detection." Biosensors & Bioelectronics **87**: 1036-1043.
Zhang, P. C., Y. H. Li, J. Zhen, J. Y. Chen, D. D. Chen, Y. Quan and R. J. Cui (2016). "Determination of Melamine Based on the Instrinsic Peroxidase-Like Activity Plait-Like Carbon Nanoroils." J. Anal. Sci. **32**(06): 769-773.
Zhang, Q., S. Chen, H. Wang and H. T. Yu (2018). "Exquisite Enzyme-Fenton Biomimetic Catalysts for Hydroxyl Radical Production by Mimicking an Enzyme Cascade." Acs Applied Materials & Interfaces **10**(10): 8666-8675.
Zhang, Q., X. X. He, A. L. Han, Q. X. Tu, G. Z. Fang, J. F. Liu, S. Wang and H. B. Li (2016). "Artificial hydrolase based on carbon nanotubes conjugated with peptides." Nanoscale **8**(38): 16851-16856.
Zhang, R. Z., S. J. He, C. M. Zhang and W. Chen (2015). "Three-dimensional Fe- and N-incorporated carbon structures as peroxidase mimics for fluorescence detection of hydrogen peroxide and glucose." J. Mater. Chem. B **3**(20): 4146-4154.
Zhang, S., G. L. Zhou, X. L. Xu, L. L. Cao, G. H. Liang, H. Chen, B. H. Liu and J. L. Kong (2011). "Development of an electrochemical aptamer-based sensor with a sensitive Fe3O4 nanopaticle-redox tag for reagentless protein detection." Electrochemistry Communications **13**(9): 928-931.
Zhang, S. T., H. Li, Z. Y. Wang, J. Liu, H. L. Zhang, B. D. Wang and Z. Y. Yang (2015). "A strongly coupled Au/Fe3O4/GO hybrid material with enhanced nanozyme activity for highly sensitive colorimetric detection, and rapid and efficient removal of Hg2+ in aqueous solutions." Nanoscale **7**(18): 8495-8502.
Zhang, S. T., D. X. Zhang, X. H. Zhang, D. H. Shang, Z. H. Xue, D. L. Shan and X. Q. Lu (2017). "Ultratrace Naked-Eye Colorimetric Detection of He2+ in Wastewater and Serum Utilizing Mercury-Stimulated Peroxidase Mimetic Activity of Reduced Graphene Oxide-PEI-Pd Nanohybrids." Analytical Chemistry **89**(6): 3538-3544.
Zhang, S. X., X. L. Zhao, H. Y. Niu, Y. L. Shi, Y. Q. Cai and G. B. Jiang (2009). "Superparamagnetic Fe3O4 nanoparticles as catalysts for the catalytic oxidation of phenolic and aniline compounds." Journal of Hazardous Materials **167**(1-3): 560-566.
Zhang, T., C. Cao, X. Tang, Y. Cai, C. Yang and Y. Pan (2017). "Enhanced peroxidase activity and tumour tissue visualization by cobalt-doped magnetoferritin nanoparticles." Nanotechnology **28**(4): 045704.
Zhang, T. B., Y. C. Lu and G. S. Luo (2014). "Synthesis of Hierarchical Iron Hydrogen Phosphate Crystal as a Robust Peroxidase Mimic for Stable H2O2 Detection." Acs Applied Materials & Interfaces **6**(16): 14433-14438.
Zhang, W., J. L. Dong, Y. Wu, P. Cao, L. N. Song, M. Ma, N. Gu and Y. Zhang (2017). "Shape-dependent enzyme-like activity of Co3O4 nanoparticles and their conjugation with his-tagged EGFR single-domain antibody." Colloid. Surface. B **154**: 55-62.
Zhang, W., S. Hu, J. J. Yin, W. He, W. Lu, M. Ma, N. Gu and Y. Zhang (2016). "Prussian Blue Nanoparticles as Multienzyme Mimetics and Reactive Oxygen Species Scavengers." J. Am. Chem. Soc. **138**(18): 5860-5865.
Zhang, W., X. Liu, D. Walsh, S. Yao, Y. Kou and D. Ma (2012). "Caged-Protein-Confined Bimetallic Structural Assemblies with Mimetic Peroxidase Activity." Small **8**(19): 2948-2953.
Zhang, W., Y. Sun, Z. Lou, L. Song, Y. Wu, N. Gu and Y. Zhang (2017). "In vitro cytotoxicity evaluation of graphene oxide from the peroxidase-like activity perspective." Colloid. Surface. B **151**: 215-223.
Zhang, W., Y. Wu, H. J. Dong, J. J. Yin, H. Zhang, H. A. Wu, L. N. Song, Y. Chong, Z. X. Li, N. Gu and Y. Zhang (2018). "Sparks fly between ascorbic acid and iron-based nanozymes: A study on Prussian blue nanoparticles." Colloid. Surface. B **163**: 379-384.
Zhang, W., Y. Zhang, Y. H. Chen, S. Y. Li, N. Gu, S. L. Hu, Y. Sun, X. Chen and Q. Li (2013). "Prussian Blue Modified Ferritin as Peroxidase Mimetics and Its Applications in Biological Detection." J. Nanosci. Nanotechnol. **13**(1): 60-67.
Zhang, W., Y. Zhang and N. Gu (2013). "Prussian blue modified ferritin nanoparticles as peroxidase and catalase mimetics and their application in glucose detection." Key Eng. Mater. **562-565**: 1333-1339.
Zhang, W. C., X. H. Niu, X. Li, Y. F. He, H. W. Song, Y. X. Peng, J. M. Pan, F. X. Qiu, H. L. Zhao and M. B. Lan (2018). "A smartphone-integrated ready-to-use paper-based sensor with mesoporous carbon-dispersed Pd nanoparticles as a highly active peroxidase mimic for H2O2 detection." Sensors and Actuators B-Chemical **265**: 412-420.
Zhang, W. J., C. P. Chen, D. X. Yang, G. X. Dong, S. J. Jia, B. X. Zhao, L. Yan, Q. Q. Yao, A. Sunna and Y. Liu (2016).

"Optical Biosensors Based on Nitrogen-Doped Graphene Functionalized with Magnetic Nanoparticles." Adv. Mater. Interfaces 1600590.
Zhang, W. M., D. Ma and J. X. Du (2014). "Prussian blue nanoparticles as peroxidase mimetics for sensitive colorimetric detection of hydrogen peroxide and glucose." Talanta **120**: 362-367.
Zhang, X., L. Liu, R. Liu, J. Wang, X. Hu, Q. Yuan, J. Guo, G. Xing, Y. Zhao and X. Gao (2018). "Specific detection and effective inhibition of a single bacterial species in situ using peptide mineralized Au cluster probes." Science China Chemistry **61**(5): 627-634.
Zhang, X. D., S. H. He, Z. H. Chen and Y. M. Huang (2013). "$CoFe_2O_4$ Nanoparticles as Oxidase Mimic-Mediated Chemiluminescence of Aqueous Luminol for Sulfite in White Wines." Journal of Agricultural and Food Chemistry **61**(4): 840-847.
Zhang, X. D. and Y. M. Huang (2015). "Evaluation of the antioxidant activity of phenols and tannic acid determination with Mn_3O_4 nano-octahedrons as an oxidase mimic." Analytical Methods **7**(20): 8640-8646.
Zhang, X. D., X. X. Mao, S. Q. Li, W. F. Dong and Y. M. Huang (2018). "Tuning the oxidase mimics activity of manganese oxides via control of their growth conditions for highly sensitive detection of glutathione." Sensors and Actuators B-Chemical **258**: 80-87.
Zhang, X. H., G. H. Wu, Z. X. Cai and X. Chen (2015). "Dual-functional Pt-on-Pd supported on reduced graphene oxide hybrids: Peroxidase-mimic activity and an enhanced electrocatalytic oxidation characteristic." Talanta **134**: 132-135.
Zhang, X. L., M. L. He, J. H. Liu, R. Liao, L. Q. Zhao, J. R. Xie, R. J. Wang, S. T. Yang, H. F. Wang and Y. F. Liu (2014). "Fe3O4@C nanoparticles as high-performance Fenton-like catalyst for dye decoloration." Chinese Science Bulletin **59**(27): 3406-3412.
Zhang, X. Q., S. W. Gong, Y. Zhang, T. Yang, C. Y. Wang and N. Gu (2010). "Prussian blue modified iron oxide magnetic nanoparticles and their high peroxidase-like activity." Journal of Materials Chemistry **20**(24): 5110-5116.
Zhang, X. Z., Y. Zhou, W. Zhang, Y. Zhang and N. Gu (2016). "Polystyrene@Au@prussian blue nanocomposites with enzyme-like activity and their application in glucose detection." Colloid. Surface. A **490**: 291-299.
Zhang, Y., Y. M. Guo, Y. L. Xianyu, W. W. Chen, Y. Y. Zhao and X. Y. Jiang (2013). "Nanomaterials for Ultrasensitive Protein Detection." Advanced Materials **25**(28): 3802-3819.
Zhang, Y., W. Ren, H. Q. Luo and N. B. Li (2016). "Label-free cascade amplification strategy for sensitive visual detection of thrombin based on target-triggered hybridization chain reaction-mediated in situ generation of DNAzymes and Pt nanochains." Biosens. Bioelectron. **80**: 463-470.
Zhang, Y., T. Tian, Y. H. Sun, Y. Zhu and Q. Huang (2014). "The biocatalytic activity of inorganic nanomaterials " Sci. Bull.(02): 158-168
Zhang, Y., F. Wang, C. Liu, Z. Wang, L. Kang, Y. Huang, K. Dong, J. Ren and X. Qu (2018). "Nanozyme Decorated Metal-Organic Frameworks for Enhanced Photodynamic Therapy." ACS Nano **12**(1): 651-661.
Zhang, Y., Y. N. Wang, X. T. Sun, L. Chen and Z. R. Xu (2017). "Boron nitride nanosheet/CuS nanocomposites as mimetic peroxidase for sensitive colorimetric detection of cholesterol." Sensors and Actuators B-Chemical **246**: 118-126.
Zhang, Y., Z. Y. Wang, X. J. Li, L. Wang, M. Yin, L. H. Wang, N. Chen, C. H. Fan and H. Y. Song (2016). "Dietary Iron Oxide Nanoparticles Delay Aging and Ameliorate Neurodegeneration in Drosophila." Advanced Materials **28**(7): 1387-1393.
Zhang, Y., C. Y. Wu, X. J. Zhou, X. C. Wu, Y. Q. Yang, H. X. Wu, S. W. Guo and J. Y. Zhang (2013). "Graphene quantum dots/gold electrode and its application in living cell H2O2 detection." Nanoscale **5**(5): 1816-1819.
Zhang, Y., W. T. Zhang, K. Chen, Q. F. Yang, N. Hu, Y. R. Suo and J. L. Wang (2018). "Highly sensitive and selective colorimetric detection of glutathione via enhanced Fenton-like reaction of magnetic metal organic framework." Sensors and Actuators B-Chemical **262**: 95-101.
Zhang, Y. F., C. L. Xu and B. X. Li (2013). "Self-assembly of hemin on carbon nanotube as highly active peroxidase mimetic and its application for biosensing." Rsc Advances **3**(17): 6044-6050.
Zhang, Y. W., J. Q. Tian, S. Liu, L. Wang, X. Y. Qin, W. B. Lu, G. H. Chang, Y. L. Luo, A. M. Asiri, A. O. Al-Youbi and X. P. Sun (2012). "Novel application of CoFe layered double hydroxide nanoplates for colorimetric detection of H_2O_2 and glucose." Analyst **137**(6): 1325-1328.
Zhang, Y. X., S. C. Xu, Y. Y. Luo, S. S. Pan, H. L. Ding and G. H. Li (2011). "Synthesis of mesoporous carbon capsules encapsulated with magnetite nanoparticles and their application in wastewater treatment." Journal of Materials Chemistry **21**(11): 3664-3671.
Zhang, Z., J. H. Hao, W. S. Yang, B. P. Lu, X. Ke, B. L. Zhang and J. L. Tang (2013). "Porous Co3O4 Nanorods-Reduced Graphene Oxide with Intrinsic Peroxidase-Like Activity and Catalysis in the Degradation of Methylene Blue." Acs Applied Materials & Interfaces **5**(9): 3809-3815.

Zhang, Z., N. F. Zhu, Y. M. Zou, X. Y. Wu, G. B. Qu and J. B. Shi (2018). "A novel, enzyme-linked immunosorbent assay based on the catalysis of AuNCs@BSA-induced signal amplification for the detection of dibutyl phthalate." Talanta **179**: 64-69.
Zhang, Z. J., Y. J. Guan, M. Li, A. D. Zhao, J. S. Ren and X. G. Qu (2015). "Highly stable and reusable imprinted artificial antibody used for in situ detection and disinfection of pathogens." Chemical Science **6**(5): 2822-2826.
Zhang, Z. J., Y. B. Liu, X. H. Zhang and J. W. Liu (2017). "A Cell-Mimicking Structure Converting Analog Volume Changes to Digital Colorimetric Output with Molecular Selectivity." Nano Letters **17**(12): 7926-7931.
Zhang, Z. J., X. H. Zhang, B. W. Liu and J. W. Liu (2017). "Molecular Imprinting on Inorganic Nanozymes for Hundred-fold Enzyme Specificity." Journal of the American Chemical Society **139**(15): 5412-5419.
Zhang, Z. M., Q. A. Fu, X. Huang, J. Y. Xu, J. Q. Liu and J. C. Shen (2009). "Construction of the Active Site of Metalloenzyme on Au NC Micelles." Chinese Journal of Chemistry **27**(7): 1215-1220.
Zhang, Z. M., Q. A. Fu, X. Q. Li, X. Huang, J. Y. Xu, J. C. Shen and J. Q. Liu (2009). "Self-assembled gold nanocrystal micelles act as an excellent artificial nanozyme with ribonuclease activity." Journal of Biological Inorganic Chemistry **14**(5): 653-662.
Zhang, Z. X., X. L. Wang and X. R. Yang (2011). "A sensitive choline biosensor using Fe(3)O(4) magnetic nanoparticles as peroxidase mimics." Analyst **136**(23): 4960-4965.
Zhang, Z. X., Z. J. Wang, X. L. Wang and X. R. Yang (2010). "Magnetic nanoparticle-linked colorimetric aptasensor for the detection of thrombin." Sensors and Actuators B-Chemical **147**(2): 428-433.
Zhang, Z. X., H. Zhu, X. L. Wang and X. R. Yang (2011). "Sensitive electrochemical sensor for hydrogen peroxide using Fe(3)O(4) magnetic nanoparticles as a mimic for peroxidase." Microchimica Acta **174**(1-2): 183-189.
Zhao, D., C. X. Chen, L. X. Lu, F. Yang and X. R. Yang (2015). "A label-free colorimetric sensor for sulfate based on the inhibition of peroxidase-like activity of cysteamine-modified gold nanoparticles." Sensors and Actuators B-Chemical **215**: 437-444.
Zhao, H., Y. M. Dong, P. P. Jiang, G. L. Wang and J. J. Zhang (2015). "Highly Dispersed CeO_2 on TiO_2 Nanotube: A Synergistic Nanocomposite with Superior Peroxidase-Like Activity." ACS Applied Materials & Interfaces **7**(12): 6451-6461.
Zhao, H. H., Z. H. Wang, X. Jiao, L. C. Zhang and Y. Lv (2012). "Uricase-Based Highly Sensitive and Selective Spectrophotometric Determination of Uric Acid Using BSA-Stabilized Au Nanoclusters as Artificial Enzyme." Spectroscopy Letters **45**(7): 511-519.
Zhao, H. M., Y. Li, B. Tan, Y. B. Zhang, X. C. Chen and X. Quan (2017). "PEGylated molybdenum dichalcogenide (PEG-MoS2) nanosheets with enhanced peroxidase-like activity for the colorimetric detection of H2O2." New Journal of Chemistry **41**(14): 6700-6708.
Zhao, J., W. F. Dong, X. D. Zhang, H. X. Chai and Y. M. Huang (2018). "FeNPs@Co3O4 hollow nanocages hybrids as effective peroxidase mimics for glucose biosensing." Sensors and Actuators B-Chemical **263**: 575-584.
Zhao, J., D. T. Lee, R. W. Yaga, M. G. Hall, H. F. Barton, I. R. Woodward, C. J. Oldham, H. J. Walls, G. W. Peterson and G. N. Parsons (2016). "Ultra-Fast Degradation of Chemical Warfare Agents Using MOF-Nanofiber Kebabs." Angew. Chem. Int. Ed. **55**(42): 13224-13228.
Zhao, J., Y. G. Wu, H. Tao, H. Y. Chen, W. P. Yang and S. Y. Qiu (2017). "Colorimetric detection of streptomycin in milk based on peroxidase-mimicking catalytic activity of gold nanoparticles." RSC Advances **7**(61): 38471-38478.
Zhao, J. K., Y. F. Xie, W. J. Yuan, D. X. Li, S. F. Liu, B. Zheng and W. G. Hou (2013). "A hierarchical Co-Fe LDH rope-like nanostructure: facile preparation from hexagonal lyotropic liquid crystals and intrinsic oxidase-like catalytic activity." J. Mater. Chem. B **1**(9): 1263-1269.
Zhao, K., W. Gu, S. S. Zheng, C. L. Zhang and Y. Z. Xian (2015). "SDS-MoS_2 nanoparticles as highly-efficient peroxidase mimetics for colorimetric detection of H_2O_2 and glucose." Talanta **141**: 47-52.
Zhao, M. G., J. Y. Huang, Y. Zhou, X. H. Pan, H. P. He, Z. Z. Ye and X. Q. Pan (2013). "Controlled synthesis of spinel ZnFe2O4 decorated ZnO heterostructures as peroxidase mimetics for enhanced colorimetric biosensing." Chem. Commun. **49**(69): 7656-7658.
Zhao, Q., H. W. Huang, L. Y. Zhang, L. Q. Wang, Y. L. Zeng, X. D. Xia, F. P. Liu and Y. Chen (2016). "Strategy To Fabricate Naked-Eye Readout Ultrasensitive Plasmonic Nanosensor Based on Enzyme Mimetic Gold Nanoclusters." Analytical Chemistry **88**(2): 1412-1418.
Zhao, R. S., X. Zhao and X. F. Gao (2015). "Molecular-Level Insights into Intrinsic Peroxidase-Like Activity of Nanocarbon Oxides." Chemistry-A European Journal **21**(3): 960-964.
Zhao, X. L., Z. H. Li, C. Chen, Y. H. Wu, Z. G. Zhu, H. L. Zhao and M. B. Lan (2017). "A Novel Biomimetic Hydrogen Peroxide Biosensor Based on Pt Flowers-decorated Fe3O4/Graphene Nanocomposite." Electroanalysis **29**(6):

1518-1523.
Zhao, X. L., Z. H. Li, C. Chen and Z. G. Zhu (2017). "A nonenzymatic H_2O_2 biosensor based on Pd / Fe_3O_4 / rGO nanocomposite." Mater. Sci. Technol. **25**(6): 56-60.
Zhao, Y., Y. C. Huang, H. Zhu, Q. Q. Zhu and Y. S. Xia (2016). "Three-in-One: Sensing, Self-Assembly, and Cascade Catalysis of Cyclodextrin Modified Gold Nanoparticles." J. Am. Chem. Soc. **138**(51): 16645-16654.
Zhao, Y., H. Qiang and Z. B. Chen (2016). "Colorimetric determination of Hg(II) based on a visually detectable signal amplification induced by a Cu@Au-Hg trimetallic amalgam with peroxidase-like activity." Microchimica Acta **184**(1): 107-115.
Zhao, Y., M. Yang, Q. Fu, H. Ouyang, W. Wen, Y. Song, C. Zhu, Y. Lin and D. Du (2018). "A Nanozyme- and Ambient Light-Based Smartphone Platform for Simultaneous Detection of Dual Biomarkers from Exposure to Organophosphorus Pesticides." Anal. Chem. **90**(12): 7391-7398.
Zhao, Y. H., Y. Huang, J. L. Wu, X. L. Zhan, Y. Y. Xie, D. Y. Tang, H. Y. Cao and W. Yun (2018). "Mixed-solvent liquid exfoliated MoS2 NPs as peroxidase mimetics for colorimetric detection of H2O2 and glucose." Rsc Advances **8**(13): 7252-7259.
Zhao, Y. L., H. Zhang, X. C. Wang and X. M. Xie (2016). "A novel impedimetric immunosensor based on AgI mimic enzyme nanomaterial for detecting carcinoembryonic antogen." Acad. J. Sec. Mil. Med. Univ. **37**(12): 1533-1537.
Zhao, Y. N., D. Q. Huo, J. Bao, M. Yang, M. Chen, J. Z. Hou, H. B. Fa and C. J. Hou (2017). "Biosensor based on 3D graphene-supported Fe3O4 quantum dots as biomimetic enzyme for in situ detection of H2O2 released from living cells." Sensors and Actuators B-Chemical **244**: 1037-1044.
Zhen, W. Y., Y. Liu, L. Lin, J. Bai, X. D. Jia, H. Y. Tian and X. Jiang (2018). "BSA-IrO2 : Catalase-like Nanoparticles with High Photothermal Conversion Efficiency and a High X-ray Absorption Coefficient for Anti-inflammation and Antitumor Theranostics." Angew. Chem. Int. Ed. **57**(32): 10309-10313.
Zheng, A. X., Z. X. Cong, J. R. Wang, J. Li, H. H. Yang and G. N. Chen (2013). "Highly-efficient peroxidase-like catalytic activity of graphene dots for biosensing." Biosensors & Bioelectronics **49**: 519-524.
Zheng, C., W. J. Ke, T. X. Yin and X. Q. An (2016). "Intrinsic peroxidase-like activity and the catalytic mechanism of gold@carbon dots nanocomposites." RSC Adv. **6**(42): 35280-35286.
Zheng, C., A. X. Zheng, B. Liu, X. L. Zhang, Y. He, J. Li, H. H. Yang and G. N. Chen (2014). "One-pot synthesized DNA-templated Ag/Pt bimetallic nanoclusters as peroxidase mimics for colorimetric detection of thrombin." Chem. Commun. **50**(86): 13103-13106.
Zheng, H., K. Y. Liu, H. Q. Cao and X. R. Zhang (2009). "L-Lysine-Assisted Synthesis of ZrO2 Nanocrystals and Their Application in Photocatalysis." Journal of Physical Chemistry C **113**(42): 18259-18263.
Zheng, L., J. H. Zhao, X. F. Niu and Y. H. Yang (2015). "Nanomaterial-based Peroxidase Enzyme Mimics with Applications to Colorimetric Analysis and Electrochemical Sensor." Mater. Rev. **29**(2): 115-120.
Zheng, T. T., Q. F. Zhang, S. Feng, J. J. Zhu, Q. Wang and H. Wang (2014). "Robust Nonenzymatic Hybrid Nanoelectrocatalysts for Signal Amplification toward Ultrasensitive Electrochemical Cytosensing." Journal of the American Chemical Society **136**(6): 2288-2291.
Zheng, W. S. and X. Y. Jiang (2016). "Integration of nanomaterials for colorimetric immunoassays with improved performance: a functional perspective." Analyst **141**(4): 1196-1208.
Zheng, X. J., Q. Zhu, H. Q. Song, X. R. Zhao, T. Yi, H. L. Chen and X. G. Chen (2015). "In Situ Synthesis of Self-Assembled Three-Dimensional Graphene-Magnetic Palladium Nanohybrids with Dual-Enzyme Activity through One-Pot Strategy and Its Application in Glucose Probe." Acs Applied Materials & Interfaces **7**(6): 3480-3491.
Zheng, X. X., Q. Liu, C. Jing, Y. Li, D. Li, W. J. Luo, Y. Q. Wen, Y. He, Q. Huang, Y. T. Long and C. H. Fan (2011). "Catalytic Gold Nanoparticles for Nanoplasmonic Detection of DNA Hybridization." Angew. Chem. Int. Ed. **50**(50): 11994-11998.
Zhong, Y. P., C. Deng, Y. He, Y. L. Ge and G. W. Song (2016). "Exploring a monothiolated β-cyclodextrin as the template to synthesize copper nanoclusters with exceptionally increased peroxidase-like activity." Microchimica Acta **183**(10): 2823-2830.
Zhou, C. S., Q. L. Liu, W. Xu, C. R. Wang and X. H. Fang (2011). "A water-soluble C-60-porphyrin compound for highly efficient DNA photocleavage." Chem. Commun. **47**(10): 2982-2984.
Zhou, E. L., C. Qin, P. Huang, X. L. Wang, W. C. Chen, K. Z. Shao and Z. M. Su (2015). "A Stable Polyoxometalate-Pillared Metal-Organic Framework for Proton-Conducting and Colorimetric Biosensing." Chemistry-a European Journal **21**(33): 11894-11898.
Zhou, H., T. Q. Han, Q. Wei and S. S. Zhang (2016). "Efficient Enhancement of Electrochemiluminescence from Cadmium Sulfide Quantum Dots by Glucose Oxidase Mimicking Gold Nanoparticles for Highly Sensitive Assay of Methyltransferase Activity." Analytical Chemistry **88**(5): 2976-2983.

Zhou, P. P., S. S. Jia, D. Pan, L. H. Wang, J. M. Gao, J. X. Lu, J. Y. Shi, Z. S. Tang and H. J. Liu (2015). "Reversible Regulation of Catalytic Activity of Gold Nanoparticles with DNA Nanomachines." Sci. Rep. **5**: 14402.
Zhou, X. H., L. L. Wong, A. S. Karakoti, S. Seal and J. F. McGinnis (2011). "Nanoceria Inhibit the Development and Promote the Regression of Pathologic Retinal Neovascularization in the Vldlr Knockout Mouse." PLoS One **6**(2): e16733.
Zhou, X. X., S. J. Guo, J. X. Gao, J. M. Zhao, S. Y. Xue and W. J. Xu (2017). "Glucose oxidase-initiated cascade catalysis for sensitive impedimetric aptasensor based on metal-organic frameworks functionalized with Pt nanoparticles and hemin/G-quadruplex as mimicking peroxidases." Biosensors & Bioelectronics **98**: 83-90.
Zhou, Y. B., B. W. Liu, R. H. Yang and J. W. Liu (2017). "Filling in the Gaps between Nanozymes and Enzymes: Challenges and Opportunities." Bioconjugate Chemistry **28**(12): 2903-2909.
Zhou, Y. T., W. W. He, W. G. Wamer, X. N. Hu, X. C. Wu, Y. M. Lo and J. J. Yin (2013). "Enzyme-mimetic effects of gold@platinum nanorods on the antioxidant activity of ascorbic acid." Nanoscale **5**(4): 1583-1591.
Zhu, A. P., K. Sun and H. R. Petty (2012). "Titanium doping reduces superoxide dismutase activity, but not oxidase activity, of catalytic CeO_2 nanoparticles." Inorganic Chemistry Communications **15**: 235-237.
Zhu, D., J. J. Luo, X. Y. Rao, J. J. Zhang, G. F. Cheng, P. G. He and Y. Z. Fang (2012). "A novel optical thrombin aptasensor based on magnetic nanoparticles and split DNAzyme." Analytica Chimica Acta **711**: 91-96.
Zhu, H. L., Y. Hu, G. X. Jiang and G. Q. Shen (2011). "Peroxidase-like activity of aminopropyltriethoxysilane-modified iron oxide magnetic nanoparticles and its application to clenbuterol detection." European Food Research and Technology **233**(5): 881-887.
Zhu, J. L., W. Nie, Q. Wang, J. W. Li, H. Li, W. Wen, T. Bao, H. Y. Xiong, X. H. Zhang and S. F. Wang (2018). "In situ growth of copper oxide-graphite carbon nitride nanocomposites with peroxidase-mimicking activity for electrocatalytic and colorimetric detection of hydrogen peroxide." Carbon **129**: 29-37.
Zhu, M. Y. and G. W. Diao (2011). "Synthesis of Porous Fe(3)O(4) Nanospheres and Its Application for the Catalytic Degradation of Xylenol Orange." Journal of Physical Chemistry C **115**(39): 18923-18934.
Zhu, R., Y. Zhou, X. L. Wang, L. P. Liang, Y. J. Long, Q. L. Wang, H. J. Zhang, X. X. Huang and H. Z. Zheng (2013). "Detection of Hg2+ based on the selective inhibition of peroxidase mimetic activity of BSA-Au clusters." Talanta **117**: 127-132.
Zhu, S. Y., X. E. Zhao, J. M. You, G. B. Xu and H. Wang (2015). "Carboxylic-group-functionalized single-walled carbon nanohorns as peroxidase mimetics and their application to glucose detection." Analyst **140**(18): 6398-6403.
Zhu, W. F., J. Zhang, Z. C. Jiang, W. W. Wang and X. H. Liu (2014). "High-quality carbon dots: synthesis, peroxidase-like activity and their application in the detection of H2O2, Ag+ and Fe3+." Rsc Advances **4**(33): 17387-17392.
Zhu, X. L., X. X. Mao, Z. H. Wang, C. Feng, G. F. Chen and G. X. Li (2017). "Fabrication of nanozyme@DNA hydrogel and its application in biomedical analysis." Nano Research **10**(3): 959-970.
Zhu, X. X., W. Chen, K. L. Wu, H. Y. Li, M. Fu, Q. Y. Liu and X. Zhang (2018). "A colorimetric sensor of H2O2 based on Co3O4-montmorillonite nanocomposites with peroxidase activity." New Journal of Chemistry **42**(2): 1501-1509.
Zhu, Y., Z. Z. Yang, M. Q. Chi, M. X. Li, C. Wang and X. F. Lu (2018). "Synthesis of hierarchical Co3O4@NiO core-shell nanotubes with a synergistic catalytic activity for peroxidase mimicking and colorimetric detection of dopamine." Talanta **181**: 431-439.
Zhu, Y. D., J. Peng, L. P. Jiang and J. J. Zhu (2014). "Fluorescent immunosensor based on CuS nanoparticles for sensitive detection of cancer biomarker." Analyst **139**(3): 649-655.
Zhu, Z., Z. C. Guan, S. S. Jia, Z. C. Lei, S. C. Lin, H. M. Zhang, Y. L. Ma, Z. Q. Tian and C. Y. J. Yang (2014). "Au@Pt Nanoparticle Encapsulated Target-Responsive Hydrogel with Volumetric Bar-Chart Chip Readout for Quantitative Point-of-Care Testing." Angew. Chem. Int. Ed. **53**(46): 12503-12507.
Zhuang, J., K. L. Fan, L. Z. Gao, D. Lu, J. Feng, D. L. Yang, N. Gu, Y. Zhang, M. M. Liang and X. Y. Yan (2012). "Ex Vivo Detection of Iron Oxide Magnetic Nanoparticles in Mice Using Their Intrinsic Peroxidase-Mimicking Activity." Molecular Pharmaceutics **9**(7): 1983-1989.
Zhuang, J., J. B. Zhang, L. Z. Gao, Y. Zhang, N. Gu, J. Feng, D. L. Yang and X. Y. Yan (2008). "A novel application of iron oxide nanoparticles for detection of hydrogen peroxide in acid rain." Materials Letters **62**(24): 3972-3974.
Zimmermann, L. M., G. I. Almerindo, J. R. Mora, I. H. Bechtold, H. D. Fiedler and F. Nome (2013). "Degradation of Methyl Paraoxon in the Presence of Mg2+-Al3+ Mixed Oxides." Journal of Physical Chemistry C **117**(49): 26097-26105.
Zou, B. Z., Y. Liu, J. Wang and C. Z. Huang (2014). "Enhanced peroxidiase-like activity of gold nanoparticles by DNA for potassium ion detection." Sci. Sin. Chim. **44**(10): 1641-1646.
Zou, H. Y., T. Yang, J. Lan and C. Z. Huang (2017). "Use of the peroxidase mimetic activity of erythrocyte-like Cu1.8S

nanoparticles in the colorimetric determination of glutathione." Analytical Methods **9**(5): 841-846.
Zou, W. S., J. Yang, T. T. Yang, X. Hu and H. Z. Lian (2012). "Magnetic-room temperature phosphorescent multifunctional nanocomposites as chemosensor for detection and photo-driven enzyme mimetics for degradation of 2,4,6-trinitrotoluene." Journal of Materials Chemistry **22**(11): 4720-4727.
Zubir, N. A., C. Yacou, J. Motuzas, X. W. Zhang and J. C. D. da Costa (2014). "Structural and functional investigation of graphene oxide-Fe3O4 nanocomposites for the heterogeneous Fenton-like reaction." Sci. Rep. **4**: 4594.
Zuo, X. L., C. Peng, Q. Huang, S. P. Song, L. H. Wang, D. Li and C. H. Fan (2009). "Design of a Carbon Nanotube/Magnetic Nanoparticle-Based Peroxidase-Like Nanocomplex and Its Application for Highly Efficient Catalytic Oxidation of Phenols." Nano Research **2**(8): 617-623.