Yan Huang

List of Publications by Citations

114 papers	8,609 citations	46 h-index	92 g-index
116 ext. papers	10,005 ext. citations	10.1 avg, IF	6.1 L-index

#	Paper	IF	Citations
114	An extremely safe and wearable solid-state zinc ion battery based on a hierarchical structured polymer electrolyte. *Energy and Environmental Science*, **2018**, 11, 941-951	35.4	520
113	A self-healable and highly stretchable supercapacitor based on a dual crosslinked polyelectrolyte. *Nature Communications*, **2015**, 6, 10310	17.4	500
112	Nanostructured Polypyrrole as a flexible electrode material of supercapacitor. *Nano Energy*, **2016**, 22, 422-438	17.1	447
111	Photoluminescent Ti C MXene Quantum Dots for Multicolor Cellular Imaging. *Advanced Materials*, **2017**, 29, 1604847	24	439
110	Highly Flexible, Freestanding Supercapacitor Electrode with Enhanced Performance Obtained by Hybridizing Polypyrrole Chains with MXene. *Advanced Energy Materials*, **2016**, 6, 1600969	21.8	439
109	Texturing in situ: N,S-enriched hierarchically porous carbon as a highly active reversible oxygen electrocatalyst. *Energy and Environmental Science*, **2017**, 10, 742-749	35.4	374
108	From industrially weavable and knittable highly conductive yarns to large wearable energy storage textiles. *ACS Nano*, **2015**, 9, 4766-75	16.7	359
107	An Intrinsically Stretchable and Compressible Supercapacitor Containing a Polyacrylamide Hydrogel Electrolyte. *Angewandte Chemie - International Edition*, **2017**, 56, 9141-9145	16.4	329
106	Multifunctional Energy Storage and Conversion Devices. *Advanced Materials*, **2016**, 28, 8344-8364	24	305
105	Recent Progress on Flexible and Wearable Supercapacitors. *Small*, **2017**, 13, 1701827	11	260
104	Magnetic-Assisted, Self-Healable, Yarn-Based Supercapacitor. *ACS Nano*, **2015**, 9, 6242-51	16.7	248
103	Weavable, Conductive Yarn-Based NiCo//Zn Textile Battery with High Energy Density and Rate Capability. *ACS Nano*, **2017**, 11, 8953-8961	16.7	237
102	Super-high rate stretchable polypyrrole-based supercapacitors with excellent cycling stability. *Nano Energy*, **2015**, 11, 518-525	17.1	214
101	Porous Fe3O4/carbon composite electrode material prepared from metal-organic framework template and effect of temperature on its capacitance. *Nano Energy*, **2014**, 8, 133-140	17.1	206
100	Polyurethane/Cotton/Carbon Nanotubes Core-Spun Yarn as High Reliability Stretchable Strain Sensor for Human Motion Detection. *ACS Applied Materials & Interfaces*, **2016**, 8, 24837-43	9.5	198
99	Mn3O4 nanoparticles on layer-structured Ti3C2 MXene towards the oxygen reduction reaction and zinc–air batteries. *Journal of Materials Chemistry A*, **2017**, 5, 20818-20823	13	166
98	A Highly Durable, Transferable, and Substrate-Versatile High-Performance All-Polymer Micro-Supercapacitor with Plug-and-Play Function. *Advanced Materials*, **2017**, 29, 1605137	24	139

97	Component Matters: Paving the Roadmap toward Enhanced Electrocatalytic Performance of Graphitic CN-Based Catalysts via Atomic Tuning. *ACS Nano*, **2017**, 11, 6004-6014	16.7	116
96	A shape memory supercapacitor and its application in smart energy storage textiles. *Journal of Materials Chemistry A*, **2016**, 4, 1290-1297	13	111
95	Near-infrared dual-emission quantum dots-gold nanoclusters nanohybrid via co-template synthesis for ratiometric fluorescent detection and bioimaging of ascorbic acid in vitro and in vivo. *Analytical Chemistry*, **2015**, 87, 9998-10005	7.8	107
94	Capacitance Enhancement in a Semiconductor Nanostructure-Based Supercapacitor by Solar Light and a Self-Powered SupercapacitorPhotodetector System. *Advanced Functional Materials*, **2016**, 26, 4481-4490	15.6	105
93	An electrochromic supercapacitor and its hybrid derivatives: quantifiably determining their electrical energy storage by an optical measurement. *Journal of Materials Chemistry A*, **2015**, 3, 21321-21327	13	102
92	A high performance fiber-shaped PEDOT@MnO2//C@Fe3O4 asymmetric supercapacitor for wearable electronics. *Journal of Materials Chemistry A*, **2016**, 4, 14877-14883	13	96
91	An aptamer-based quartz crystal microbalance biosensor for sensitive and selective detection of leukemia cells using silver-enhanced gold nanoparticle label. *Talanta*, **2014**, 126, 130-5	6.2	92
90	Toward enhanced activity of a graphitic carbon nitride-based electrocatalyst in oxygen reduction and hydrogen evolution reactions via atomic sulfur doping. *Journal of Materials Chemistry A*, **2016**, 4, 12205-12211	13	92
89	Resurfaced fluorescent protein as a sensing platform for label-free detection of copper(II) ion and acetylcholinesterase activity. *Analytical Chemistry*, **2015**, 87, 1974-80	7.8	87
88	Colorimetric detection of apoptosis based on caspase-3 activity assay using unmodified gold nanoparticles. *Chemical Communications*, **2012**, 48, 997-9	5.8	83
87	Extremely Stable Polypyrrole Achieved via Molecular Ordering for Highly Flexible Supercapacitors. *ACS Applied Materials & Interfaces*, **2016**, 8, 2435-40	9.5	82
86	A simple "clickable" biosensor for colorimetric detection of copper(II) ions based on unmodified gold nanoparticles. *Biosensors and Bioelectronics*, **2013**, 41, 663-8	11.8	79
85	Highly Integrated Supercapacitor-Sensor Systems via Material and Geometry Design. *Small*, **2016**, 12, 3393-9	11	71
84	Immune-independent and label-free fluorescent assay for Cystatin C detection based on protein-stabilized Au nanoclusters. *Biosensors and Bioelectronics*, **2013**, 41, 256-61	11.8	69
83	Fluorescent TiC MXene quantum dots for an alkaline phosphatase assay and embryonic stem cell identification based on the inner filter effect. *Nanoscale*, **2018**, 10, 19579-19585	7.7	68
82	Randomly arrayed G-quadruplexes for label-free and real-time assay of enzyme activity. *Chemical Communications*, **2014**, 50, 6875-8	5.8	67
81	Self-Assembled DNA Hydrogel Based on Enzymatically Polymerized DNA for Protein Encapsulation and Enzyme/DNAzyme Hybrid Cascade Reaction. *ACS Applied Materials & Interfaces*, **2016**, 8, 22801-7	9.5	64
80	A gold nanoparticles colorimetric assay for label-free detection of protein kinase activity based on phosphorylation protection against exopeptidase cleavage. *Biosensors and Bioelectronics*, **2014**, 53, 295-300	11.8	63

79	Enhanced tolerance to stretch-induced performance degradation of stretchable MnO2-based supercapacitors. *ACS Applied Materials & Interfaces*, **2015**, 7, 2569-74	9.5	61
78	Boron Element Nanowires Electrode for Supercapacitors. *Advanced Energy Materials*, **2018**, 8, 1703117	21.8	59
77	Fabrication of Boron Nitride Nanosheets by Exfoliation. *Chemical Record*, **2016**, 16, 1204-15	6.6	56
76	Facile synthesis of □FeO nanodisk with superior photocatalytic performance and mechanism insight. *Science and Technology of Advanced Materials*, **2015**, 16, 014801	7.1	55
75	A universal platform for building molecular logic circuits based on a reconfigurable three-dimensional DNA nanostructure. *Chemical Science*, **2015**, 6, 3556-3564	9.4	53
74	A versatile biosensing system for DNA-related enzyme activity assay via the synthesis of silver nanoclusters using enzymatically-generated DNA as template. *Biosensors and Bioelectronics*, **2014**, 61, 321-7	11.8	53
73	Engineering of Nucleic Acids and Synthetic Cofactors as Holo Sensors for Probing Signaling Molecules in the Cellular Membrane Microenvironment. *Angewandte Chemie - International Edition*, **2019**, 58, 6590-6594	16.4	52
72	Hydrothermal synthesis of blue-fluorescent monolayer BN and BCNO quantum dots for bio-imaging probes. *RSC Advances*, **2016**, 6, 79090-79094	3.7	51
71	An Intrinsically Stretchable and Compressible Supercapacitor Containing a Polyacrylamide Hydrogel Electrolyte. *Angewandte Chemie*, **2017**, 129, 9269-9273	3.6	48
70	Development of near-infrared ratiometric fluorescent probe based on cationic conjugated polymer and CdTe/CdS QDs for label-free determination of glucose in human body fluids. *Biosensors and Bioelectronics*, **2017**, 95, 41-47	11.8	47
69	Capillary electrophoresis with end-column electrochemiluminescence for the analysis of chloroquine phosphate and the study on its interaction with human serum albumin. *Journal of Chromatography A*, **2007**, 1154, 373-8	4.5	47
68	A novel DNA-templated click chemistry strategy for fluorescent detection of copper(II) ions. *Chemical Communications*, **2012**, 48, 281-3	5.8	46
67	A modularization approach for linear-shaped functional supercapacitors. *Journal of Materials Chemistry A*, **2016**, 4, 4580-4586	13	42
66	Versatile electrochemiluminescent biosensor for protein-nucleic acid interaction based on the unique quenching effect of deoxyguanosine-5Rphosphate on electrochemiluminescence of CdTe/ZnS quantum dots. *Analytical Chemistry*, **2013**, 85, 6279-86	7.8	40
65	Intra-molecular G-quadruplex structure generated by DNA-templated click chemistry: "turn-on" fluorescent probe for copper ions. *Biosensors and Bioelectronics*, **2014**, 55, 187-94	11.8	39
64	Enhanced nonenzymatic sensing of hydrogen peroxide released from living cells based on Fe3O4/self-reduced graphene nanocomposites. *Analytical Methods*, **2014**, 6, 6073	3.2	39
63	Chimeric DNA-Functionalized Titanium Carbide MXenes for Simultaneous Mapping of Dual Cancer Biomarkers in Living Cells. *Analytical Chemistry*, **2019**, 91, 1651-1658	7.8	39
62	Cell-Surface-Anchored Ratiometric DNA Tweezer for Real-Time Monitoring of Extracellular and Apoplastic pH. *Analytical Chemistry*, **2018**, 90, 13459-13466	7.8	39

61	Phospholipid-Tailored Titanium Carbide Nanosheets as a Novel Fluorescent Nanoprobe for Activity Assay and Imaging of Phospholipase D. *Analytical Chemistry*, **2018**, 90, 6742-6748	7.8	35
60	Multifunctional Gold Nanoclusters-Based Nanosurface Energy Transfer Probe for Real-Time Monitoring of Cell Apoptosis and Self-Evaluating of Pro-Apoptotic Theranostics. *Analytical Chemistry*, **2016**, 88, 11184-11192	7.8	34
59	Simple, rapid and label-free colorimetric assay for Zn2+ based on unmodified gold nanoparticles and specific Zn2+ binding peptide. *Chemical Communications*, **2011**, 47, 4412-4	5.8	34
58	Unique electrocatalytic activity of a nucleic acid-mimicking coordination polymer for the sensitive detection of coenzyme A and histone acetyltransferase activity. *Chemical Communications*, **2015**, 51, 17611-4	5.8	33
57	A supercharged fluorescent protein as a versatile probe for homogeneous DNA detection and methylation analysis. *Angewandte Chemie - International Edition*, **2014**, 53, 8358-62	16.4	33
56	Robust reduced graphene oxide paper fabricated with a household non-stick frying pan: a large-area freestanding flexible substrate for supercapacitors. *RSC Advances*, **2015**, 5, 33981-33989	3.7	32
55	Label-free fluorescence assay for thrombin based on unmodified quantum dots. *Biosensors and Bioelectronics*, **2014**, 54, 42-7	11.8	28
54	Fluorescent detection of protein kinase based on zirconium ions-immobilized magnetic nanoparticles. *Analytica Chimica Acta*, **2013**, 780, 89-94	6.6	28
53	Enzyme-Activated G-Quadruplex Synthesis for in Situ Label-Free Detection and Bioimaging of Cell Apoptosis. *Analytical Chemistry*, **2017**, 89, 1892-1899	7.8	26
52	Functional Titanium Carbide MXenes-Loaded Entropy-Driven RNA Explorer for Long Noncoding RNA PCA3 Imaging in Live Cells. *Analytical Chemistry*, **2019**, 91, 8622-8629	7.8	26
51	Enzymatically generated long polyT-templated copper nanoparticles for versatile biosensing assay of DNA-related enzyme activity. *Analytical Methods*, **2015**, 7, 4355-4361	3.2	24
50	A biomimetic colorimetric logic gate system based on multi-functional peptide-mediated gold nanoparticle assembly. *Nanoscale*, **2016**, 8, 8591-9	7.7	24
49	Peptide Logic Circuits Based on Chemoenzymatic Ligation for Programmable Cell Apoptosis. *Angewandte Chemie - International Edition*, **2017**, 56, 14888-14892	16.4	22
48	A poly(ADP-ribose) polymerase-1 activity assay based on the FRET between a cationic conjugated polymer and supercharged green fluorescent protein. *Chemical Communications*, **2015**, 51, 14389-92	5.8	22
47	Nanomaterial-based tools for protein kinase bioanalysis. *TrAC - Trends in Analytical Chemistry*, **2014**, 58, 40-53	14.6	22
46	Phosphorylation-Mediated Assembly of a Semisynthetic Fluorescent Protein for Label-Free Detection of Protein Kinase Activity. *Analytical Chemistry*, **2015**, 87, 6311-8	7.8	22
45	DNA nanostructure-based nucleic acid probes: construction and biological applications. *Chemical Science*, **2021**, 12, 7602-7622	9.4	22
44	Protein@Inorganic Nanodumpling System for High-Loading Protein Delivery with Activatable Fluorescence and Magnetic Resonance Bimodal Imaging Capabilities. *ACS Nano*, **2020**, 14, 2172-2182	16.7	21

43	Automatic and integrated micro-enzyme assay (AIEA) platform for highly sensitive thrombin analysis via an engineered fluorescence protein-functionalized monolithic capillary column. *Analytical Chemistry*, **2015**, 87, 4552-9	7.8	19
42	Transpeptidation-Mediated Assembly of Tripartite Split Green Fluorescent Protein for Label-Free Assay of Sortase Activity. *Analytical Chemistry*, **2018**, 90, 3245-3252	7.8	17
41	Fluorescent detection of copper(II) based on DNA-templated click chemistry and graphene oxide. *Methods*, **2013**, 64, 299-304	4.6	17
40	A colorimetric and fluorescence sensing platform for two analytes in homogenous solution based on aptamer-modified gold nanoparticles. *Analytical Methods*, **2013**, 5, 2477	3.2	17
39	Fluorescent detection of protein kinase based on positively charged gold nanoparticles. *Talanta*, **2014**, 128, 360-5	6.2	15
38	A semisynthetic fluorescent protein assembly-based FRET probe for real-time profiling of cell membrane protease functions in situ. *Chemical Communications*, **2019**, 55, 2218-2221	5.8	12
37	DNA-mediated supercharged fluorescent protein/graphene oxide interaction for label-free fluorescence assay of base excision repair enzyme activity. *Chemical Communications*, **2015**, 51, 13373-6	5.8	12
36	Target-activated transcription for the amplified sensing of protease biomarkers. *Chemical Science*, **2020**, 11, 2993-2998	9.4	12
35	Simultaneous Monitoring of Cell-surface Receptor and Tumor-targeted Photodynamic Therapy via TdT-initiated Poly-G-Quadruplexes. *Scientific Reports*, **2018**, 8, 5551	4.9	12
34	Live-Cell Imaging of Neurotransmitter Release with a Cell-Surface-Anchored DNA-Nanoprism Fluorescent Sensor. *Analytical Chemistry*, **2020**, 92, 15194-15201	7.8	12
33	Fluorometric and Colorimetric Dual-Readout Assay for Histone Demethylase Activity Based on Formaldehyde Inhibition of Ag-Triggered Oxidation of -Phenylenediamine. *Analytical Chemistry*, **2020**, 92, 9421-9428	7.8	11
32	Charge designable and tunable GFP as a target pH-responsive carrier for intracellular functional protein delivery and tracing. *Chemical Communications*, **2018**, 54, 7806-7809	5.8	11
31	Label-free fluorescent detection of thrombin activity based on a recombinant enhanced green fluorescence protein and nickel ions immobilized nitrilotriacetic acid-coated magnetic nanoparticles. *Talanta*, **2013**, 116, 468-73	6.2	11
30	Chimeric Peptides Self-Assembling on Titanium Carbide MXenes as Biosensing Interfaces for Activity Assay of Post-translational Modification Enzymes. *Analytical Chemistry*, **2020**, 92, 8819-8826	7.8	10
29	Design strategies for fluorescent proteins/mimics and their applications in biosensing and bioimaging. *TrAC - Trends in Analytical Chemistry*, **2020**, 122, 115757	14.6	10
28	Engineering of Nucleic Acids and Synthetic Cofactors as Holo Sensors for Probing Signaling Molecules in the Cellular Membrane Microenvironment. *Angewandte Chemie*, **2019**, 131, 6662-6666	3.6	9
27	A Supercharged Fluorescent Protein as a Versatile Probe for Homogeneous DNA Detection and Methylation Analysis. *Angewandte Chemie*, **2014**, 126, 8498-8502	3.6	9
26	Electrostatic Force Triggering Elastic Condensation of Double-Stranded DNA for High-Performance One-Step Immunoassay. *Analytical Chemistry*, **2018**, 90, 11446-11452	7.8	9

25	Surface charge tuneable fluorescent protein-based logic gates for smart delivery of nucleic acids. *Chemical Communications*, **2017**, 53, 11326-11329	5.8	8
24	Development of the DNA-based biosensors for high performance in detection of molecular biomarkers: More rapid, sensitive, and universal. *Biosensors and Bioelectronics*, **2022**, 197, 113739	11.8	8
23	A de novo strategy to develop NIR precipitating fluorochrome for long-term in situ cell membrane bioimaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	8
22	Ultrasensitive ratiometric detection of Pb using DNA tetrahedron-mediated hyperbranched hybridization chain reaction. *Analytica Chimica Acta*, **2021**, 1147, 170-177	6.6	7
21	An enzymatic polymerization-activated silver nanocluster probe for in situ apoptosis assay. *Analyst, The*, **2018**, 143, 2908-2914	5	6
20	Biomineralization synthesis of a near-infrared fluorescent nanoprobe for direct glucose sensing in whole blood. *Nanoscale*, **2020**, 12, 864-870	7.7	6
19	Chemical colorimetric square wave and its derived logic gates based on tunable growth of plasmonic gold nanoparticles. *RSC Advances*, **2014**, 4, 18668-18675	3.7	5
18	Sensitive detection of DNA methyltransferase activity based on supercharged fluorescent protein and template-free DNA polymerization. *Science China Chemistry*, **2016**, 59, 809-815	7.9	5
17	Label-free fluorescent enzymatic assay of citrate synthase by CoA-Au(I) co-ordination polymer and its application in a multi-enzyme logic gate cascade. *Biosensors and Bioelectronics*, **2016**, 86, 1038-1046	11.8	5
16	Peptide Logic Circuits Based on Chemoenzymatic Ligation for Programmable Cell Apoptosis. *Angewandte Chemie*, **2017**, 129, 15084-15088	3.6	5
15	A dual enzymatic amplified strategy for the detection of endonuclease V activity. *Analytical Methods*, **2015**, 7, 8453-8458	3.2	4
14	A label-free fluorescence assay for thrombin activity analysis based on fluorescent protein and gold nanoparticles. *Analytical Methods*, **2016**, 8, 3691-3697	3.2	4
13	A mix-and-read fluorescence strategy for the switch-on probing of kinase activity based on an aptameric-peptide/graphene-oxide platform. *Chemistry - an Asian Journal*, **2014**, 9, 2560-7	4.5	4
12	A Solid-State Electrochemiluminescence Sensor for Label-Free Analysis of Leukemia Cells. *Electroanalysis*, **2013**, 25, 1780-1786	3	3
11	Amplified and label-free electrochemical detection of a protease biomarker by integrating proteolysis-triggered transcription. *Biosensors and Bioelectronics*, **2021**, 190, 113372	11.8	3
10	Sensitive and versatile fluorescent enzymatic assay of nucleases and DNA methyltransferase based on a supercharged fluorescent protein. *RSC Advances*, **2016**, 6, 34074-34080	3.7	2
9	Inductance-based sensing technique for wireless, remote-query measurement in liquid media. *Science China Chemistry*, **2010**, 53, 1391-1397	7.9	2
8	PAM-less conditional DNA substrates leverage trans-cleavage of CRISPR-Cas12a for versatile live-cell biosensing.. *Chemical Science*, **2022**, 13, 2011-2020	9.4	2

7	Dual-Product Synergistically Enhanced Colorimetric Assay for Sensitive Detection of Lipid Transferase Activity. *Analytical Chemistry*, **2020**, 92, 15236-15243	7.8	2
6	Integration of FRET and sequencing to engineer kinase biosensors from mammalian cell libraries. *Nature Communications*, **2021**, 12, 5031	17.4	2
5	Near-infrared light-controllable MXene hydrogel for tunable on-demand release of therapeutic proteins. *Acta Biomaterialia*, **2021**, 130, 138-148	10.8	2
4	Click-Type Protein-DNA Conjugation for Mn Imaging in Living Cells. *Analytical Chemistry*, **2019**, 91, 10180-10187	7.8	1
3	Photothermally Activated Coacervate Model Protocells as Signal Transducers Endow Mammalian Cells with Light Sensitivity. *Advanced Biology*, **2021**, 5, e2100695		1
2	Chemical–Biological approaches for the direct regulation of cell–cell aggregation. *Aggregate*,	22.9	
1	Enzyme-activated anchoring of peptide probes onto plasma membranes for selectively lighting up target cells. *Analyst, The*, **2020**, 145, 3626-3633	5	