Christopher J Chang

List of Publications by Year
in descending order

241 papers	43,939 citations	1536 106 h-index	2033 205 g-index
246 all docs	246 docs citations	246 times ranked	40909 citing authors

#	Article	IF	Citations
1	Covalent organic frameworks comprising cobalt porphyrins for catalytic CO ₂ reduction in water. Science, 2015, 349, 1208-1213.	12.6	2,046
2	Metals in Neurobiology: Probing Their Chemistry and Biology with Molecular Imaging. Chemical Reviews, 2008, 108, 1517-1549.	47.7	1,873
3	Reaction-based small-molecule fluorescent probes for chemoselective bioimaging. Nature Chemistry, 2012, 4, 973-984.	13.6	1,630
4	Chemistry and biology of reactive oxygen species in signaling or stress responses. Nature Chemical Biology, 2011, 7, 504-511.	8.0	1,461
5	A Molecular MoS ₂ Edge Site Mimic for Catalytic Hydrogen Generation. Science, 2012, 335, 698-702.	12.6	1,103
6	Synthetic fluorescent sensors for studying the cell biology of metals. Nature Chemical Biology, 2008, 4, 168-175.	8.0	1,011
7	Metalâ€“Organic Frameworks for Electrocatalytic Reduction of Carbon Dioxide. Journal of the American Chemical Society, 2015, 137, 14129-14135.	13.7	966
8	Chemical probes for molecular imaging and detection of hydrogen sulfide and reactive sulfur species in biological systems. Chemical Society Reviews, 2015, 44, 4596-4618.	38.1	885
9	A Selective Turn-On Fluorescent Sensor for Imaging Copper in Living Cells. Journal of the American Chemical Society, 2006, 128, 10-11.	13.7	748
10	Reaction-Based Fluorescent Probes for Selective Imaging of Hydrogen Sulfide in Living Cells. Journal of the American Chemical Society, 2011, 133, 10078-10080.	13.7	713
11	Boronate Oxidation as a Bioorthogonal Reaction Approach for Studying the Chemistry of Hydrogen Peroxide in Living Systems. Accounts of Chemical Research, 2011, 44, 793-804.	15.6	694
12	Unraveling the Biological Roles of Reactive Oxygen Species. Cell Metabolism, 2011, 13, 361-366.	16.2	661
13	A molecular molybdenum-oxo catalyst for generating hydrogen from water. Nature, 2010, 464, 1329-1333.	27.8	637
14	Aquaporin-3 mediates hydrogen peroxide uptake to regulate downstream intracellular signaling. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15681-15686.	7.1	595
15	A Selective, Cell-Permeable Optical Probe for Hydrogen Peroxide in Living Cells. Journal of the American Chemical Society, 2004, 126, 15392-15393.	13.7	594
16	Complexes of earth-abundant metals for catalytic electrochemical hydrogen generation under aqueous conditions. Chemical Society Reviews, 2013, 42, 2388-2400.	38.1	586
17	A Targetable Fluorescent Probe for Imaging Hydrogen Peroxide in the Mitochondria of Living Cells. Journal of the American Chemical Society, 2008, 130, 9638-9639.	13.7	582
18	Electrodeposited Cobalt-Sulfide Catalyst for Electrochemical and Photoelectrochemical Hydrogen Generation from Water. Journal of the American Chemical Society, 2013, 135, 17699-17702.	13.7	540

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19	Boronate-Based Fluorescent Probes for Imaging Cellular Hydrogen Peroxide. Journal of the American Chemical Society, 2005, 127, 16652-16659.	13.7	537
20	Connecting copper and cancer: from transition metal signalling to metalloplasia. Nature Reviews Cancer, 2022, 22, 102-113.	28.4	519
21	An ICT-Based Approach to Ratiometric Fluorescence Imaging of Hydrogen Peroxide Produced in Living Cells. Journal of the American Chemical Society, 2008, 130, 4596-4597.	13.7	500
22	Screening Mercury Levels in Fish with a Selective Fluorescent Chemosensor. Journal of the American Chemical Society, 2005, 127, 16030-16031.	13.7	494
23	A Palette of Fluorescent Probes with Varying Emission Colors for Imaging Hydrogen Peroxide Signaling in Living Cells. Journal of the American Chemical Society, 2010, 132, 5906-5915.	13.7	477
24	Slow Magnetic Relaxation in a High-Spin Iron(II) Complex. Journal of the American Chemical Society, 2010, 132, 1224-1225.	13.7	457
25	Reticular Electronic Tuning of Porphyrin Active Sites in Covalent Organic Frameworks for Electrocatalytic Carbon Dioxide Reduction. Journal of the American Chemical Society, 2018, 140, 1116-1122.	13.7	457
26	Synthetic fluorescent probes for studying copper in biological systems. Chemical Society Reviews, 2015, 44, 4400-4414.	38.1	440
27	Bacterial Killing by Dry Metallic Copper Surfaces. Applied and Environmental Microbiology, 2011, 77, 794-802.	3.1	421
28	Molecular imaging of hydrogen peroxide produced for cell signaling. Nature Chemical Biology, 2007, 3, 263-267.	8.0	406
29	Molecular Cobalt Pentapyridine Catalysts for Generating Hydrogen from Water. Journal of the American Chemical Society, 2011, 133, 9212-9215.	13.7	397
30	A Reaction-Based Fluorescent Probe for Selective Imaging of Carbon Monoxide in Living Cells Using a Palladium-Mediated Carbonylation. Journal of the American Chemical Society, 2012, 134, 15668-15671.	13.7	383
31	A FRET-Based Approach to Ratiometric Fluorescence Detection of Hydrogen Peroxide. Journal of the American Chemical Society, 2006, 128, 9640-9641.	13.7	362
32	Nanowireâ€“Bacteria Hybrids for Unassisted Solar Carbon Dioxide Fixation to Value-Added Chemicals. Nano Letters, 2015, 15, 3634-3639.	9.1	362
33	In vivo imaging of hydrogen peroxide production in a murine tumor model with a chemoselective bioluminescent reporter. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21316-21321.	7.1	356
34	Guidelines for measuring reactive oxygen species and oxidative damage in cells and in vivo. Nature Metabolism, 2022, 4, 651-662.	11.9	356
35	Redox-based reagents for chemoselective methionine bioconjugation. Science, 2017, 355, 597-602.	12.6	353
36	Cell-trappable fluorescent probes for endogenous hydrogen sulfide signaling and imaging H ₂ O ₂ -dependent H ₂ S production. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7131-7135.	7.1	344

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37	A Molecular Surface Functionalization Approach to Tuning Nanoparticle Electrocatalysts for Carbon Dioxide Reduction. Journal of the American Chemical Society, 2016, 138, 8120-8125.	13.7	340
38	Visualizing Ascorbate-Triggered Release of Labile Copper within Living Cells using a Ratiometric Fluorescent Sensor. Journal of the American Chemical Society, 2010, 132, 1194-1195.	13.7	328
39	A Selective Fluorescent Sensor for Detecting Lead in Living Cells. Journal of the American Chemical Society, 2006, 128, 9316-9317.	13.7	326
40	Slow Magnetic Relaxation in a Family of Trigonal Pyramidal Iron(II) Pyrrolide Complexes. Journal of the American Chemical Society, 2010, 132, 18115-18126.	13.7	317
41	Visible-Light Photoredox Catalysis: Selective Reduction of Carbon Dioxide to Carbon Monoxide by a Nickel N-Heterocyclic Carbeneâ€“Isoquinoline Complex. Journal of the American Chemical Society, 2013, 135, 14413-14424.	13.7	317
42	Mitochondrial-targeted fluorescent probes for reactive oxygen species. Current Opinion in Chemical Biology, 2010, 14, 50-56.	6.1	288
43	Organelle-Targetable Fluorescent Probes for Imaging Hydrogen Peroxide in Living Cells via SNAP-Tag Protein Labeling. Journal of the American Chemical Society, 2010, 132, 4455-4465.	13.7	274
44	Strategy for Dual-Analyte Luciferin Imaging: In Vivo Bioluminescence Detection of Hydrogen Peroxide and Caspase Activity in a Murine Model of Acute Inflammation. Journal of the American Chemical Society, 2013, 135, 1783-1795.	13.7	261
45	A Targetable Fluorescent Sensor Reveals That Copper-Deficient SCO1 and SCO2 Patient Cells Prioritize Mitochondrial Copper Homeostasis. Journal of the American Chemical Society, 2011, 133, 8606-8616.	13.7	255
46	Targeted Proton Delivery in the Catalyzed Reduction of Oxygen to Water by Bimetallic Pacman Porphyrins. Journal of the American Chemical Society, 2004, 126, 10013-10020.	13.7	249
47	Nox2 redox signaling maintains essential cell populations in the brain. Nature Chemical Biology, 2011, 7, 106-112.	8.0	248
48	Mammals divert endogenous genotoxic formaldehyde into one-carbon metabolism. Nature, 2017, 548, 549-554.	27.8	246
49	Fluorescent probes for sensing and imaging biological hydrogen sulfide. Current Opinion in Chemical Biology, 2012, 16, 595-601.	6.1	245
50	Responsive magnetic resonance imaging contrast agents as chemical sensors for metals in biology and medicine. Chemical Society Reviews, 2010, 39, 51-60.	38.1	237
51	Recognition- and Reactivity-Based Fluorescent Probes for Studying Transition Metal Signaling in Living Systems. Accounts of Chemical Research, 2015, 48, 2434-2442.	15.6	234
52	Hybrid bioinorganic approach to solar-to-chemical conversion. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11461-11466.	7.1	234
53	A tautomeric zinc sensor for ratiometric fluorescence imaging: Application to nitric oxide-induced release of intracellular zinc. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1129-1134.	7.1	222
54	An Aza-Cope Reactivity-Based Fluorescent Probe for Imaging Formaldehyde in Living Cells. Journal of the American Chemical Society, 2015, 137, 10886-10889.	13.7	219

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55	An Endoperoxide Reactivity-Based FRET Probe for Ratiometric Fluorescence Imaging of Labile Iron Pools in Living Cells. Journal of the American Chemical Society, 2016, 138, 14338-14346.	13.7	213
56	A Turn-On Fluorescent Sensor for Detecting Nickel in Living Cells. Journal of the American Chemical Society, 2009, 131, 18020-18021.	13.7	205
57	Wilson Disease Protein ATP7B Utilizes Lysosomal Exocytosis to Maintain Copper Homeostasis. Developmental Cell, 2014, 29, 686-700.	7.0	203
58	Metalâ€“Polypyridyl Catalysts for Electro- and Photochemical Reduction of Water to Hydrogen. Accounts of Chemical Research, 2015, 48, 2027-2036.	15.6	201
59	Positional effects of second-sphere amide pendants on electrochemical CO₂ reduction catalyzed by iron porphyrins. Chemical Science, 2018, 9, 2952-2960.	7.4	199
60	Electrocatalytic reduction of protons to hydrogen by a water-compatible cobalt polypyridyl platform. Chemical Communications, 2010, 46, 958-960.	4.1	195
61	Near-infrared fluorescent sensor for in vivo copper imaging in a murine Wilson disease model. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2228-2233.	7.1	188
62	Calcium-dependent copper redistributions in neuronal cells revealed by a fluorescent copper sensor and X-ray fluorescence microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5980-5985.	7.1	182
63	Photocatalytic generation of hydrogen from water using a cobalt pentapyridine complex in combination with molecular and semiconductor nanowire photosensitizers. Chemical Science, 2013, 4, 118-124.	7.4	179
64	Reactive Oxygen Species-Induced Actin Glutathionylation Controls Actin Dynamics in Neutrophils. Immunity, 2012, 37, 1037-1049.	14.3	174
65	Proton-coupled electron transfer: a unifying mechanism for biological charge transport, amino acid radical initiation and propagation, and bond making/breaking reactions of water and oxygen. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1655, 13-28.	1.0	171
66	Activityâ€Based Sensing: A Synthetic Methods Approach for Selective Molecular Imaging and Beyond. Angewandte Chemie - International Edition, 2020, 59, 13734-13762.	13.8	171
67	Catalytic proton reduction with transition metal complexes of the redox-active ligand bpy2PYMe. Chemical Science, 2013, 4, 3934.	7.4	166
68	Chemical Approaches to Discovery and Study of Sources and Targets of Hydrogen Peroxide Redox Signaling Through NADPH Oxidase Proteins. Annual Review of Biochemistry, 2015, 84, 765-790.	11.1	166
69	A two-photon fluorescent probe for ratiometric imaging of hydrogen peroxide in live tissue. Chemical Communications, 2011, 47, 9618.	4.1	162
70	Proton-Coupled Oâ^'O Activation on a Redox Platform Bearing a Hydrogen-Bonding Scaffold. Journal of the American Chemical Society, 2003, 125, 1866-1876.	13.7	158
71	Fluorescent probes for nitric oxide and hydrogen peroxide in cell signaling. Current Opinion in Chemical Biology, 2007, 11, 620-625.	6.1	157
72	MDM2 and MDMX promote ferroptosis by PPARÎ±-mediated lipid remodeling. Genes and Development, 2020, 34, 526-543.	5.9	156

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73	Mitochondrial DNA damage: Molecular marker of vulnerable nigral neurons in Parkinson's disease. Neurobiology of Disease, 2014, 70, 214-223.	4.4	155
74	Molecular Imaging of Labile Iron(II) Pools in Living Cells with a Turn-On Fluorescent Probe. Journal of the American Chemical Society, 2013, 135, 15165-15173.	13.7	154
75	Chemiluminescent Probes for Activityâ€Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. Angewandte Chemie - International Edition, 2018, 57, 7508-7512.	13.8	150
76	Copper regulates cyclic-AMP-dependent lipolysis. Nature Chemical Biology, 2016, 12, 586-592.	8.0	149
77	Iron Porphyrins Embedded into a Supramolecular Porous Organic Cage for Electrochemical CO₂ Reduction in Water. Angewandte Chemie - International Edition, 2018, 57, 9684-9688.	13.8	149
78	Electrocatalytic four-electron reduction of oxygen to water by a highly flexible cofacial cobalt bisporphyrin. Chemical Communications, 2000, , 1355-1356.	4.1	148
79	A Smart Magnetic Resonance Contrast Agent for Selective Copper Sensing. Journal of the American Chemical Society, 2006, 128, 15942-15943.	13.7	148
80	Mechanisms of Contact-Mediated Killing of Yeast Cells on Dry Metallic Copper Surfaces. Applied and Environmental Microbiology, 2011, 77, 416-426.	3.1	148
81	Preparation and use of MitoPY1 for imaging hydrogen peroxide in mitochondria of live cells. Nature Protocols, 2013, 8, 1249-1259.	12.0	144
82	Subcellular metal imaging identifies dynamic sites of Cu accumulation in Chlamydomonas. Nature Chemical Biology, 2014, 10, 1034-1042.	8.0	143
83	Bright Fluorescent Chemosensor Platforms for Imaging Endogenous Pools of Neuronal Zinc. Chemistry and Biology, 2004, 11, 203-210.	6.0	142
84	Copper-Responsive Magnetic Resonance Imaging Contrast Agents. Journal of the American Chemical Society, 2009, 131, 8527-8536.	13.7	139
85	Searching for harmony in transition-metal signaling. Nature Chemical Biology, 2015, 11, 744-747.	8.0	139
86	In vivo bioluminescence imaging reveals copper deficiency in a murine model of nonalcoholic fatty liver disease. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14219-14224.	7.1	139
87	Copper Capture in a Thioether-Functionalized Porous Polymer Applied to the Detection of Wilsonâ€™s Disease. Journal of the American Chemical Society, 2016, 138, 7603-7609.	13.7	137
88	Bioinspiration in light harvesting and catalysis. Nature Reviews Materials, 2020, 5, 828-846.	48.7	136
89	A New Direction in Dye-Sensitized Solar Cells Redox Mediator Development: In Situ Fine-Tuning of the Cobalt(II)/(III) Redox Potential through Lewis Base Interactions. Journal of the American Chemical Society, 2012, 134, 16646-16653.	13.7	134
90	Direct Observation of the â€œPac-Manâ€•Effect from Dibenzofuran-Bridged Cofacial Bisporphyrins. Journal of the American Chemical Society, 2000, 122, 410-411.	13.7	133

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91	A Fluorescent Sensor for Imaging Reversible Redox Cycles in Living Cells. Journal of the American Chemical Society, 2007, 129, 3458-3459.	13.7	132
92	â€œHangmanâ€•Porphyrins for the Assembly of a Model Heme Water Channel. Journal of the American Chemical Society, 2001, 123, 1513-1514.	13.7	129
93	A High-Spin Iron(IV)â€“Oxo Complex Supported by a Trigonal Nonheme Pyrrolide Platform. Journal of the American Chemical Society, 2012, 134, 1536-1542.	13.7	129
94	A Nuclear-Localized Fluorescent Hydrogen Peroxide Probe for Monitoring Sirtuin-Mediated Oxidative Stress Responses InÂVivo. Chemistry and Biology, 2011, 18, 943-948.	6.0	125
95	A reactivity-based probe of the intracellular labile ferrous iron pool. Nature Chemical Biology, 2016, 12, 680-685.	8.0	122
96	Development of a General Aza-Cope Reaction Trigger Applied to Fluorescence Imaging of Formaldehyde in Living Cells. Journal of the American Chemical Society, 2017, 139, 5338-5350.	13.7	121
97	Copper signaling in the brain and beyond. Journal of Biological Chemistry, 2018, 293, 4628-4635.	3.4	121
98	Nickel N-heterocyclic carbeneâ€“pyridine complexes that exhibit selectivity for electrocatalytic reduction of carbon dioxide over water. Chemical Communications, 2011, 47, 6578.	4.1	120
99	Analytical Methods for Imaging Metals in Biology: From Transition Metal Metabolism to Transition Metal Signaling. Analytical Chemistry, 2017, 89, 22-41.	6.5	120
100	Copper is an endogenous modulator of neural circuit spontaneous activity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16280-16285.	7.1	118
101	ZP8, a Neuronal Zinc Sensor with Improved Dynamic Range; Imaging Zinc in Hippocampal Slices with Two-Photon Microscopy. Inorganic Chemistry, 2004, 43, 6774-6779.	4.0	117
102	Boronate-Based Fluorescent Probes. Methods in Enzymology, 2013, 526, 19-43.	1.0	116
103	Mitochondria Are the Source of Hydrogen Peroxide for Dynamic Brain-Cell Signaling. Journal of Neuroscience, 2009, 29, 9002-9010.	3.6	115
104	A Boronate-Caged [¹⁸F]FLT Probe for Hydrogen Peroxide Detection Using Positron Emission Tomography. Journal of the American Chemical Society, 2014, 136, 14742-14745.	13.7	113
105	A selective reaction-based fluorescent probe for detecting cobalt in living cells. Chemical Communications, 2012, 48, 5268.	4.1	111
106	Chelating Nâ€Heterocyclic Carbene Ligands Enable Tuning of Electrocatalytic CO₂ Reduction to Formate and Carbon Monoxide: Surface Organometallic Chemistry. Angewandte Chemie - International Edition, 2018, 57, 4981-4985.	13.8	110
107	Lanthanide-based luminescent probes for selective time-gated detection of hydrogen peroxide in water and in living cells. Chemical Communications, 2010, 46, 7510.	4.1	109
108	Inflammation mobilizes copper metabolism to promote colon tumorigenesis via an IL-17-STEAP4-XIAP axis. Nature Communications, 2020, 11, 900.	12.8	108

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109	Xanthene-Bridged Cofacial Bisporphyrins. Inorganic Chemistry, 2000, 39, 959-966.	4.0	107
110	Bioinspired Thiophosphorodichloridate Reagents for Chemoselective Histidine Bioconjugation. Journal of the American Chemical Society, 2019, 141, 7294-7301.	13.7	102
111	Iron Chaperone Poly rC Binding Protein 1 Protects Mouse Liver From Lipid Peroxidation and Steatosis. Hepatology, 2021, 73, 1176-1193.	7.3	101
112	In vivo bioluminescence imaging of labile iron accumulation in a murine model of Acinetobacter baumannii infection. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12669-12674.	7.1	100
113	Preparation and use of Coppersensor-1, a synthetic fluorophore for live-cell copper imaging. Nature Protocols, 2006, 1, 824-827.	12.0	99
114	Bioinspired design of redox-active ligands for multielectron catalysis: effects of positioning pyrazine reservoirs on cobalt for electro- and photocatalytic generation of hydrogen from water. Chemical Science, 2015, 6, 4954-4972.	7.4	99
115	A mechanistic study of proton reduction catalyzed by a pentapyridine cobalt complex: evidence for involvement of an anation-based pathway. Chemical Science, 2013, 4, 1578.	7.4	98
116	A Hydrogen Peroxide-Responsive Hyperpolarized ¹³C MRI Contrast Agent. Journal of the American Chemical Society, 2011, 133, 3776-3779.	13.7	97
117	Supramolecular Tuning Enables Selective Oxygen Reduction Catalyzed by Cobalt Porphyrins for Direct Electrosynthesis of Hydrogen Peroxide. Angewandte Chemie - International Edition, 2020, 59, 4902-4907.	13.8	97
118	Glucose metabolism impacts the spatiotemporal onset and magnitude of HSC induction in vivo. Blood, 2013, 121, 2483-2493.	1.4	96
119	Catalytic Oâ˜O Activation Chemistry Mediated by Iron Hangman Porphyrins with a Wide Range of Proton-Donating Abilities. Organic Letters, 2003, 5, 2421-2424.	4.6	95
120	Structural, Spectroscopic, and Reactivity Comparison of Xanthene- and Dibenzofuran-Bridged Cofacial Bisporphyrins. Inorganic Chemistry, 2002, 41, 3102-3109.	4.0	94
121	Fluorescent probes for imaging formaldehyde in biological systems. Current Opinion in Chemical Biology, 2017, 39, 17-23.	6.1	94
122	Activity-based ratiometric FRET probe reveals oncogene-driven changes in labile copper pools induced by altered glutathione metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18285-18294.	7.1	94
123	A 2-aza-Cope reactivity-based platform for ratiometric fluorescence imaging of formaldehyde in living cells. Chemical Science, 2017, 8, 4073-4081.	7.4	93
124	Copper regulates rest-activity cycles through the locus coeruleus-norepinephrine system. Nature Chemical Biology, 2018, 14, 655-663.	8.0	93
125	Hybrid Catalysts for Artificial Photosynthesis: Merging Approaches from Molecular, Materials, and Biological Catalysis. Accounts of Chemical Research, 2020, 53, 575-587.	15.6	93
126	Versatile Histochemical Approach to Detection of Hydrogen Peroxide in Cells and Tissues Based on Puromycin Staining. Journal of the American Chemical Society, 2018, 140, 6109-6121.	13.7	89

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127	Aerobic Epoxidation of Olefins Catalyzed by Electronegative Vanadyl Salen Complexes. Inorganic Chemistry, 1997, 36, 5927-5930.	4.0	88
128	N2O Activation and Oxidation Reactivity from a Non-Heme Iron Pyrrole Platform. Journal of the American Chemical Society, 2007, 129, 15128-15129.	13.7	88
129	Stable Dyeâ€Sensitized Solar Cell Electrolytes Based on Cobalt(II)/(III) Complexes of a Hexadentate Pyridyl Ligand. Angewandte Chemie - International Edition, 2013, 52, 5527-5531.	13.8	87
130	A Phototriggered Molecular Spring for Aerobic Catalytic Oxidation Reactions. Journal of the American Chemical Society, 2002, 124, 7884-7885.	13.7	86
131	Activity-based sensing fluorescent probes for iron in biological systems. Current Opinion in Chemical Biology, 2018, 43, 113-118.	6.1	86
132	Activity-Based Sensing Methods for Monitoring the Reactive Carbon Species Carbon Monoxide and Formaldehyde in Living Systems. Accounts of Chemical Research, 2019, 52, 2841-2848.	15.6	86
133	Peptidoglycan Recognition Proteins Kill Bacteria by Inducing Oxidative, Thiol, and Metal Stress. PLoS Pathogens, 2014, 10, e1004280.	4.7	85
134	A red-emitting naphthofluorescein-based fluorescent probe for selective detection of hydrogen peroxide in living cells. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5948-5950.	2.2	83
135	Molecular Imaging. Current Opinion in Chemical Biology, 2010, 14, 1-2.	6.1	83
136	Electrochemical generation of hydrogen from acetic acid using a molecular molybdenumâ€“oxo catalyst. Energy and Environmental Science, 2012, 5, 7762.	30.8	79
137	Metalâ€“Ligand Cooperativity via Exchange Coupling Promotes Iron- Catalyzed Electrochemical CO₂ Reduction at Low Overpotentials. Journal of the American Chemical Society, 2020, 142, 20489-20501.	13.7	77
138	A dendrimer-based platform for simultaneous dual fluorescence imaging of hydrogen peroxide and pH gradients produced in living cells. Chemical Science, 2011, 2, 1156.	7.4	75
139	S100B and APP Promote a Gliocentric Shift and Impaired Neurogenesis in Down Syndrome Neural Progenitors. PLoS ONE, 2011, 6, e22126.	2.5	73
140	Improvement of Human Keratinocyte Migration by a Redox Active Bioelectric Dressing. PLoS ONE, 2014, 9, e89239.	2.5	72
141	Computational and Experimental Study of the Mechanism of Hydrogen Generation from Water by a Molecular Molybdenum-Oxo Electrocatalyst. Journal of the American Chemical Society, 2012, 134, 5233-5242.	13.7	68
142	meso-Tetraaryl Cofacial Bisporphyrins Delivered by Suzuki Cross-Coupling. Journal of Organic Chemistry, 2003, 68, 4075-4078.	3.2	67
143	A Structurally Characterized Nitrous Oxide Complex of Vanadium. Journal of the American Chemical Society, 2011, 133, 2108-2111.	13.7	67
144	Excited-State Dynamics of Cofacial Pacman Porphyrins. Journal of Physical Chemistry A, 2002, 106, 11700-11708.	2.5	65

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145	Dephosphorylation of Tyrosine 393 in Argonaute 2 by Protein Tyrosine Phosphatase 1B Regulates Gene Silencing in Oncogenic RAS-Induced Senescence. Molecular Cell, 2014, 55, 782-790.	9.7	65
146	Supramolecular Porphyrin Cages Assembled at Molecularâ€“Materials Interfaces for Electrocatalytic CO Reduction. ACS Central Science, 2017, 3, 1032-1040.	11.3	65
147	The histone demethylase Phf2 acts as a molecular checkpoint to prevent NAFLD progression during obesity. Nature Communications, 2018, 9, 2092.	12.8	63
148	Effect of Cerebral Amyloid Angiopathy on Brain Iron, Copper, and Zinc in Alzheimer's Disease. Journal of Alzheimer's Disease, 2011, 24, 137-149.	2.6	62
149	Chemiluminescent Probes for Activityâ€Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. Angewandte Chemie, 2018, 130, 7630-7634.	2.0	60
150	Mitochondrial alarmins released by degenerating motor axon terminals activate perisynaptic Schwann cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E497-505.	7.1	59
151	Ligand-Directed Approach to Activity-Based Sensing: Developing Palladacycle Fluorescent Probes That Enable Endogenous Carbon Monoxide Detection. Journal of the American Chemical Society, 2020, 142, 15917-15930.	13.7	58
152	A Physical Organic Approach to Tuning Reagents for Selective and Stable Methionine Bioconjugation. Journal of the American Chemical Society, 2019, 141, 12657-12662.	13.7	56
153	Tuning Second Coordination Sphere Interactions in Polypyridylâ€“Iron Complexes to Achieve Selective Electrocatalytic Reduction of Carbon Dioxide to Carbon Monoxide. Inorganic Chemistry, 2020, 59, 5206-5217.	4.0	56
154	Water-Soluble Iron(IV)-Oxo Complexes Supported by Pentapyridine Ligands: Axial Ligand Effects on Hydrogen Atom and Oxygen Atom Transfer Reactivity. Inorganic Chemistry, 2015, 54, 5879-5887.	4.0	55
155	A tandem activity-based sensing and labeling strategy enables imaging of transcellular hydrogen peroxide signaling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	55
156	Porphyrin Architectures Bearing Functionalized Xanthene Spacers. Journal of Organic Chemistry, 2002, 67, 1403-1406.	3.2	54
157	Transient Absorption Studies of the Pacman Effect in Spring-Loaded Diiron(III) Î¼-Oxo Bisporphyrins. Inorganic Chemistry, 2003, 42, 8270-8277.	4.0	54
158	H2O2 Production Downstream of FLT3 Is Mediated by p22phox in the Endoplasmic Reticulum and Is Required for STAT5 Signalling. PLoS ONE, 2012, 7, e34050.	2.5	54
159	A Hydrogen-Bond Facilitated Cycle for Oxygen Reduction by an Acid- and Base-Compatible Iron Platform. Inorganic Chemistry, 2009, 48, 10024-10035.	4.0	51
160	A copper-activated magnetic resonance imaging contrast agent with improved turn-on relaxivity response and anion compatibility. Dalton Transactions, 2010, 39, 469-476.	3.3	51
161	Selenoprotein H is an essential regulator of redox homeostasis that cooperates with p53 in development and tumorigenesis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5562-71.	7.1	49
162	Zinc-secreting Paneth Cells Studied by ZP Fluorescence. Journal of Histochemistry and Cytochemistry, 2006, 54, 311-316.	2.5	48

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163	Acinetobacter baumannii OxyR Regulates the Transcriptional Response to Hydrogen Peroxide. Infection and Immunity, 2019, 87, .	2.2	48
164	Caged luciferins for bioluminescent activity-based sensing. Current Opinion in Biotechnology, 2019, 60, 198-204.	6.6	47
165	Inorganic Chemistry Approaches to Activity-Based Sensing: From Metal Sensors to Bioorthogonal Metal Chemistry. Inorganic Chemistry, 2019, 58, 13546-13560.	4.0	46
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