

Supporting Information

3D Assembly of Preformed Colloidal Nanoparticles into Gels and Aerogels: Function-led Design

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Table S1. BET surface area values and density of various aerogels presented.

| Aerogel component | Sample abbreviation | surface area (m ² g ⁻¹) | density (g cm ⁻³) |
|-------------------|---|--|-------------------------------|
| Metal | Pd ¹ | 40–108 | 0.025–0.059 |
| | β-CD-Pd ² | 92 | 0.066 |
| | PdPt ³ | 73–86 | --- |
| | Pd ₈₃ Ni ₁₇ ⁴ | 29.8 | 0.12 |
| | MCu (M=Pd, Pt, Au) ⁵ | 21.3–37.5 | --- |
| | PtNi ⁶ | 55–58 | --- |
| | Pd ₈₃ Ni ₁₇ HNS ⁷ | 95.4 | 0.035 |
| | Ni-Pd _x Pt _y ⁸ | 95.4–67.7 | 0.035–0.050 |
| | PtAg NTAGs ⁹ | 24.7–83.4 | 0.165–0.3 |
| | Au ¹⁰ | 50.1 | 0.040 |
| | Cu ¹¹ | --- | 0.0043–0.0075 |
| | Au/Ag ¹² | 67–73 | 0.051–0.055 |
| QD | CdS ¹³ | 245 | 0.07 |
| | CdSe ¹³ | 143 | --- |
| | ZnS ¹³ | 192 | 0.35 |
| | PbS ¹³ | 130 | --- |
| | BiTe ₃ ¹⁴ | 36 | --- |
| | BixSb _{2-x} Te ₃ ¹⁵ | 45 | --- |
| Metal Oxide | Cryptomelane ¹⁶ | 80 | 0.0029 |
| | Y ₂ O ₃ ¹⁷ | 445 | 0.15 |
| hybrids | Au-TiO ₂ ¹⁸ | 405 | --- |
| | TiO ₂ -WO _x -Au ¹⁹ | 473 | --- |
| | Pt-rGO-TiO ₂ ²⁰ | 480/498 | --- |
| | Ag-MnO ₂ ²¹ | 124.7 | --- |

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|--|--|--------|-------------|
| | Pd/ZnO ²² | 55–248 | --- |
| | ZnPd/ZnO ²² | 23–33 | --- |
| | Au/Fe ₃ O ₄ -GO-MoS ₂ ²³ | 164.4 | 0.5382 |
| | CdS-Ag ²⁴ | 73–165 | --- |
| | CdTe-Au (1:1) ²⁵ | 130 | --- |
| | CdSe/Ag ²⁶ | 69–210 | 0.032–0.072 |

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