A dual fluorometric and colorimetric sensor for dopamine based on BSA-stabilized Au nanoclusters

DOI: 10.1016/j.bios.2012.10.014
Biosensors and Bioelectronics, 2013, 42, 41-6.

#	Paper	IF	Citations
240	Two-Dimensional Zirconium-Based MetalOrganic Framework Nanosheet Composites Embedded with Au Nanoclusters: A Highly Sensitive Electrochemical Aptasensor toward Detecting Cocaine.		
239	Cholesterol determination using protein-templated fluorescent gold nanocluster probes. *Analyst, The*, **2013**, 138, 7299-302	5	33
238	Highly effective discrimination of catecholamine derivatives via FRET-on/off processes induced by the intermolecular assembly with two fluorescence sensors. **2013**, 49, 9287-9		18
237	A sensitive and selective fluorescent probe for cysteine based on a new response-assisted electrostatic attraction strategy: the role of spatial charge configuration. *Chemistry - A European Journal*, **2013**, 19, 7817-24	4.8	95
236	Carbon Dot Based Sensing of Dopamine and Ascorbic Acid. **2014**, 2014, 1-8		41
235	Folate receptor-targeting gold nanoclusters as fluorescence enzyme mimetic nanoprobes for tumor molecular colocalization diagnosis. **2014**, 4, 142-53		87
234	Recent advances in the field of bionanotechnology: an insight into optoelectric bacteriorhodopsin, quantum dots, and noble metal nanoclusters. **2014**, 14, 19731-66		19
233	Exploring the role of ligand-BSA in the response of BSA-protected gold-nanoclusters to silver (I) Ions by FT-IR and circular dichroism spectra. **2014**, 74, 137-141		19
232	Label-free turn-on fluorescent detection of melamine based on the anti-quenching ability of Hg 2+ to gold nanoclusters. *Biosensors and Bioelectronics*, **2014**, 53, 76-81	11.8	69
231	Novel graphene flowers modified carbon fibers for simultaneous determination of ascorbic acid, dopamine and uric acid. *Biosensors and Bioelectronics*, **2014**, 53, 220-4	11.8	223
230	Metal nanoclusters: New fluorescent probes for sensors and bioimaging. **2014**, 9, 132-157		700
229	Nano-gold as artificial enzymes: hidden talents. **2014**, 26, 4200-17		290
228	Synergistic electrocatalytic effect of graphene/nickel hydroxide composite for the simultaneous electrochemical determination of ascorbic acid, dopamine and uric acid. **2014**, 133, 233-240		89
227	Cu2+ modulated BSA□u nanoclusters: A versatile fluorescence turn-on sensor for dopamine. *Microchemical Journal*, **2014**, 116, 151-156	4.8	59
226	Catalytically active nanomaterials: a promising candidate for artificial enzymes. **2014**, 47, 1097-105		846
225	A colorimetric immunoassay for respiratory syncytial virus detection based on gold nanoparticles-graphene oxide hybrids with mercury-enhanced peroxidase-like activity. **2014**, 50, 11526-8		93
224	Lab-on-a-drop: biocompatible fluorescent nanoprobes of gold nanoclusters for label-free evaluation of phosphorylation-induced inhibition of acetylcholinesterase activity towards the ultrasensitive detection of pesticide residues. *Analyst, The*, **2014**, 139, 4620-8	5	42

223	Enhanced chemiluminescence of the luminol-hydrogen peroxide system by BSA-stabilized Au nanoclusters as a peroxidase mimic and its application. *Analytical Methods*, **2014**, 6, 3117-3123	3.2	55
222	Scissor-based fluorescent detection of pepsin using lysozyme-stabilized Au nanoclusters. *Analytical Methods*, **2014**, 6, 6789-6795	3.2	10
221	Nitrite ion-induced fluorescence quenching of luminescent BSA-Au(25) nanoclusters: mechanism and application. *Analyst, The*, **2014**, 139, 2221-8	5	56
220	Fluorescent Au nanoclusters: recent progress and sensing applications. **2014**, 2, 8000-8011		112
219	Optical reading of contaminants in aqueous media based on gold nanoparticles. *Small*, **2014**, 10, 3461-79	11	69
218	Graphene-multiwall carbon nanotube-gold nanocluster composites modified electrode for the simultaneous determination of ascorbic acid, dopamine, and uric acid. **2014**, 173, 1717-26		27
217	Selective and sensitive detection of free bilirubin in blood serum using human serum albumin stabilized gold nanoclusters as fluorometric and colorimetric probe. *Biosensors and Bioelectronics*, **2014**, 59, 370-6	11.8	87
216	A colorimetric fluorescent chemodosimeter based on diketopyrrolopyrrole and 1,3-indanedione for cysteine detection and cellular imaging in living cells. *Sensors and Actuators B: Chemical*, **2014**, 205, 281-288	8.5	20
215	Turn-on fluorescent dopamine sensing based on in situ formation of visible light emitting polydopamine nanoparticles. **2014**, 86, 5508-12		175
214	Enzyme-like activity of nanomaterials. **2014**, 32, 186-211		118
213	Colorimetric and Fluorometric Assays for Dopamine with a Wide Concentration Range Based on Fe-MIL-88NH2 Metal-organic Framework. **2015**, 31, 1035-9		22
212	Biomedical Probes Based on Inorganic Nanoparticles for Electrochemical and Optical Spectroscopy Applications. **2015**, 15, 21427-77		16
211	Fluorescent Gold Nanoclusters: Synthesis and Recent Biological Application. **2015**, 2015, 1-23		55
210	A visual physiological temperature sensor developed with gelatin-stabilized luminescent silver nanoclusters. **2015**, 143, 469-473		15
209	A label-free and ultrasensitive fluorescent sensor for dopamine detection based on double-stranded DNA templated copper nanoparticles. *Sensors and Actuators B: Chemical*, **2015**, 220, 146-153	8.5	84
208	Hierarchical nanoporous platinum-copper alloy for simultaneous electrochemical determination of ascorbic acid, dopamine, and uric acid. **2015**, 182, 1345-1352		42
207	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*, **2015**, 869, 89-95	6.6	198
206	Facile Synthesis of Molecularly Imprinted Graphene Quantum Dots for the Determination of Dopamine with Affinity-Adjustable. **2015**, 7, 11741-7		70

205	ZnO-CuxO/polypyrrole nanocomposite modified electrode for simultaneous determination of ascorbic acid, dopamine, and uric acid. **2015**, 473, 53-62		91
204	Gold-nanoparticle-based colorimetric array for detection of dopamine in urine and serum. **2015**, 139, 89-95		58
203	Simple and fast determination of catecholamines in pharmaceutical samples using Ag+?,3?,5,5?-tetramethylbenzidine as a colorimetric probe. *Analytical Methods*, **2015**, 7, 6785-6790	3.2	10
202	Advanced materials for optical sensing and biosensing of neurotransmitters. **2015**, 72, 27-44		25
201	Electrochemiluminescence sensor for dopamine with a dual molecular recognition strategy based on graphite-like carbon nitride nanosheets/3,4,9,10-perylenetetracarboxylic acid hybrids. **2015**, 5, 42698-42704		28
200	Gold Nanoparticles for In Vitro Diagnostics. **2015**, 115, 10575-636		598
199	Thioglycolic acid capped CdS quantum dots as a fluorescent probe for the nanomolar determination of dopamine. *Analytical Methods*, **2015**, 7, 6791-6798	3.2	59
198	Preparation of Graphene-Modified Acupuncture Needle and Its Application in Detecting Neurotransmitters. **2015**, 5, 11627		34
197	Gold nanoparticles and nanostructures in optical biosensors. **2015**, 30, B167-B177		5
196	Ratiometric fluorescence detection of tyrosinase activity and dopamine using thiolate-protected gold nanoclusters. **2015**, 87, 4897-902		163
195	Metal nanoclusters: novel probes for diagnostic and therapeutic applications. **2015**, 44, 8636-63		504
194	One-pot synthesis of active copper-containing carbon dots with laccase-like activities. **2015**, 7, 19641-6		85
193	Humic acid-assisted synthesis of stable copper nanoparticles as a peroxidase mimetic and their application in glucose detection. **2015**, 3, 7718-7723		35
192	Highly promising discrimination of various catecholamines using ratiometric fluorescence probes with intermolecular self-association of two sensing elements. **2015**, 5, 78468-78475		3
191	Cyclodextrin functionalised gold nanoclusters as luminescence probes for the ultrasensitive detection of dopamine. *Analyst, The*, **2015**, 140, 1046-53	5	48
190	A label-free fluorescent assay for free chlorine in drinking water based on protein-stabilized gold nanoclusters. **2015**, 132, 790-5		26
189	A fluorescence detection of D-penicillamine based on Cu(2+)-induced fluorescence quenching system of protein-stabilized gold nanoclusters. **2015**, 135, 198-202		21
188	Recognition and Quantification of Some Monoamines Neurotransmitters. **2016**, 28, 2500-2505		8

187	Study on glutathione□ inhibition to dopamine polymerization and its application in dopamine determination in alkaline environment based on silver selenide/molybdenum selenide/glassy carbon electrode. *Sensors and Actuators B: Chemical*, **2016**, 237, 685-692	8.5	18
186	High-quality molybdenum disulfide nanosheets with 3D structure for electrochemical sensing. *Applied Surface Science*, **2016**, 385, 63-71	6.7	17
185	A fluorescent assay for □glutamyltranspeptidase via aggregation induced emission and its applications in real samples. *Biosensors and Bioelectronics*, **2016**, 85, 317-323	11.8	52
184	Sensitive semi-quantitative detection of respiratory syncytial virus by dark-field light scattering imaging of the infected host cells. **2016**, 61, 639-644		3
183	Sensitive and selective turn off-on fluorescence detection of heparin based on the energy transfer platform using the BSA-stabilized Au nanoclusters/amino-functionalized graphene oxide hybrids. **2016**, 161, 482-488		16
182	Sensitive detection of dopamine and quinone drugs based on the quenching of the fluorescence of carbon dots. **2016**, 61, 1615-1623		26
181	Rational Design of Biomolecular Templates for Synthesizing Multifunctional Noble Metal Nanoclusters toward Personalized Theranostic Applications. **2016**, 5, 1844-59		64
180	Boric acid functionalized ratiometric fluorescence probe for sensitive and on-site naked eye determination of dopamine based on two different kinds of quantum dots. **2016**, 6, 72715-72721		19
179	Tailoring Enzyme-Like Activities of Gold Nanoclusters by Polymeric Tertiary Amines for Protecting Neurons Against Oxidative Stress. *Small*, **2016**, 12, 4127-35	11	52
178	Multiplexed Activity of perAuxidase: DNA-Capped AuNPs Act as Adjustable Peroxidase. **2016**, 88, 600-5		121
177	Layer by layer assembly of albumin nanoparticles with selective recognition of tumor necrosis factor-related apoptosis-inducing ligand (TRAIL). **2016**, 465, 11-7		30
176	A fluorescent probe for simultaneous discrimination of GSH and Cys/Hcy in human serum samples via distinctly-separated emissions with independent excitations. *Biosensors and Bioelectronics*, **2016**, 81, 341-348	11.8	115
175	Colorimetric detection of urea, urease, and urease inhibitor based on the peroxidase-like activity of gold nanoparticles. *Analytica Chimica Acta*, **2016**, 915, 74-80	6.6	91
174	A ratiometric fluorescent probe for hyaluronidase detection via hyaluronan-induced formation of red-light emitting excimers. *Biosensors and Bioelectronics*, **2016**, 79, 776-83	11.8	24
173	A microporous silk carbon-ionic liquid composite for the electrochemical sensing of dopamine. *Analyst, The*, **2016**, 141, 2447-53	5	14
172	Rapid determination of dopamine in human plasma using a gold nanoparticle-based dual-mode sensing system. **2016**, 61, 207-13		49
171	Rapid synthesis of protein conjugated gold nanoclusters and their application in tea polyphenol sensing. *Sensors and Actuators B: Chemical*, **2016**, 223, 178-185	8.5	21
170	Protein-templated synthesis of metal-based nanomaterials. **2017**, 46, 14-19		21

169	Fluorescent Gold Nanoclusters as a Powerful Tool for Sensing Applications in Cancer Management. **2017**, 385-428		2
168	Recent advances in biomedical applications of fluorescent gold nanoclusters. **2017**, 242, 1-16		128
167	The synthesis of polyamidoamine modified gold nanoparticles/SnO2/graphene sheets nanocomposite and its application in biosensor. **2017**, 520, 668-675		11
166	Fluorescence growth of self-polymerized fluorescence polydopamine for ratiometric visual detection of DA. **2017**, 168, 16-22		16
165	Fe (III) ion modulated l-DOPA protected gold nanocluster probe for fluorescence turn on sensing of ascorbic acid. *Sensors and Actuators B: Chemical*, **2017**, 246, 943-951	8.5	32
164	A facile water-stable MOF-based "off-on" fluorescent switch for label-free detection of dopamine in biological fluid. **2017**, 5, 2524-2535		37
163	One-step synthesis of boronic acid functionalized gold nanoclusters for photoluminescence sensing of dopamine. **2017**, 5, 014006		7
162	Visualizing BPA by molecularly imprinted ratiometric fluorescence sensor based on dual emission nanoparticles. *Biosensors and Bioelectronics*, **2017**, 92, 147-153	11.8	61
161	Voltammetric dopamine sensor based on three-dimensional electrosynthesized molecularly imprinted polymers and polypyrrole nanowires. **2017**, 184, 2515-2522		33
160	Pattern-based sensing of triple negative breast cancer cells with dual-ligand cofunctionalized gold nanoclusters. **2017**, 116, 21-33		40
159	A novel fluorimetric sensing platform for highly sensitive detection of organophosphorus pesticides by using egg white-encapsulated gold nanoclusters. *Biosensors and Bioelectronics*, **2017**, 91, 232-237	11.8	111
158	Dopamine sensing with fluorescence strategy based on low temperature co-fired ceramic technology modified with conducting polymers. *Sensors and Actuators B: Chemical*, **2017**, 252, 803-812	8.5	26
157	Sensing of hydrogen peroxide and glucose in human serum via quenching fluorescence of biomolecule-stabilized Au nanoclusters assisted by the Fenton reaction. **2017**, 7, 26559-26565		21
156	Discrimination and ultrasensitive detection of 2-agonists using copper nanoclusters as a fluorescent probe. **2017**, 184, 3317-3324		7
155	NIR fluorescence detection of dopamine using 3-aminophenyl boronic acid-functionalized and lysozyme-templated gold nanoclusters. *Analytical Methods*, **2017**, 9, 3414-3417	3.2	3
154	Sensitive detection of alkaline phosphatase by switching on gold nanoclusters fluorescence quenched by pyridoxal phosphate. *Biosensors and Bioelectronics*, **2017**, 95, 8-14	11.8	90
153	Recent advances in optical detection of dopamine using nanomaterials. **2017**, 184, 1239-1266		66
152	Synthesis and properties enhancement of metal nanoclusters templated on a biological molecule/ionic liquids complex. *New Journal of Chemistry*, **2017**, 41, 3766-3772	3.6	2

151	Kanamycin detection based on the catalytic ability enhancement of gold nanoparticles. *Biosensors and Bioelectronics*, **2017**, 91, 262-267	11.8	55
150	Atmospheric-Pressure Plasma Jet Processed Carbon-Based Electrochemical Sensor Integrated with a 3D-Printed Microfluidic Channel. **2017**, 164, B534-B541		13
149	Fluorescence and magnetic nanocomposite FeO@SiO@Au MNPs as peroxidase mimetics for glucose detection. **2017**, 538, 26-33		36
148	Fluorescent metal quantum clusters: an updated overview of the synthesis, properties, and biological applications. **2017**, 5, 9055-9084		41
147	Chitosan□gold nanoparticles as peroxidase mimic and their application in glucose detection in serum. **2017**, 7, 44463-44469		48
146	Gold-platinum bimetallic nanoclusters with enhanced peroxidase-like activity and their integrated agarose hydrogel-based sensing platform for the colorimetric analysis of glucose levels in serum. *Analyst, The*, **2017**, 142, 4106-4115	5	43
145	Boronic acid functionalized nitrogen doped carbon dots for fluorescent turn-on detection of dopamine. **2017**, 184, 4081-4090		35
144	CVD graphene incorporating polymerized L-cysteine as an electrochemical sensing platform for simultaneous determination of dopamine and ascorbic acid. *Analytical Methods*, **2017**, 9, 6689-6697	3.2	14
143	Red-emitting p53-protected gold nanoclusters and their screening of anti-tumor agents from Chinese medicine. **2017**, 7, 34276-34282		2
142	A sensing approach for dopamine determination by boronic acid-functionalized molecularly imprinted graphene quantum dots composite. *Applied Surface Science*, **2017**, 423, 810-816	6.7	40
141	High peroxidase-like activity of iron and nitrogen co-doped carbon dots and its application in immunosorbent assay. **2017**, 164, 1-6		88
140	Protein/peptide-templated biomimetic synthesis of inorganic nanoparticles for biomedical applications. **2017**, 5, 401-417		101
139	Regioselective plasmonic nano-assemblies for bimodal sub-femtomolar dopamine detection. **2017**, 9, 223-229		33
138	Green and Cost Effective Synthesis of Fluorescent Carbon Quantum Dots for Dopamine Detection. **2018**, 28, 573-579		38
137	Development of a SERS strategy to overcome the nanoparticle stabilisation effect in serum-containing samples: Application to the quantification of dopamine in the culture medium of PC-12 cells. **2018**, 186, 8-16		11
136	Progress of Visual Biosensor Based on Gold Nanoparticles. **2018**, 46, 1-10		23
135	Facile synthesis of near-infrared-excited NaYF:Yb, Tm nanoparticles for label-free detection of dopamine in biological fluids. **2018**, 179, 478-484		20
134	Diagnosis by simplicity: an aptachip for dopamine capture and accurate detection with a dual colorimetric and fluorometric system. **2018**, 6, 3387-3394		6

133	High oxidase-mimic activity of Fe nanoparticles embedded in an N-rich porous carbon and their application for sensing of dopamine. **2018**, 182, 476-483		47
132	Highly fluorescent gold nanoclusters stabilized by food proteins: From preparation to application in detection of food contaminants and bioactive nutrients. **2018**, 58, 689-699		20
131	Selective fluorescence quenching of papain-Au nanoclusters by self-polymerization of dopamine. **2018**, 33, 168-173		20
130	Ratiometric fluorescence and visual imaging detection of dopamine based on carbon dots/copper nanoclusters dual-emitting nanohybrids. **2018**, 178, 109-115		102
129	Metal Nanoparticles and Clusters. **2018**,		12
128	A novel, enzyme-linked immunosorbent assay based on the catalysis of AuNCs@BSA-induced signal amplification for the detection of dibutyl phthalate. **2018**, 179, 64-69		16
127	Gold and Silver Fluorescent Nanomaterials as Emerging Probes for Toxic and Biochemical Sensors. **2018**, 327-383		
126	Selective visualization of endogenous hypochlorous acid in zebrafish during lipopolysaccharide-induced acute liver injury using a polymer micelles-based ratiometric fluorescent probe. *Biosensors and Bioelectronics*, **2018**, 99, 318-324	11.8	127
125	One-pot green synthesis of supramolecular Ecyclodextrin functionalized gold nanoclusters and their application for highly selective and sensitive fluorescent detection of dopamine. *Sensors and Actuators B: Chemical*, **2018**, 254, 1017-1024	8.5	64
124	Reliable and quantitative SERS detection of dopamine levels in human blood plasma using a plasmonic Au/Ag nanocluster substrate. **2018**, 10, 22493-22503		34
123	Dual-mode Detection of Dopamine Based on Enhanced Fluorescent and Colorimetric Signals of Fe3+-H2O2-o-Phenylenediamine System. **2018**, 46, 1231-1237		10
122	Electrochemical determination of dopamine and uric acid using a glassy carbon electrode modified with a composite consisting of a Co(II)-based metalorganic framework (ZIF-67) and graphene oxide. **2018**, 185, 486		51
121	Simple construction of ratiometric fluorescent probe for the detection of dopamine and tyrosinase by the naked eye. *Analyst, The*, **2018**, 143, 5295-5301	5	16
120	A carbon dots/rutin system for colorimetric and fluorimetric dual mode detection of Al in aqueous solution. *Analyst, The*, **2018**, 143, 5467-5473	5	17
119	Protamine-gold nanoclusters as peroxidase mimics and the selective enhancement of their activity by mercury ions for highly sensitive colorimetric assay of Hg(II). **2018**, 410, 7385-7394		21
118	Use of nanostructured materials in medical diagnostics. **2018**, 319-338		1
117	A Fluorescent Biosensors for Detection Vital Body Fluids' Agents. **2018**, 18,		30
116	Fabrication of Metal-Substituted Polyoxometalates for Colorimetric Detection of Dopamine and Ractopamine. **2018**, 11,		11

115	Naked-eye recognition: Emerging gold nano-family for visual sensing. **2018**, 11, 166-188		28
114	Catalytically Active Enzyme Mimetic Nanomaterials and Their Role in Biosensing. **2018**, 285-300		
113	Preparation of Carbon Dots with High-Fluorescence Quantum Yield and Their Application in Dopamine Fluorescence Probe and Cellular Imaging. **2019**, 2019, 1-9		18
112	Noble-metal nanocluster as enzyme-mimetic catalyst for diagnostic analysis. **2019**, 62, 2306-2309		4
111	Gold nanoclusters-based dual-channel assay for colorimetric and turn-on fluorescent sensing of alkaline phosphatase. *Sensors and Actuators B: Chemical*, **2019**, 301, 127080	8.5	34
110	A multifunctional mesoporous silica-gold nanocluster hybrid platform for selective breast cancer cell detection using a catalytic amplification-based colorimetric assay. **2019**, 11, 2631-2636		47
109	A conjugated carbon-dot-tyrosinase bioprobe for highly selective and sensitive detection of dopamine. *Analyst, The*, **2019**, 144, 468-473	5	26
108	One-step fabrication of a boric acid-functionalized lanthanide metal–organic framework as a ratiometric fluorescence sensor for the selective recognition of dopamine. *New Journal of Chemistry*, **2019**, 43, 1291-1298	3.6	25
107	Urazole-Au Nanocluster as a Novel Fluorescence Probe for Curcumin Determination and Mitochondria Imaging. **2019**, 12, 1805-1812		11
106	Fluorometric and colorimetric dual-readout alkaline phosphatase activity assay based on enzymatically induced formation of colored Au@Ag nanoparticles and an inner filter effect. **2019**, 186, 348		19
105	A Simple, Rapid, Fluorometric Assay for Dopamine by In Situ Reaction of Boronic Acids and -Diol. **2019**, 2019, 6540397		3
104	Colorimetric determination of lead(II) or mercury(II) based on target induced switching of the enzyme-like activity of metallothionein-stabilized copper nanoclusters. **2019**, 186, 250		20
103	Nanomaterials-Based Colorimetric Immunoassays. **2019**, 9,		34
102	Ultrasmall Au nanoclusters for biomedical and biosensing applications: A mini-review. **2019**, 200, 432-442		78
101	Luminescent metal nanoclusters for biomedical applications. **2019**, 12, 1251-1265		64
100	Nanozymes: Classification, Catalytic Mechanisms, Activity Regulation, and Applications. **2019**, 119, 4357-4412		1010
99	A Review of Neurotransmitters Sensing Methods for Neuro-Engineering Research. **2019**, 9, 4719		19
98	Ratiometric fluorometric and visual determination of cyanide based on the use of carbon dots and gold nanoclusters. **2019**, 186, 809		10

97	A ZIF-8 derived nitrogen-doped porous carbon and nitrogen-doped graphene nanocomposite modified electrode for simultaneous determination of ascorbic acid, dopamine and uric acid. *New Journal of Chemistry*, **2019**, 43, 16819-16828	3.6	10
96	Aequorin as a sensitive and selective reporter for detection of dopamine: A photoprotein inhibition assay approach. **2019**, 122, 677-683		3
95	Gold nanorods and graphene oxide enhanced BSA-AgInS2 quantum dot-based photoelectrochemical sensors for detection of dopamine. **2019**, 295, 1006-1016		34
94	Fluorometric dopamine assay based on an energy transfer system composed of aptamer-functionalized MoS quantum dots and MoS nanosheets. **2019**, 186, 58		23
93	Label-free fluorescent discrimination and detection of epinephrine and dopamine based on bioinspired in situ copolymers and excitation wavelength switch. *Analytica Chimica Acta*, **2019**, 1054, 167-175	6.6	13
92	Red emitting human serum albumin templated copper nanoclusters as effective candidates for highly specific biosensing of bilirubin. **2019**, 98, 1064-1072		23
91	A high-performance fluorescent probe for dopamine detection based on g-CN nanofibers. **2019**, 212, 300-307		18
90	Competitive method for fluorescent dopamine detection in cerebrospinal fluid based on the peroxidase-like activity of ficin. **2019**, 209, 8-13		8
89	Green synthesis of Pd nanocones as a novel and effective electrochemiluminescence illuminant for highly sensitive detection of dopamine. *Sensors and Actuators B: Chemical*, **2019**, 281, 588-594	8.5	19
88	Nanomaterials with enzyme-like characteristics (nanozymes): next-generation artificial enzymes (II). **2019**, 48, 1004-1076		1430
87	Designed inorganic nanomaterials for intrinsic peroxidase mimics: A review. *Sensors and Actuators B: Chemical*, **2019**, 283, 18-34	8.5	51
86	A simple dopamine detection method based on fluorescence analysis and dopamine polymerization. *Microchemical Journal*, **2019**, 145, 55-58	4.8	41
85	Optical Biomarker-based Biosensors for Cancer/Infectious Disease Medical Diagnoses. **2019**, 27, 278-286		17
84	Gold nanoclusters-poly(9,9-dioctylfluorenyl-2,7-diyl) dots@zeolitic imidazolate framework-8 (ZIF-8) nanohybrid based probe for ratiometric analysis of dopamine. *Analytica Chimica Acta*, **2020**, 1098, 102-109	6.6	17
83	Molybdenum oxide-based metal-organic framework/polypyrrole nanocomposites for enhancing electrochemical detection of dopamine. **2020**, 209, 120507		45
82	Nanotechnology and Microfluidics for Biosensing and Biophysical Property Assessment. **2020**, 83-107		1
81	Functionalized tungsten disulfide nanotubes for dopamine and catechol detection in a tyrosinase-based amperometric biosensor design. **2020**, 8, 3566-3573		17
80	Protein-protected metal nanoclusters: An emerging ultra-small nanozyme. **2020**, 12, e1602		25

79	A sensitive resonance Rayleigh scattering sensor for dopamine in urine using upconversion nanoparticles. **2020**, 51, 406-413		7
78	Colorimetric sensor array based on gold nanoparticles: Design principles and recent advances. **2020**, 122, 115754		55
77	Copper Nanocluster (Cu23 NC)-Based Biomimetic System with Peroxidase Activity. **2020**, 8, 18335-18344		18
76	A simple, quantitative method for spectroscopic detection of metformin using gold nanoclusters. **2020**, 241, 118744		9
75	Fluorescence Quenchers Manipulate the Peroxidase-like Activity of Gold-Based Nanomaterials. **2020**, 5, 24487-24494		2
74	Dopamine Sensing Based on Ultrathin Fluorescent Metal-Organic Nanosheets. **2020**, 12, 44499-44507		15
73	Tailoring two-dimensional nanomaterials by structural engineering for chemical and biological sensing. **2020**, 2, 100024		3
72	Colorimetric determination of dopamine using an electrospun nanofibrous membrane decorated with gold nanoparticles. **2020**, 55, 7969-7980		9
71	A novel and non-toxic dopamine detection method based on self-polymerisation of dopamine. **2020**, 15, 233-241		1
70	A novel selective and sensitive multinanozyme colorimetric method for glutathione detection by using an indamine polymer. *Analytica Chimica Acta*, **2020**, 1127, 1-8	6.6	9
69	A field-applicable colorimetric assay for notorious explosive triacetone triperoxide through nanozyme-catalyzed irreversible oxidation of 3, 3'-diaminobenzidine. **2020**, 187, 431		5
68	Recent Advances in Electrochemical and Optical Sensing of Dopamine. **2020**, 20,		41
67	Enzymatic Platforms for Sensitive Neurotransmitter Detection. **2020**, 20,		11
66	Nanobiomaterial Engineering. **2020**,		19
65	Metal-Free Colorimetric Detection of Pyrophosphate Ions by Inhibitive Nanozymatic Carbon Dots. **2020**, 5, 1314-1324		22
64	Single-step synthesis of N-doped carbon dots and applied for dopamine sensing, in vitro multicolor cellular imaging as well as fluorescent ink. **2021**, 406, 113019		10
63	Facile and recyclable dopamine sensing by a label-free terbium(III) metal-organic framework. **2021**, 221, 121399		8
62	Colorimetric sensing of dopamine in beef meat using copper sulfide encapsulated within bovine serum albumin functionalized with copper phosphate (CuS-BSA-Cu(PO)) nanoparticles. **2021**, 582, 732-740		12

61	Gold nanoclusters for theranostic applications. **2021**, 431, 213689		23
60	High quantum-yield carbon dots embedded metal-organic frameworks for selective and sensitive detection of dopamine. *Microchemical Journal*, **2021**, 160, 105718	4.8	11
59	Design of "Turn On" fluorometric nanoprobe based on nitrogen doped graphene quantum dots modified with Ecyclodextrin and vitamin B cofactor for selective sensing of dopamine in human serum. **2021**, 248, 119180		11
58	One-pot ball-milling preparation of cetylpyridinium chloride/Zirconium phosphate composite for simultaneous detection of ascorbic acid and dopamine. **2021**, 860, 157927		3
57	Novel Designing of Chemically Modified Electrode (CME) of the Bio-MOF-1 for the Detection of Dopamine Based on Inhibition of [Ru(bpy)3]2+/DBAE System. **2021**, 33, 601-608		2
56	MOF-derived Co3O4/FeCo2O4 incorporated porous biomass carbon: Simultaneous electrochemical determination of dopamine, acetaminophen and xanthine. **2021**, 858, 157701		13
55	Gold Nanozymes: From Concept to Biomedical Applications. **2020**, 13, 10		46
54	An ultrasensitive chemiluminescent biosensor for tracing glutathione in human serum using BSA@AuNCs as a peroxidase-mimetic nanozyme on a luminol/artesunate system. **2021**, 9, 8038-8047		0
53	Selective dopamine detection by SPR sensor signal amplification using gold nanoparticles. *New Journal of Chemistry*,	3.6	1
52	Insights and Perspectives Regarding Nanostructured Fluorescent Materials toward Tackling COVID-19 and Future Pandemics. *ACS Applied Nano Materials*, **2021**, 4, 911-948	5.6	15
51	Rational Confinement of Yttrium Vanadate within Three-Dimensional Graphene Aerogel: Electrochemical Analysis of Monoamine Neurotransmitter (Dopamine). **2021**, 13, 10987-10995		21
50	Protein-protected metal nanoclusters as diagnostic and therapeutic platforms for biomedical applications. **2021**,		13
49	Efficient fluorescence resonance energy transfer-based ratiometric fluorescent probe for detection of dopamine using a dual-emission carbon dot-gold nanocluster nanohybrid. **2021**, 411, 113195		11
48	Metal Cluster-Based Electrochemical Biosensing System for Detecting Epithelial-to-Mesenchymal Transition. **2021**, 6, 2290-2298		1
47	Nitrogen doped graphene quantum dots based on host guest interaction for selective dual readout of dopamine. **2021**, 252, 119516		3
46	Turn-on fluorescent probe for dopamine detection in solutions and live cells based on in situ formation of aminosilane-functionalized carbon dots. *Analytica Chimica Acta*, **2021**, 1157, 338394	6.6	8
45	A novel ratiometric fluorescent probe for detection of dopamine and cupric ions. 1-8		2
44	Fe-Coordinated Carbon Nanozyme Dots as Peroxidase-Like Nanozymes and Magnetic Resonance Imaging Contrast Agents.. **2021**, 4, 5520-5528		5

43	Synthesis of POMOFs with 8-fold helix and its composite with carboxyl functionalized SWCNTs for the voltammetric determination of dopamine. **2021**, 413, 5309-5320		5
42	Aptamer-Modified Cu-Functionalized C-Dots: Versatile Means to Improve Nanozyme Activities-"Aptananozymes". **2021**, 143, 11510-11519		11
41	Electrochemical synthesis of Poly(melamine)-Poly (aspartic acid) copolymer for highly sensitive and selective determination of dopamine. **2021**, 267, 124683		3
40	A boric acid-functionalized lanthanide metal-organic gel: A ratiometric fluorescence probe with rapid and sensitive detection of dopamine. *Microchemical Journal*, **2021**, 169, 106579	4.8	3
39	Catalytic ferromagnetic gold nanoparticle immunoassay for the detection and differentiation of Mycobacterium tuberculosis and Mycobacterium bovis. *Analytica Chimica Acta*, **2021**, 1184, 339037	6.6	1
38	Fluorometric and SERS Sensor Systems for Diagnostics and Monitoring of Catecholamine-Dependent Diseases. **2021**, 133-160		
37	Boron Doped Carbon Quantum Dots: Turn-Off Fluorescent Probe for Dopamine Detection. *Nanotechnology*, **2020**,	3.4	6
36	Upconversion-luminescent hydrogel optical probe for in situ dopamine monitoring. *Photonics Research*, **2020**, 8, 1800	6	5
35	Metal nanoparticles-based nanoplatforms for colorimetric sensing: A review. *Reviews in Analytical Chemistry*, **2020**, 40, 1-11	2.3	12
34	One-pot synthesis of boron and nitrogen co-doped silicon-carbon dots for fluorescence enhancement and on-site colorimetric detection of dopamine with high selectivity. *Applied Surface Science*, **2022**, 573, 151457	6.7	1
33	Peroxidase-Like Activity of Metal Nanoparticles for Biomedical Applications. **2020**, 109-126		1
32	Nanozymes in Tumor Theranostics. *Frontiers in Oncology*, **2021**, 11, 666017	5.3	2
31	A peroxidase-like activity-based colorimetric sensor array of noble metal nanozymes to discriminate heavy metal ions. *Analyst, The*, **2021**,	5	5
30	Screening of synthetic cannabinoids in herbal mixtures using 1-dodecanethiol-gold nanoclusters. *Sensors and Actuators B: Chemical*, **2022**, 353, 131151	8.5	0
29	Smartphone-integrated colorimetric sensor array-based reader system and fluorometric detection of dopamine in male and female geriatric plasma by bluish-green fluorescent carbon quantum dots. *Materials Today Bio*, **2021**, 12, 100168	9.9	5
28	Tyrosine-Decorated Gold Nanoclusters Chelated Cerium(III) for Fluorescence Detection of Dopamine. *ACS Applied Nano Materials*,	5.6	0
27	Fast dopamine detection based on evanescent wave detection platform.. *Analytica Chimica Acta*, **2022**, 1191, 339312	6.6	2
26	Water-Dispersible Gold Nanoclusters: Synthesis Strategies, Optical Properties, and Biological Applications. *Chemistry - A European Journal*, **2021**, e202103736	4.8	0

25	Biocatalytic nanomaterials as an alternative to peroxidase enzymes. **2022**, 513-542		0
24	Preparation of amorphous MOF based biomimetic nanozyme with high laccase- and catecholase-like activity for the degradation and detection of phenolic compounds. *Chemical Engineering Journal*, **2022**, 434, 134677	14.7	6
23	Construction of biomimetic nanozyme with high laccase- and catecholase-like activity for oxidation and detection of phenolic compounds.. *Journal of Hazardous Materials*, **2022**, 429, 128404	12.8	2
22	Composite of gold nanoclusters and basified human serum albumin significantly boosts the inhibition of Alzheimer's □amyloid by photo-oxygenation.. *Acta Biomaterialia*, **2022**,	10.8	2
21	Gold Nanoclusters as Emerging Theranostic Interventions for Biomedical Applications. **2022**, 1-31		
20	Au -Functionalized UiO-67 Metal-Organic Framework Nanoparticles: O and □OH Generating Nanozymes and Their Antibacterial Functions.. *Small*, **2022**, e2200548	11	2
19	The controllable synthesis of orange-red emissive Au nanoclusters and their use as a portable colorimetric fluorometric probe for dopamine. *New Journal of Chemistry*,	3.6	1
18	Manganese-induced highly fluorescent oligodopamine for sensitive detection of dopamine neurotransmitter by catalytic action of H 2 O 2 /MnO 2 nanosheets. *Physica Status Solidi (A) Applications and Materials Science*,	1.6	
17	Metal-Organic Frameworks-Mediated Assembly of Gold Nanoclusters for Sensing Applications.. *Journal of Analysis and Testing*, **2022**, 1-15	3.2	2
16	Catalysis Driven by Biohybrid Nanozyme. **2022**, 100024		
15	Recent advances in the visual detection of ions and molecules based on gold and silver nanoclusters. *Analytical Methods*,	3.2	0
14	PC-12 Cell Line as a Neuronal Cell Model for Biosensing Applications. *Biosensors*, **2022**, 12, 500	5.9	1
13	Gold nanomaterials for biochemical sensing.		0
12	SERS and EC dual-mode detection for dopamine based on WO3-SnO2 nanoflake arrays.		1
11	Bioresource-Derived Colloidal Nitrogen-Doped Graphene Quantum Dots as Ultrasensitive and Stable Nanosensors for Cancer and Neurotransmitter Biomarkers.		0
10	Highly sensitive enzyme-free sensor based on a carbon paste electrode modified with binary zinc oxide/polyaniline nanocomposites for dopamine, ascorbic acid and uric acid sensing.		0
9	Microplasma-enabled carbon dots composited with multi-walled carbon nanotubes for dopamine detection. **2022**, 340631		0
8	3D printed neural tissues with in situ optical dopamine sensors. **2023**, 222, 114942		1

7	Bovine serum albumin-stabilized gold nanoclusters as fluorescent probe for enzyme-free detection of glyphosate.	0
6	Peroxidase-like phosphate hydrate nanosheets bio-synthesized by a marine Shewanella algae strain for highly sensitive dopamine detection. **2023**, 225, 113248	0
5	Albumin: Source, preparation, determination, applications, and prospects. **2023**, 8, 100549	0
4	Colorimetric sensing of biomarkers based on the enzyme-mimetic activity of metal nanoclusters. **2023**, 465, 142817	0
3	Practical applications of metal nanoclusters. **2023**, 289-372	0
2	Advances in bovine serum albumin-protected gold nanoclusters: from understanding the formation mechanisms to biological applications. **2023**, 29, 101460	0
1	Aptamer-Modified Homogeneous Catalysts, Heterogenous Nanoparticle Catalysts, and Photocatalysts: Functional Nucleoapzymes, Aptananozymes, and Photoaptazymes	0