

# Lei Han

## List of Publications by Year in descending order

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Version: 2024-02-01

69

papers

3,470

citations

136950

32

h-index

144013

57

g-index

71

all docs

71

docs citations

71

times ranked

4088

citing authors

#	ARTICLE	IF	CITATIONS
1	Denatured proteins show new vitality: Green synthesis of germanium oxide hollow microspheres with versatile functions by denaturing proteins around bubbles. <i>Aggregate</i> , 2023, 4, .	9.9	8
2	ZIF-8@GMP-Tb nanocomplex for ratiometric fluorescent detection of alkaline phosphatase activity. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 264, 120230.	3.9	15
3	Taking full advantage of the structure and multi-activities of mineralized microbial surface-displayed enzymes: Portable three-in-one organophosphate pesticides assay device. <i>Chemical Engineering Journal</i> , 2022, 429, 132317.	12.7	12
4	Graphene-Based Nanomaterials for Dental Applications: Principles, Current Advances, and Future Outlook. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 804201.	4.1	15
5	Selective Inhibition toward Dual Enzyme-like Activities of Iridium Nanozymes for a Specific Colorimetric Assay of Malathion without Enzymes. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 3898-3906.	5.2	26
6	Flow-homogeneous electrochemical sensing system based on 2D metal-organic framework nanozyme for successive microRNA assay. <i>Biosensors and Bioelectronics</i> , 2022, 206, 114120.	10.1	26
7	A low-background fluorescent aptasensor for acetamiprid detection based on DNA three-way junction-formed G-quadruplexes and graphene oxide. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 2071-2079.	3.7	14
8	Catalyst-Free Spontaneous Polymerization with 100% Atom Economy: Facile Synthesis of Photoresponsive Polysulfonates with Multifunctionalities. <i>Jacs Au</i> , 2021, 1, 344-353.	7.9	14
9	Crystal Violet-Sensitized Direct Z-Scheme Heterojunction Coupled with a G-Wire Superstructure for Photoelectrochemical Sensing of Uracil-DNA Glycosylase. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 15881-15889.	8.0	18
10	Displaying of acetylcholinesterase mutants on surface of yeast for ultra-trace fluorescence detection of organophosphate pesticides with gold nanoclusters. <i>Biosensors and Bioelectronics</i> , 2020, 148, 111825.	10.1	60
11	pH-induced aggregation of hydrophilic carbon dots for fluorescence detection of acidic amino acid and intracellular pH imaging. <i>Materials Science and Engineering C</i> , 2020, 108, 110401.	7.3	28
12	Smartphones and Test Paper-Assisted Ratiometric Fluorescent Sensors for Semi-Quantitative and Visual Assay of Tetracycline Based on the Target-Induced Synergistic Effect of Antenna Effect and Inner Filter Effect. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 47099-47107.	8.0	105
13	A ratiometric optical strategy for bromide and iodide ion sensing based on target-induced competitive coordination of a metal-organic nanosystem. <i>Journal of Materials Chemistry C</i> , 2020, 8, 11517-11524.	5.5	9
14	Redox induced dual-signal optical sensor of carbon dots/MnO <sub>2</sub> nanosheets based on fluorescence and second-order scattering for the detection of ascorbic acid. <i>Mikrochimica Acta</i> , 2020, 187, 475.	5.0	11
15	Multifunctional Binding Strategy on Nonconjugated Polymer Nanoparticles for Ratiometric Detection and Effective Removal of Mercury Ions. <i>Environmental Science &amp; Technology</i> , 2020, 54, 10270-10278.	10.0	45
16	Catalase active metal-organic framework synthesized by ligand regulation for the dual detection of glucose and cysteine. <i>Analytica Chimica Acta</i> , 2020, 1131, 118-125.	5.4	12
17	A label-free photoelectrochemical immunosensor for detection of the milk allergen $\beta$ -lactoglobulin based on Ag <sub>2</sub> S-sensitized spindle-shaped BiVO <sub>4</sub> /BiOBr heterojunction by an in situ growth method. <i>Analytica Chimica Acta</i> , 2020, 1140, 122-131.	5.4	22
18	A lanthanide coordination polymer as a ratiometric fluorescent probe for rapid and visual sensing of phosphate based on the target-triggered competitive effect. <i>Journal of Materials Chemistry C</i> , 2020, 8, 13063-13071.	5.5	39

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19	White Peroxidaseâ€Mimicking Nanozymes: Colorimetric Pesticide Assay without Interferences of O <sub>2</sub> and Color. <i>Advanced Functional Materials</i> , 2020, 30, 2001933.	14.9	105
20	A visual detection of human immunodeficiency virus gene using ratiometric method enabled by phenol red and target-induced catalytic hairpin assembly. <i>Talanta</i> , 2020, 219, 121202.	5.5	12
21	White Peroxidaseâ€Mimicking Nanozymes: White Peroxidaseâ€Mimicking Nanozymes: Colorimetric Pesticide Assay without Interferences of O <sub>2</sub> and Color (Adv. Funct. Mater. 28/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070184.	14.9	5
22	Colorimetric Assay of Bacterial Pathogens Based on Co <sub>3</sub> O <sub>4</sub> Magnetic Nanozymes Conjugated with Specific Fusion Phage Proteins and Magnetophoretic Chromatography. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 9090-9097.	8.0	95
23	Threeâ€dimensional donorâ€acceptorâ€type photoactive material/conducting polyaniline hydrogel complex for sensitive photocathodic enzymatic bioanalysis. <i>Biosensors and Bioelectronics</i> , 2020, 158, 112179.	10.1	21
24	Fe(III) Mixed IP6@Au NPs with Enhanced SERS Activity for Detection of 4-ATP. <i>Scientific Reports</i> , 2020, 10, 5752.	3.3	17
25	Specific phages-based electrochemical impedimetric immunosensors for label-free and ultrasensitive detection of dual prostate-specific antigens. <i>Sensors and Actuators B: Chemical</i> , 2019, 297, 126727.	7.8	35
26	Simultaneous detection of five flavoring agents in chewing gum by ultrasound-microwave synergistic extraction coupled with gas chromatography. <i>Scientific Reports</i> , 2019, 9, 12085.	3.3	4
27	A universal one-pot assay strategy based on bio-inorganic cascade catalysts for different analytes by changing pH-dependent activity of enzymes on enzyme mimics. <i>Sensors and Actuators B: Chemical</i> , 2019, 286, 460-467.	7.8	22
28	Carbon dots-based fluorescent turn off/on sensor for highly selective and sensitive detection of Hg <sup>2+</sup> and biothiols. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 222, 117260.	3.9	33
29	Construction of an effective ratiometric fluorescent sensing platform for specific and visual detection of mercury ions based on target-triggered the inhibition on inner filter effect. <i>Journal of Hazardous Materials</i> , 2019, 376, 170-177.	12.4	47
30	pH-mediated reversible fluorescence nanoswitch based on inner filter effect induced fluorescence quenching for selective and visual detection of 4-nitrophenol. <i>Journal of Hazardous Materials</i> , 2019, 362, 45-52.	12.4	130
31	Oxidation etching induced dual-signal response of carbon dots/silver nanoparticles system for ratiometric optical sensing of H <sub>2</sub> O <sub>2</sub> and H <sub>2</sub> O <sub>2</sub> -related bioanalysis. <i>Analytica Chimica Acta</i> , 2019, 1055, 81-89.	5.4	29
32	pH-sensitive fluorescent organic nanoparticles: Off-on fluorescent detection of furfural in transformer oil. <i>Talanta</i> , 2019, 197, 383-389.	5.5	8
33	Green fluorescent carbon quantum dots as a label-free probe for rapid and sensitive detection of hematin. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 212, 167-172.	3.9	20
34	A hybrid materialâ€composed of guanine-rich single stranded DNA and cobalt(III) oxyhydroxide (CoOOH) nanosheets as a fluorescentâ€probe for ascorbic acid via formation of a complex between G-quadruplex and thioflavin T. <i>Mikrochimica Acta</i> , 2019, 186, 156.	5.0	10
35	Size-dependent modulation of fluorescence and light scattering: a new strategy for development of ratiometric sensing. <i>Materials Horizons</i> , 2018, 5, 454-460.	12.2	69
36	Proteinâ€Directed Metal Oxide Nanoflakes with Tandem Enzymeâ€Like Characteristics: Colorimetric Glucose Sensing Based on Oneâ€Pot Enzymeâ€Free Cascade Catalysis. <i>Advanced Functional Materials</i> , 2018, 28, 1800018.	14.9	227

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37	A novel electrochemical sensor based on poly(p-aminobenzene sulfonic acid)-reduced graphene oxide composite film for the sensitive and selective detection of levofloxacin in human urine. Journal of Electroanalytical Chemistry, 2018, 817, 141-148.	3.8	44
38	Selected landscape phage probe as selective recognition interface for sensitive total prostate-specific antigen immunosensor. Biosensors and Bioelectronics, 2018, 106, 1-6.	10.1	34
39	Sensitive colorimetric immunoassay of <i>Vibrio parahaemolyticus</i> based on specific nonapeptide probe screening from a phage display library conjugated with MnO <sub>2</sub> nanosheets with peroxidase-like activity. Nanoscale, 2018, 10, 2825-2833.	5.6	60
40	Rational design of engineered microbial cell surface multi-enzyme co-display system for sustainable NADH regeneration from low-cost biomass. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 111-121.	3.0	10
41	Enzymatic biofuel cell-based self-powered biosensing of protein kinase activity and inhibition via thiophosphorylation-mediated interface engineering. Chemical Communications, 2018, 54, 5438-5441.	4.1	23
42	A Thioflavin T-induced G-Quadruplex Fluorescent Biosensor for Target DNA Detection. Analytical Sciences, 2018, 34, 149-153.	1.6	20
43	Redesigning of Microbial Cell Surface and Its Application to Whole-Cell Biocatalysis and Biosensors. Applied Biochemistry and Biotechnology, 2018, 185, 396-418.	2.9	74
44	Preparation of a Si/SiO <sub>2</sub> "Ordered Mesoporous" Carbon Nanocomposite as an Anode for High-Performance Lithium-Ion and Sodium-Ion Batteries. Chemistry - A European Journal, 2018, 24, 4841-4848.	3.3	70
45	Mechanistic Insights into Interactions between Bacterial Class I P450 Enzymes and Redox Partners. ACS Catalysis, 2018, 8, 9992-10003.	11.2	78
46	"Non-Naked" Gold with Glucose Oxidase-Like Activity: A Nanozyme for Tandem Catalysis. Small, 2018, 14, e1803256.	10.0	156
47	Rational Integration of Biomineralization, Microbial Surface Display, and Carbon Nanocomposites: Ultrasensitive and Selective Biosensor for Traces of Pesticides. Advanced Materials Interfaces, 2018, 5, 1801332.	3.7	5
48	New approaches to NAD(P)H regeneration in the biosynthesis systems. World Journal of Microbiology and Biotechnology, 2018, 34, 141.	3.6	24
49	Copper nanoclusters with strong fluorescence emission as a sensing platform for sensitive and selective detection of picric acid. Analytical Methods, 2018, 10, 4251-4256.	2.7	36
50	One-step synthesis of fluorescent organic nanoparticles: The application to label-free ratiometric fluorescent pH sensor. Sensors and Actuators B: Chemical, 2018, 273, 1479-1486.	7.8	25
51	Bioinspired Nanozymes with pH-Independent and Metal Ions-Controllable Activity: Field-Programmable Logic Conversion of Sole Logic Gate System. Particle and Particle Systems Characterization, 2018, 35, 1800207.	2.3	16
52	Novel Cell-Inorganic Hybrid Catalytic Interfaces with Enhanced Enzymatic Activity and Stability for Sensitive Biosensing of Paraoxon. ACS Applied Materials & Interfaces, 2017, 9, 6894-6901.	8.0	38
53	Protein-directed gold nanoparticles with excellent catalytic activity for 4-nitrophenol reduction. Materials Science and Engineering C, 2017, 78, 429-434.	7.3	30
54	Phage capsid protein-directed MnO <sub>2</sub> nanosheets with peroxidase-like activity for spectrometric biosensing and evaluation of antioxidant behaviour. Chemical Communications, 2017, 53, 5216-5219.	4.1	94

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55	Novel biotemplated MnO <sub>2</sub> 1D nanozyme with controllable peroxidase-like activity and unique catalytic mechanism and its application for glucose sensing. <i>Sensors and Actuators B: Chemical</i> , 2017, 252, 919-926.	7.8	107
56	Facile synthesis of multicolor photoluminescent polymer carbon dots with surface-state energy gap-controlled emission. <i>Journal of Materials Chemistry C</i> , 2017, 5, 10785-10793.	5.5	115
57	Gold nanoprobe functionalized with specific fusion protein selection from phage display and its application in rapid, selective and sensitive colorimetric biosensing of <i>Staphylococcus aureus</i> . <i>Biosensors and Bioelectronics</i> , 2016, 82, 195-203.	10.1	93
58	Genetically Engineered Phage-Templated MnO <sub>2</sub> Nanowires: Synthesis and Their Application in Electrochemical Glucose Biosensor Operated at Neutral pH Condition. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 13768-13776.	8.0	106
59	A sensitive acetylcholinesterase biosensor based on gold nanorods modified electrode for detection of organophosphate pesticide. <i>Talanta</i> , 2016, 156-157, 34-41.	5.5	100
60	A sialic acid aldolase from <i>Peptoclostridium difficile</i> NAP08 with 4-hydroxy-2-oxo-pentanoate aldolase activity. <i>Enzyme and Microbial Technology</i> , 2016, 92, 99-106.	3.2	6
61	A Label-Free Electrochemical Impedance Cytosensor Based on Specific Peptide-Fused Phage Selected from Landscape Phage Library. <i>Scientific Reports</i> , 2016, 6, 22199.	3.3	70
62	Rational design of xylose dehydrogenase for improved thermostability and its application in development of efficient enzymatic biofuel cell. <i>Enzyme and Microbial Technology</i> , 2016, 84, 78-85.	3.2	26
63	A Novel Scheme to Obtain Y <sub>2</sub> O <sub>3</sub> :Er <sup>3+</sup> Upconversion Luminescent Hollow Nanofibers via Precursor Templating. <i>Journal of the American Ceramic Society</i> , 2015, 98, 2817-2822.	3.8	10
64	A V <sub>2</sub> O <sub>3</sub> -ordered mesoporous carbon composite with novel peroxidase-like activity towards the glucose colorimetric assay. <i>Nanoscale</i> , 2015, 7, 11678-11685.	5.6	100
65	Novel glucose sensor with Au@Ag heterogeneous nanorods based on electrocatalytic reduction of hydrogen peroxide at negative potential. <i>Journal of Electroanalytical Chemistry</i> , 2015, 742, 84-89.	3.8	18
66	Au@Ag Heterogeneous Nanorods as Nanozyme Interfaces with Peroxidase-Like Activity and Their Application for One-Pot Analysis of Glucose at Nearly Neutral pH. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 14463-14470.	8.0	237
67	Leaf-templated synthesis of 3D hierarchical porous cobalt oxide nanostructure as direct electrochemical biosensing interface with enhanced electrocatalysis. <i>Biosensors and Bioelectronics</i> , 2015, 63, 145-152.	10.1	154
68	Ultrasensitive electrochemical sensor for p-nitrophenyl organophosphates based on ordered mesoporous carbons at low potential without deoxygenization. <i>Analytica Chimica Acta</i> , 2014, 822, 23-29.	5.4	41
69	Porous gold cluster film prepared from Au@BSA microspheres for electrochemical nonenzymatic glucose sensor. <i>Electrochimica Acta</i> , 2014, 138, 109-114.	5.2	82