

Table S1 Comparison of IL-6 detection performance using different sensors.

Detection Electrodes	Method	Probe	Detection Range (pg mL^{-1})	LOD (pg mL^{-1})	Ref.
<i>AuNPs/PPyNPs/SPGE</i>	EC	Apt	$1\sim 1.5\times 10^7$	0.33	64
<i>AuNPs/rGO/Au</i>	EC	Ab	0.97~250	0.41	65
<i>ErGO/AuPdNPs/HCPE</i>	EC	Ab	$0.1\sim 1\times 10^5$	0.059	66
<i>FC-PPN-Ab₂/IL-6/Ab₁/GO/GCE</i>	EC	Ab	$2\sim 2\times 10^4$	1.0	67
<i>rGO/Fe₃O₄/PDDA/CdSe/GCE</i>	ECL	Ab	$2\sim 2\times 10^4$	0.65	68
<i>BSA/Ab/GO/PANi/CdSe/GCE</i>	ECL	Ab	$0.5\sim 1\times 10^4$	0.17	69
<i>Ab₂-HRP/ACP/OAMs/IL-6/BSA/Ab₁/CTIL/Ru(bpy)₃²⁺@AMCs/GCE</i>	ECL	Ab	$1\times 10^{-5}\sim 9\times 10^4$	3.5×10^{-6}	70
<i>BSA/Ab/Co₃O₄@O-SNF/ITO</i>	ECL	Ab	$1\times 10^{-3}\sim 1\times 10^4$	6.4×10^{-4}	This work

AuNPs: gold nanoparticles; PPyNPs: polypyrrole; SPGE: screen-printed gold electrode; EC: electrochemistry; rGO: reduced graphene oxide; ErGO: electrochemically reduced of graphene oxide; AuPdNPs: gold palladium nanoparticles; HCPE: heated carbon paste electrode; FC: ferrocene; PPN: porous polyelectrolyte nanoparticles; GO: graphene oxide; GCE, glassy carbon electrode; PDDA: polydimethyl diallyl ammonium chloride; CdSe: cadmium selenide nanoparticles; ECL: electrochemical luminescence; PANi: polyaniline; HRP: horseradish peroxidase; ACP: acid phosphatase; OAMs: octahedral anatase mesocrystals; CTIL: carboxyl-terminated ionic liquid; Ru(bpy)₃²⁺: Tris(2,2'-bipyridyl)ruthenium(II) chloride, hexahydrate; AMCs: TiO₂ (anatase)mesocages.