

# Chunyang Lei

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

2,199  
citations

218381

26  
h-index

233125

45  
g-index

64  
all docs

64  
docs citations

64  
times ranked

2537  
citing authors

#	ARTICLE	IF	CITATIONS
1	Integrating CRISPR-Cas12a with a DNA circuit as a generic sensing platform for amplified detection of microRNA. <i>Chemical Science</i> , 2020, 11, 7362-7368.	3.7	169
2	Impedimetric Aptasensor with Femtomolar Sensitivity Based on the Enlargement of Surface-Charged Gold Nanoparticles. <i>Analytical Chemistry</i> , 2009, 81, 739-745.	3.2	162
3	A CRISPR-Cas autocatalysis-driven feedback amplification network for supersensitive DNA diagnostics. <i>Science Advances</i> , 2021, 7, .	4.7	152
4	Fluorescent Ti <sub>3</sub> C <sub>2</sub> MXene quantum dots for an alkaline phosphatase assay and embryonic stem cell identification based on the inner filter effect. <i>Nanoscale</i> , 2018, 10, 19579-19585.	2.8	104
5	Resurfaced Fluorescent Protein as a Sensing Platform for Label-Free Detection of Copper(II) Ion and Acetylcholinesterase Activity. <i>Analytical Chemistry</i> , 2015, 87, 1974-1980.	3.2	102
6	Immune-independent and label-free fluorescent assay for Cystatin C detection based on protein-stabilized Au nanoclusters. <i>Biosensors and Bioelectronics</i> , 2013, 41, 256-261.	5.3	79
7	Electrochemical Conversion of Fe <sub>3</sub> O <sub>4</sub> Magnetic Nanoparticles to Electroactive Prussian Blue Analogues for Self-Sacrificial Label Biosensing of Avian Influenza Virus H5N1. <i>Analytical Chemistry</i> , 2017, 89, 12145-12151.	3.2	77
8	Engineering of Nucleic Acids and Synthetic Cofactors as Holo Sensors for Probing Signaling Molecules in the Cellular Membrane Microenvironment. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6590-6594.	7.2	76
9	DNA mimics of red fluorescent proteins (RFP) based on G-quadruplex-confined synthetic RFP chromophores. <i>Nucleic Acids Research</i> , 2017, 45, 10380-10392.	6.5	70
10	Cell-Surface-Anchored Ratiometric DNA Tweezer for Real-Time Monitoring of Extracellular and Apoplastic pH. <i>Analytical Chemistry</i> , 2018, 90, 13459-13466.	3.2	70
11	Chimeric DNA-Functionalized Titanium Carbide MXenes for Simultaneous Mapping of Dual Cancer Biomarkers in Living Cells. <i>Analytical Chemistry</i> , 2019, 91, 1651-1658.	3.2	67
12	Analysis of copper nanoparticles toxicity based on a stress-responsive bacterial biosensor array. <i>Nanoscale</i> , 2013, 5, 653-662.	2.8	61
13	Advances in antimicrobial peptides-based biosensing methods for detection of foodborne pathogens: A review. <i>Food Control</i> , 2020, 112, 107116.	2.8	59
14	Colorimetric Sensor Array for Thiols Discrimination Based on Urease-Metal Ion Pairs. <i>Analytical Chemistry</i> , 2016, 88, 8542-8547.	3.2	56
15	Light-Up Nonthiolated Aptasensor for Low-Mass, Soluble Amyloid- $\beta$ <sub>40</sub> Oligomers at High Salt Concentrations. <i>Analytical Chemistry</i> , 2018, 90, 1710-1717.	3.2	53
16	Phospholipid-Tailored Titanium Carbide Nanosheets as a Novel Fluorescent Nanoprobe for Activity Assay and Imaging of Phospholipase D. <i>Analytical Chemistry</i> , 2018, 90, 6742-6748.	3.2	52
17	Functional Titanium Carbide MXenes-Loaded Entropy-Driven RNA Explorer for Long Noncoding RNA PCA3 Imaging in Live Cells. <i>Analytical Chemistry</i> , 2019, 91, 8622-8629.	3.2	37
18	Protein@Inorganic Nanodumpling System for High-Loading Protein Delivery with Activatable Fluorescence and Magnetic Resonance Bimodal Imaging Capabilities. <i>ACS Nano</i> , 2020, 14, 2172-2182.	7.3	37

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19	A Supercharged Fluorescent Protein as a Versatile Probe for Homogeneous DNA Detection and Methylation Analysis. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8358-8362.	7.2	36
20	PAM-less conditional DNA substrates leverage trans-cleavage of CRISPR-Cas12a for versatile live-cell biosensing. <i>Chemical Science</i> , 2022, 13, 2011-2020.	3.7	35
21	Label-free fluorescence assay for thrombin based on unmodified quantum dots. <i>Biosensors and Bioelectronics</i> , 2014, 54, 42-47.	5.3	34
22	Fluorescent detection of protein kinase based on zirconium ions-immobilized magnetic nanoparticles. <i>Analytica Chimica Acta</i> , 2013, 780, 89-94.	2.6	33
23	Development of a novel antioxidant assay technique based on G-quadruplex DNAzyme. <i>Biosensors and Bioelectronics</i> , 2010, 26, 523-529.	5.3	27
24	Phosphorylation-Mediated Assembly of a Semisynthetic Fluorescent Protein for Label-Free Detection of Protein Kinase Activity. <i>Analytical Chemistry</i> , 2015, 87, 6311-6318.	3.2	27
25	Rapid and sensitive detection of <i>E. coli</i> O157:H7 based on antimicrobial peptide functionalized magnetic nanoparticles and urease-catalyzed signal amplification. <i>Analytical Methods</i> , 2017, 9, 5204-5210.	1.3	27
26	Fluorometric and Colorimetric Dual-Readout Assay for Histone Demethylase Activity Based on Formaldehyde Inhibition of Ag <sup>+</sup> -Triggered Oxidation of <i>o</i> -Phenylenediamine. <i>Analytical Chemistry</i> , 2020, 92, 9421-9428.	3.2	27
27	An antimicrobial peptide-based colorimetric bioassay for rapid and sensitive detection of <i>E. coli</i> O157:H7. <i>RSC Advances</i> , 2017, 7, 15769-15775.	1.7	25
28	Transpeptidation-Mediated Assembly of Tripartite Split Green Fluorescent Protein for Label-Free Assay of Sortase Activity. <i>Analytical Chemistry</i> , 2018, 90, 3245-3252.	3.2	23
29	Chimeric Peptides Self-Assembling on Titanium Carbide MXenes as Biosensing Interfaces for Activity Assay of Post-translational Modification Enzymes. <i>Analytical Chemistry</i> , 2020, 92, 8819-8826.	3.2	23
30	Modular Combination of Proteolysis-Responsive Transcription and Spherical Nucleic Acids for Smartphone-Based Colorimetric Detection of Protease Biomarkers. <i>Analytical Chemistry</i> , 2021, 93, 3517-3525.	3.2	23
31	Automatic and Integrated Micro-Enzyme Assay (AI <sup>4</sup> EA) Platform for Highly Sensitive Thrombin Analysis via an Engineered Fluorescence Protein-Functionalized Monolithic Capillary Column. <i>Analytical Chemistry</i> , 2015, 87, 4552-4559.	3.2	22
32	A ligation-driven CRISPR-Cas biosensing platform for non-nucleic acid target detections. <i>Chemical Communications</i> , 2021, 57, 7051-7054.	2.2	22
33	Colorimetric detection of lipopolysaccharides based on a lipopolysaccharide-binding peptide and AuNPs. <i>Analytical Methods</i> , 2016, 8, 8079-8083.	1.3	21
34	Fluorescent detection of protein kinase based on positively charged gold nanoparticles. <i>Talanta</i> , 2014, 128, 360-365.	2.9	19
35	Design strategies for fluorescent proteins/mimics and their applications in biosensing and bioimaging. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 122, 115757.	5.8	18
36	Coupling of proteolysis-triggered transcription and CRISPR-Cas12a for ultrasensitive protease detection. <i>Science China Chemistry</i> , 2021, 64, 330-336.	4.2	18

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37	Proteolysis-Responsive Rolling Circle Transcription Assay Enabling Femtomolar Sensitivity Detection of a Target Protease Biomarker. <i>Analytical Chemistry</i> , 2020, 92, 16314-16321.	3.2	17
38	Target-activated transcription for the amplified sensing of protease biomarkers. <i>Chemical Science</i> , 2020, 11, 2993-2998.	3.7	16
39	Biomineralization synthesis of a near-infrared fluorescent nanoprobe for direct glucose sensing in whole blood. <i>Nanoscale</i> , 2020, 12, 864-870.	2.8	15
40	Visualization of Deep Tissue G-quadruplexes with a Novel Large Stokes-Shifted Red Fluorescent Benzothiazole Derivative. <i>Analytical Chemistry</i> , 2022, 94, 10283-10290.	3.2	15
41	Charge designable and tunable GFP as a target pH-responsive carrier for intracellular functional protein delivery and tracing. <i>Chemical Communications</i> , 2018, 54, 7806-7809.	2.2	14
42	Advances in the Integration of Nucleic Acid Nanotechnology into CRISPR-Cas System. <i>Journal of Analysis and Testing</i> , 2021, 5, 130-141.	2.5	14
43	Label-free fluorescent detection of thrombin activity based on a recombinant enhanced green fluorescence protein and nickel ions immobilized nitrilotriacetic acid-coated magnetic nanoparticles. <i>Talanta</i> , 2013, 116, 468-473.	2.9	13
44	A semisynthetic fluorescent protein assembly-based FRET probe for real-time profiling of cell membrane protease functions <i>in situ</i> . <i>Chemical Communications</i> , 2019, 55, 2218-2221.	2.2	13
45	Engineering of Nucleic Acids and Synthetic Cofactors as Holo Sensors for Probing Signaling Molecules in the Cellular Membrane Microenvironment. <i>Angewandte Chemie</i> , 2019, 131, 6662-6666.	1.6	12
46	A switchable Cas12a enabling CRISPR-based direct histone deacetylase activity detection. <i>Biosensors and Bioelectronics</i> , 2022, 213, 114468.	5.3	12
47	Kinetics Accelerated CRISPR-Cas12a Enabling Live-Cell Monitoring of Mn <sup>2+</sup> Homeostasis. <i>Analytical Chemistry</i> , 2022, 94, 10159-10167.	3.2	12
48	Surface charge tuneable fluorescent protein-based logic gates for smart delivery of nucleic acids. <i>Chemical Communications</i> , 2017, 53, 11326-11329.	2.2	10
49	CRISPR-Cas System for RNA Detection and Imaging. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 157-163.	1.3	8
50	Visual and quantitative detection of E. coli O157:H7 by coupling immunomagnetic separation and quantum dot-based paper strip. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 4417-4426.	1.9	8
51	An enzymatic polymerization-activated silver nanocluster probe for <i>in situ</i> apoptosis assay. <i>Analyst</i> , 2018, 143, 2908-2914.	1.7	7
52	Click-Type Protein-DNA Conjugation for Mn <sup>2+</sup> Imaging in Living Cells. <i>Analytical Chemistry</i> , 2019, 91, 10180-10187.	3.2	7
53	Amplified and label-free electrochemical detection of a protease biomarker by integrating proteolysis-triggered transcription. <i>Biosensors and Bioelectronics</i> , 2021, 190, 113372.	5.3	6
54	Integration of electrochemical interface and cell-free synthetic biology for biosensing. <i>Journal of Electroanalytical Chemistry</i> , 2022, 911, 116209.	1.9	6

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55	A Mix-and-Read Fluorescence Strategy for the Switch-On Probing of Kinase Activity Based on an Aptamer/Peptide/Graphene Oxide Platform. <i>Chemistry - an Asian Journal</i> , 2014, 9, 2560-2567.	1.7	5
56	Sensitive detection of DNA methyltransferase activity based on supercharged fluorescent protein and template-free DNA polymerization. <i>Science China Chemistry</i> , 2016, 59, 809-815.	4.2	5
57	Bioimmobilization Matrices with Ultrahigh Efficiency Based on Combined Polymerizations of Chemical Oxidation and Metal Organic Coordination for Biosensing. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6229-6236.	1.5	4
58	Dual-Product Synergistically Enhanced Colorimetric Assay for Sensitive Detection of Lipid Transferase Activity. <i>Analytical Chemistry</i> , 2020, 92, 15236-15243.	3.2	4
59	Sensitive and versatile fluorescent enzymatic assay of nucleases and DNA methyltransferase based on a supercharged fluorescent protein. <i>RSC Advances</i> , 2016, 6, 34074-34080.	1.7	3
60	Engineering of Nucleic Acids and Synthetic Cofactors as Holo Sensors for Probing Signaling Molecules in the Cellular Membrane Microenvironment ( <i>Angew. Chem.</i> 20/2019). <i>Angewandte Chemie</i> , 2019, 131, 6854-6854.	1.6	0
61	Enzyme-activated anchoring of peptide probes onto plasma membranes for selectively lighting up target cells. <i>Analyst</i> , 2020, 145, 3626-3633.	1.7	0