Table S1: Summary of the main MIPs-based artificial enzymes in this review.

Enzyme-like activity	Template	Sustrate	Active center	Imprinting factor	Activity enhancement/fold (MIP/NIP)	Ref.
Peroxidase-like	Homovanillic acid	Homovanillic acid	hemin	3.32	71.03	51
Peroxidase-like	Homovanillic acid	Homovanillic acid	hemin	2.38	6.38	53
Carbonic Anhydras-like	CO_2	CO_2	Zn(II) ions medated complex	_____	_____	54
Phosphotriesterase -like	Methyl parathion	Methyl parathion	Zn(II) ions medated complex	_____	414.89	56
Carboxypeptidase A-like	Amidphenyl-2-pyridyl-phosphateinium	Diphenyl carbonate	Zn(II) ions medated complex	61.5	3200	64
Carboxypeptidase A-like	Amidphenyl-2-pyridyl-phosphateinium	Diphenyl carbonate	Cu(II) ions medated complex	49.0	8015	65
Carboxypeptidase A-like	Amidphenyl-2-pyridyl-phosphateinium	Di-(2-pyridyl)-carbonate	Cu(II) ions medated complex	53.8	217 000	66
Chymotrypsin-like	Phenyl-1-(*N*-benzyloxycarbonylamino)-2-(phenyl)ethyl phosphonate	*Z*-l-Phe-PNA	Hydroxyl, imidazole, carboxyl groups	4.22	75.38	67
Chymotrypsin-like	Phenyl 1-benzyloxycarbonylamino-4-methoxybenzyl phosphonate	Z-Phe-PNP	Imidazole groups	1.37	12.43	68
Chymotrypsin-like	Phenyl-1-(N-benzyloxycarbonylamino)-2-(phenyl)ethyl phosphonate	Z-L-Phe-Gly-OH	Hydroxyl, imidazole, carboxyl groups	43.22	1666.16	69
Organophosphorus hydrolase-like	1-(diethoxyphosphorylmethyl)-4-nitrobenzene	Paraoxon-ethyl	Zn(II) ions medated complex	_____	14 (than natural OPH)	70
Atrazine transforming activity	Allyl 4-ethylamino-6-isopropylamino-1,3,5-triazine-2-yl disulfide	Atrazine	Sulfonic acid, methacrylic acid	_____	_____	76
Glycosidases-like	2-Aminophenyl-β-D-	Glucose	Carboxyl	177	_____	77

	glucopyranoside		groups			
Organophosphorus hydrolase-like	Ethyl-parathion	Ethyl-parathion	Ag(I) complexes	2.4	12000 (than self-hydrolysis)	80
Photocatalytic activity	Ketoprofen	Ketoprofen	Zr-O cluster	4.74	_____	87
Glucosidase-like	4-Aminophenyl-β-D-glucopyranoside	Cellulose	Carboxyl groups	>450	(Several times han commercial cellulases)	96
Epoxide oxidase-like	T1	Styrene	peroxycarboxylic acid	_____	_____	97

Table S2: Summary of the main nanozyme@MIPs in this review.

Nanozyme	Enzyme-like activity	Template	Sustrate	k_{cat}/K_m (s^{-1} μM^{-1})			Ref.
				MIP	NIP	Bare	
Fe_3O_4	Peroxide-like	TMB	TMB	6.8×10^{-2}	2.2×10^{-2}	2.4×10^{-2}	90
Fe_3O_4	Peroxide-like	MB	MB	_____	_____	_____	110
AuNPs	Glucose Oxidase-like	Glucose	Glucose	447.7×10^{-3}	15.3×10^{-3}	1.7×10^{-3}	111
DNAzyme	Peroxide-like	Amplex Red	Amplex Red	(Km) 1.8 μM	(Km) 8.5 μM	(Km) 5.5 μM	112
GO–Fe(III) complex	Cytochrome c oxidase-like	Cr(VI) ions	Cr(VI) ions	5.8×10^{-7}	6.7×10^{-8}	_____	113
CoA-HSD nanofibers	Hydrolase-like	*p*-NPA	*p*-NPB	(Activity) 155.4 μM/min	(Activity) 155.4 μM/min	_____	119
AMIP-H nanofibers	Hydrolase-like	*p*-NPA	*p*-NPA	2.6×10^{-7}	1.4×10^{-7}	0.9×10^{-7}	120
HNE/BSA-$Cu_3(PO_4)_2 \cdot 3H_2O$	Elastase-like	Interleukin-6	Interleukin-6	_____	_____	_____	123