

Table S1 Comparison of CRP detection performance with other sensors.

Electrode/Material	Method	Recognitive ligand	Linear range (ng/mL)	LOD (pg/mL)	Ref.
Ab/TiNTs/PtNWs/ITO	ECL	Antibody	0.05-6.25	11	[58]
GO-AuNPs-Ab <sub>2</sub> /CRP/BSA/Ab <sub>1</sub> /	ECL	Antibody	0.005-50	0.26	[60]
Ru@Cu <sub>3</sub> (HHTP) <sub>2</sub> /GCE					
Ru(bpy) <sub>3</sub> <sup>2+</sup> @AuNPs- Ab <sub>2</sub> /CRP/Ab <sub>1</sub> /SPE	ECL	Antibody	0.01-1000	4.6	[61]
Ir(III)-β-CD/Ab <sub>2</sub> /CRP/Ab <sub>1</sub> -MB/	ECL	Antibody	1-1×10 <sup>4</sup>	72	[59]
Apt/AuNPs/GO/PDES/GCE	EIS	Aptamer	0.001-50	0.3	[18]
GBP3/AuNPs@BP@PDA/Au	SWV	Peptide receptor	0-36	700	[56]
BSA/Ab/indole/AuNPs/SPCE	DPV	Antibody	0.1-1×10 <sup>5</sup>	30	[57]
BSA/Apt/AuNPs@O-SNF/ITO	ECL	Aptamer	0.01-1000	7.4	This work

TiNTs: titania nanotubes; PtNWs: platinum nanowire; GO: graphene oxide; Ab<sub>2</sub>: the second CRP antibody; Ab<sub>1</sub>: the first CRP antibody; Ru@Cu<sub>3</sub>(HHTP)<sub>2</sub>: Ru(bpy)<sub>3</sub><sup>2+</sup>-loaded Cu<sub>3</sub>(hexahydroxytriphenylene); GCE: glassy carbon electrode; AuNPs: gold nanoparticles; SPE: screen-printed electrode; Ir(III)-β-CD: Ir(III) compound and β-cyclodextrin complex; MB: magnetic bead; Apt: CRP aptamer; PDES: poly deep eutectic solvents; GBP: gold binding peptide; BP: black phosphorus; PDA: tethered polydopamine; SWV: square wave voltammetry; SPCE: screen-printed carbon electrode.; DPV: differential pulse voltammetry.