

Christopher J Chang

List of Publications by Citations

Source: <https://exaly.com/author-pdf/350791/christopher-j-chang-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

228
papers

35,357
citations

95
h-index

186
g-index

246
ext. papers

39,880
ext. citations

13.9
avg, IF

7.78
L-index

#	Paper	IF	Citations
228	Metals in neurobiology: probing their chemistry and biology with molecular imaging. <i>Chemical Reviews</i> , 2008 , 108, 1517-49	68.1	1686
227	Covalent organic frameworks comprising cobalt porphyrins for catalytic CO ₂ reduction in water. <i>Science</i> , 2015 , 349, 1208-13	33.3	1540
226	Reaction-based small-molecule fluorescent probes for chemoselective bioimaging. <i>Nature Chemistry</i> , 2012 , 4, 973-84	17.6	1370
225	Chemistry and biology of reactive oxygen species in signaling or stress responses. <i>Nature Chemical Biology</i> , 2011 , 7, 504-11	11.7	1141
224	A molecular MoS ₂ edge site mimic for catalytic hydrogen generation. <i>Science</i> , 2012 , 335, 698-702	33.3	992
223	Synthetic fluorescent sensors for studying the cell biology of metals. <i>Nature Chemical Biology</i> , 2008 , 4, 168-75	11.7	934
222	Metal-organic frameworks for electrocatalytic reduction of carbon dioxide. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14129-35	16.4	768
221	Chemical probes for molecular imaging and detection of hydrogen sulfide and reactive sulfur species in biological systems. <i>Chemical Society Reviews</i> , 2015 , 44, 4596-4618	58.5	738
220	A selective turn-on fluorescent sensor for imaging copper in living cells. <i>Journal of the American Chemical Society</i> , 2006 , 128, 10-1	16.4	686
219	Reaction-based fluorescent probes for selective imaging of hydrogen sulfide in living cells. <i>Journal of the American Chemical Society</i> , 2011 , 133, 10078-80	16.4	640
218	Boronate oxidation as a bioorthogonal reaction approach for studying the chemistry of hydrogen peroxide in living systems. <i>Accounts of Chemical Research</i> , 2011 , 44, 793-804	24.3	592
217	A molecular molybdenum-oxo catalyst for generating hydrogen from water. <i>Nature</i> , 2010 , 464, 1329-33	50.4	564
216	Unraveling the biological roles of reactive oxygen species. <i>Cell Metabolism</i> , 2011 , 13, 361-366	24.6	542
215	A targetable fluorescent probe for imaging hydrogen peroxide in the mitochondria of living cells. <i>Journal of the American Chemical Society</i> , 2008 , 130, 9638-9	16.4	534
214	A selective, cell-permeable optical probe for hydrogen peroxide in living cells. <i>Journal of the American Chemical Society</i> , 2004 , 126, 15392-3	16.4	532
213	Complexes of earth-abundant metals for catalytic electrochemical hydrogen generation under aqueous conditions. <i>Chemical Society Reviews</i> , 2013 , 42, 2388-400	58.5	518
212	Aquaporin-3 mediates hydrogen peroxide uptake to regulate downstream intracellular signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 15681-6	11.5	489

211	Boronate-based fluorescent probes for imaging cellular hydrogen peroxide. <i>Journal of the American Chemical Society</i> , 2005 , 127, 16652-9	16.4	484
210	Electrodeposited cobalt-sulfide catalyst for electrochemical and photoelectrochemical hydrogen generation from water. <i>Journal of the American Chemical Society</i> , 2013 , 135, 17699-702	16.4	463
209	Screening mercury levels in fish with a selective fluorescent chemosensor. <i>Journal of the American Chemical Society</i> , 2005 , 127, 16030-1	16.4	463
208	An ICT-based approach to ratiometric fluorescence imaging of hydrogen peroxide produced in living cells. <i>Journal of the American Chemical Society</i> , 2008 , 130, 4596-7	16.4	449
207	A palette of fluorescent probes with varying emission colors for imaging hydrogen peroxide signaling in living cells. <i>Journal of the American Chemical Society</i> , 2010 , 132, 5906-15	16.4	420
206	Slow magnetic relaxation in a high-spin iron(II) complex. <i>Journal of the American Chemical Society</i> , 2010 , 132, 1224-5	16.4	400
205	Molecular imaging of hydrogen peroxide produced for cell signaling. <i>Nature Chemical Biology</i> , 2007 , 3, 263-7	11.7	360
204	Molecular cobalt pentapyridine catalysts for generating hydrogen from water. <i>Journal of the American Chemical Society</i> , 2011 , 133, 9212-5	16.4	354
203	Synthetic fluorescent probes for studying copper in biological systems. <i>Chemical Society Reviews</i> , 2015 , 44, 4400-14	58.5	339
202	A FRET-based approach to ratiometric fluorescence detection of hydrogen peroxide. <i>Journal of the American Chemical Society</i> , 2006 , 128, 9640-1	16.4	332
201	Bacterial killing by dry metallic copper surfaces. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 794-802	16.4	331
200	In vivo imaging of hydrogen peroxide production in a murine tumor model with a chemoselective bioluminescent reporter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 21316-21	11.5	320
199	A reaction-based fluorescent probe for selective imaging of carbon monoxide in living cells using a palladium-mediated carbonylation. <i>Journal of the American Chemical Society</i> , 2012 , 134, 15668-71	16.4	307
198	Visualizing ascorbate-triggered release of labile copper within living cells using a ratiometric fluorescent sensor. <i>Journal of the American Chemical Society</i> , 2010 , 132, 1194-5	16.4	307
197	A selective fluorescent sensor for detecting lead in living cells. <i>Journal of the American Chemical Society</i> , 2006 , 128, 9316-7	16.4	305
196	Reticular Electronic Tuning of Porphyrin Active Sites in Covalent Organic Frameworks for Electrocatalytic Carbon Dioxide Reduction. <i>Journal of the American Chemical Society</i> , 2018 , 140, 1116-1122	16.4	300
195	Cell-trappable fluorescent probes for endogenous hydrogen sulfide signaling and imaging H ₂ O ₂ -dependent H ₂ S production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 7131-5	11.5	287
194	Slow magnetic relaxation in a family of trigonal pyramidal iron(II) pyrrolide complexes. <i>Journal of the American Chemical Society</i> , 2010 , 132, 18115-26	16.4	285

193	A Molecular Surface Functionalization Approach to Tuning Nanoparticle Electrocatalysts for Carbon Dioxide Reduction. <i>Journal of the American Chemical Society</i> , 2016 , 138, 8120-5	16.4	272
192	Nanowire-bacteria hybrids for unassisted solar carbon dioxide fixation to value-added chemicals. <i>Nano Letters</i> , 2015 , 15, 3634-9	11.5	269
191	Mitochondrial-targeted fluorescent probes for reactive oxygen species. <i>Current Opinion in Chemical Biology</i> , 2010 , 14, 50-6	9.7	269
190	Visible-light photoredox catalysis: selective reduction of carbon dioxide to carbon monoxide by a nickel N-heterocyclic carbene-isoquinoline complex. <i>Journal of the American Chemical Society</i> , 2013 , 135, 14413-24	16.4	262
189	Organelle-targetable fluorescent probes for imaging hydrogen peroxide in living cells via SNAP-Tag protein labeling. <i>Journal of the American Chemical Society</i> , 2010 , 132, 4455-65	16.4	244
188	Redox-based reagents for chemoselective methionine bioconjugation. <i>Science</i> , 2017 , 355, 597-602	33.3	231
187	Targeted proton delivery in the catalyzed reduction of oxygen to water by bimetallic pacman porphyrins. <i>Journal of the American Chemical Society</i> , 2004 , 126, 10013-20	16.4	227
186	Strategy for dual-analyte luciferin imaging: in vivo bioluminescence detection of hydrogen peroxide and caspase activity in a murine model of acute inflammation. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1783-95	16.4	224
185	A targetable fluorescent sensor reveals that copper-deficient SCO1 and SCO2 patient cells prioritize mitochondrial copper homeostasis. <i>Journal of the American Chemical Society</i> , 2011 , 133, 8606-16	16.4	224
184	Responsive magnetic resonance imaging contrast agents as chemical sensors for metals in biology and medicine. <i>Chemical Society Reviews</i> , 2010 , 39, 51-60	58.5	223
183	Fluorescent probes for sensing and imaging biological hydrogen sulfide. <i>Current Opinion in Chemical Biology</i> , 2012 , 16, 595-601	9.7	219
182	A tautomeric zinc sensor for ratiometric fluorescence imaging: application to nitric oxide-induced release of intracellular zinc. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 1129-34	11.5	215
181	Nox2 redox signaling maintains essential cell populations in the brain. <i>Nature Chemical Biology</i> , 2011 , 7, 106-12	11.7	207
180	Recognition- and reactivity-based fluorescent probes for studying transition metal signaling in living systems. <i>Accounts of Chemical Research</i> , 2015 , 48, 2434-42	24.3	189
179	A turn-on fluorescent sensor for detecting nickel in living cells. <i>Journal of the American Chemical Society</i> , 2009 , 131, 18020-1	16.4	182
178	An Aza-Cope Reactivity-Based Fluorescent Probe for Imaging Formaldehyde in Living Cells. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10886-9	16.4	177
177	Hybrid bioinorganic approach to solar-to-chemical conversion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11461-6	11.5	174
176	Electrocatalytic reduction of protons to hydrogen by a water-compatible cobalt polypyridyl platform. <i>Chemical Communications</i> , 2010 , 46, 958-60	5.8	173

175	Photocatalytic generation of hydrogen from water using a cobalt pentapyridine complex in combination with molecular and semiconductor nanowire photosensitizers. <i>Chemical Science</i> , 2013 , 4, 118-124	9.4	166
174	Metal-polypyridyl catalysts for electro- and photochemical reduction of water to hydrogen. <i>Accounts of Chemical Research</i> , 2015 , 48, 2027-36	24.3	165
173	Near-infrared fluorescent sensor for in vivo copper imaging in a murine Wilson disease model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 2228-33	11.5	165
172	Mammals divert endogenous genotoxic formaldehyde into one-carbon metabolism. <i>Nature</i> , 2017 , 548, 549-554	50.4	158
171	Calcium-dependent copper redistributions in neuronal cells revealed by a fluorescent copper sensor and X-ray fluorescence microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 5980-5	11.5	158
170	An Endoperoxide Reactivity-Based FRET Probe for Ratiometric Fluorescence Imaging of Labile Iron Pools in Living Cells. <i>Journal of the American Chemical Society</i> , 2016 , 138, 14338-14346	16.4	152
169	Fluorescent probes for nitric oxide and hydrogen peroxide in cell signaling. <i>Current Opinion in Chemical Biology</i> , 2007 , 11, 620-5	9.7	150
168	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. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2004 , 1655, 13-28	4.6	149
167	Wilson disease protein ATP7B utilizes lysosomal exocytosis to maintain copper homeostasis. <i>Developmental Cell</i> , 2014 , 29, 686-700	10.2	146
166	Catalytic proton reduction with transition metal complexes of the redox-active ligand bpy2PYMe. <i>Chemical Science</i> , 2013 , 4, 3934	9.4	141
165	A two-photon fluorescent probe for ratiometric imaging of hydrogen peroxide in live tissue. <i>Chemical Communications</i> , 2011 , 47, 9618-9620	5.8	141
164	Proton-coupled O-O activation on a redox platform bearing a hydrogen-bonding scaffold. <i>Journal of the American Chemical Society</i> , 2003 , 125, 1866-76	16.4	139
163	Reactive oxygen species-induced actin glutathionylation controls actin dynamics in neutrophils. <i>Immunity</i> , 2012 , 37, 1037-49	32.3	137
162	Electrocatalytic four-electron reduction of oxygen to water by a highly flexible cofacial cobalt bisporphyrin. <i>Chemical Communications</i> , 2000 , 1355-1356	5.8	137
161	Molecular imaging of labile iron(II) pools in living cells with a turn-on fluorescent probe. <i>Journal of the American Chemical Society</i> , 2013 , 135, 15165-73	16.4	134
160	A smart magnetic resonance contrast agent for selective copper sensing. <i>Journal of the American Chemical Society</i> , 2006 , 128, 15942-3	16.4	131
159	Chemical approaches to discovery and study of sources and targets of hydrogen peroxide redox signaling through NADPH oxidase proteins. <i>Annual Review of Biochemistry</i> , 2015 , 84, 765-90	29.1	129
158	Bright fluorescent chemosensor platforms for imaging endogenous pools of neuronal zinc. <i>Chemistry and Biology</i> , 2004 , 11, 203-10		128

157	Mitochondrial DNA damage: molecular marker of vulnerable nigral neurons in Parkinson's disease. <i>Neurobiology of Disease</i> , 2014 , 70, 214-23	7.5	126
156	A fluorescent sensor for imaging reversible redox cycles in living cells. <i>Journal of the American Chemical Society</i> , 2007 , 129, 3458-9	16.4	126
155	Copper-responsive magnetic resonance imaging contrast agents. <i>Journal of the American Chemical Society</i> , 2009 , 131, 8527-36	16.4	125
154	Positional effects of second-sphere amide pendants on electrochemical CO reduction catalyzed by iron porphyrins. <i>Chemical Science</i> , 2018 , 9, 2952-2960	9.4	124
153	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. <i>Journal of the American Chemical Society</i> , 2012 , 134, 16646-53	16.4	123
152	A high-spin iron(IV)-oxo complex supported by a trigonal nonheme pyrrolide platform. <i>Journal of the American Chemical Society</i> , 2012 , 134, 1536-42	16.4	122
151	Direct Observation of the Bac-Man Effect from Dibenzofuran-Bridged Cofacial Bisporphyrins. <i>Journal of the American Chemical Society</i> , 2000 , 122, 410-411	16.4	122
150	Preparation and use of MitoPY1 for imaging hydrogen peroxide in mitochondria of live cells. <i>Nature Protocols</i> , 2013 , 8, 1249-59	18.8	120
149	A nuclear-localized fluorescent hydrogen peroxide probe for monitoring sirtuin-mediated oxidative stress responses in vivo. <i>Chemistry and Biology</i> , 2011 , 18, 943-8		112
148	ZP8, a neuronal zinc sensor with improved dynamic range; imaging zinc in hippocampal slices with two-photon microscopy. <i>Inorganic Chemistry</i> , 2004 , 43, 6774-9	5.1	112
147	Nickel N-heterocyclic carbene-pyridine complexes that exhibit selectivity for electrocatalytic reduction of carbon dioxide over water. <i>Chemical Communications</i> , 2011 , 47, 6578-80	5.8	110
146	Mechanisms of contact-mediated killing of yeast cells on dry metallic copper surfaces. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 416-26	4.8	110
145	"Hangman" porphyrins for the assembly of a model heme water channel. <i>Journal of the American Chemical Society</i> , 2001 , 123, 1513-4	16.4	109
144	In vivo bioluminescence imaging reveals copper deficiency in a murine model of nonalcoholic fatty liver disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 14219-14224	11.5	107
143	Subcellular metal imaging identifies dynamic sites of Cu accumulation in Chlamydomonas. <i>Nature Chemical Biology</i> , 2014 , 10, 1034-42	11.7	106
142	Boronate-based fluorescent probes: imaging hydrogen peroxide in living systems. <i>Methods in Enzymology</i> , 2013 , 526, 19-43	1.7	104
141	Chemiluminescent Probes for Activity-Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 7508-7512	16.4	103
140	A selective reaction-based fluorescent probe for detecting cobalt in living cells. <i>Chemical Communications</i> , 2012 , 48, 5268-70	5.8	101

139	Mitochondria are the source of hydrogen peroxide for dynamic brain-cell signaling. <i>Journal of Neuroscience</i> , 2009 , 29, 9002-10	6.6	100
138	Copper Capture in a Thioether-Functionalized Porous Polymer Applied to the Detection of Wilson's Disease. <i>Journal of the American Chemical Society</i> , 2016 , 138, 7603-9	16.4	99
137	Lanthanide-based luminescent probes for selective time-gated detection of hydrogen peroxide in water and in living cells. <i>Chemical Communications</i> , 2010 , 46, 7510-2	5.8	98
136	Xanthene-bridged cofacial bisporphyrins. <i>Inorganic Chemistry</i> , 2000 , 39, 959-66	5.1	96
135	Development of a General Aza-Cope Reaction Trigger Applied to Fluorescence Imaging of Formaldehyde in Living Cells. <i>Journal of the American Chemical Society</i> , 2017 , 139, 5338-5350	16.4	95
134	Preparation and use of Coppersensor-1, a synthetic fluorophore for live-cell copper imaging. <i>Nature Protocols</i> , 2006 , 1, 824-7	18.8	95
133	Searching for harmony in transition-metal signaling. <i>Nature Chemical Biology</i> , 2015 , 11, 744-7	11.7	93
132	Iron Porphyrins Embedded into a Supramolecular Porous Organic Cage for Electrochemical CO Reduction in Water. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 9684-9688	16.4	93
131	A boronate-caged [18]FLT probe for hydrogen peroxide detection using positron emission tomography. <i>Journal of the American Chemical Society</i> , 2014 , 136, 14742-5	16.4	92
130	Copper is an endogenous modulator of neural circuit spontaneous activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 16280-5	11.5	88
129	Structural, spectroscopic, and reactivity comparison of xanthene- and dibenzofuran-bridged cofacial bisporphyrins. <i>Inorganic Chemistry</i> , 2002 , 41, 3102-9	5.1	88
128	Copper regulates cyclic-AMP-dependent lipolysis. <i>Nature Chemical Biology</i> , 2016 , 12, 586-92	11.7	87
127	Analytical Methods for Imaging Metals in Biology: From Transition Metal Metabolism to Transition Metal Signaling. <i>Analytical Chemistry</i> , 2017 , 89, 22-41	7.8	86
126	A hydrogen peroxide-responsive hyperpolarized ¹³ C MRI contrast agent. <i>Journal of the American Chemical Society</i> , 2011 , 133, 3776-9	16.4	86
125	A mechanistic study of proton reduction catalyzed by a pentapyridine cobalt complex: evidence for involvement of an anation-based pathway. <i>Chemical Science</i> , 2013 , 4, 1578	9.4	85
124	Catalytic O-O activation chemistry mediated by iron hangman porphyrins with a wide range of proton-donating abilities. <i>Organic Letters</i> , 2003 , 5, 2421-4	6.2	83
123	N ₂ O activation and oxidation reactivity from a non-heme iron pyrrole platform. <i>Journal of the American Chemical Society</i> , 2007 , 129, 15128-9	16.4	82
122	Chelating N-Heterocyclic Carbene Ligands Enable Tuning of Electrocatalytic CO Reduction to Formate and Carbon Monoxide: Surface Organometallic Chemistry. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 4981-4985	16.4	81

121	Aerobic Epoxidation of Olefins Catalyzed by Electronegative Vanadyl Salen Complexes. <i>Inorganic Chemistry</i> , 1997 , 36, 5927-5930	5.1	81
120	Activity-Based Sensing: A Synthetic Methods Approach for Selective Molecular Imaging and Beyond. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 13734-13762	16.4	81
119	A reactivity-based probe of the intracellular labile ferrous iron pool. <i>Nature Chemical Biology</i> , 2016 , 12, 680-5	11.7	81
118	A phototriggered molecular spring for aerobic catalytic oxidation reactions. <i>Journal of the American Chemical Society</i> , 2002 , 124, 7884-5	16.4	80
117	Glucose metabolism impacts the spatiotemporal onset and magnitude of HSC induction in vivo. <i>Blood</i> , 2013 , 121, 2483-93	2.2	79
116	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. <i>Chemical Science</i> , 2015 , 6, 4954-4972	9.4	77
115	In vivo bioluminescence imaging of labile iron accumulation in a murine model of infection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 12669-12674	11.5	76
114	Stable dye-sensitized solar cell electrolytes based on cobalt(II)/(III) complexes of a hexadentate pyridyl ligand. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 5527-31	16.4	74
113	Copper signaling in the brain and beyond. <i>Journal of Biological Chemistry</i> , 2018 , 293, 4628-4635	5.4	73
112	A red-emitting naphthofluorescein-based fluorescent probe for selective detection of hydrogen peroxide in living cells. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 5948-50	2.9	72
111	Fluorescent probes for imaging formaldehyde in biological systems. <i>Current Opinion in Chemical Biology</i> , 2017 , 39, 17-23	9.7	71
110	A dendrimer-based platform for simultaneous dual fluorescence imaging of hydrogen peroxide and pH gradients produced in living cells. <i>Chemical Science</i> , 2011 , 2, 1156	9.4	71
109	Electrochemical generation of hydrogen from acetic acid using a molecular molybdenum-oxo catalyst. <i>Energy and Environmental Science</i> , 2012 , 5, 7762	35.4	70
108	A 2-aza-Cope reactivity-based platform for ratiometric fluorescence imaging of formaldehyde in living cells. <i>Chemical Science</i> , 2017 , 8, 4073-4081	9.4	67
107	Versatile Histochemical Approach to Detection of Hydrogen Peroxide in Cells and Tissues Based on Puromycin Staining. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6109-6121	16.4	67
106	Peptidoglycan recognition proteins kill bacteria by inducing oxidative, thiol, and metal stress. <i>PLoS Pathogens</i> , 2014 , 10, e1004280	7.6	67
105	Computational and experimental study of the mechanism of hydrogen generation from water by a molecular molybdenum-oxo electrocatalyst. <i>Journal of the American Chemical Society</i> , 2012 , 134, 5233-42	16.4	64
104	Meso-tetraaryl cofacial bisporphyrins delivered by Suzuki cross-coupling. <i>Journal of Organic Chemistry</i> , 2003 , 68, 4075-8	4.2	63

103	MDM2 and MDMX promote ferroptosis by PPAR β -mediated lipid remodeling. <i>Genes and Development</i> , 2020 , 34, 526-543	12.6	60
102	Activity-based sensing fluorescent probes for iron in biological systems. <i>Current Opinion in Chemical Biology</i> , 2018 , 43, 113-118	9.7	60
101	A structurally characterized nitrous oxide complex of vanadium. <i>Journal of the American Chemical Society</i> , 2011 , 133, 2108-11	16.4	60
100	Bioinspired Thiophosphorodichloridate Reagents for Chemoselective Histidine Bioconjugation. <i>Journal of the American Chemical Society</i> , 2019 , 141, 7294-7301	16.4	58
99	Excited-State Dynamics of Cofacial Pacman Porphyrins. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 11700-11708	21.8	58
98	Improvement of human keratinocyte migration by a redox active bioelectric dressing. <i>PLoS ONE</i> , 2014 , 9, e89239	3.7	56
97	Effect of cerebral amyloid angiopathy on brain iron, copper, and zinc in Alzheimer's disease. <i>Journal of Alzheimer's Disease</i> , 2011 , 24, 137-49	4.3	54
96	S100B and APP promote a gliocentric shift and impaired neurogenesis in Down syndrome neural progenitors. <i>PLoS ONE</i> , 2011 , 6, e22126	3.7	54
95	Bioinspiration in light harvesting and catalysis. <i>Nature Reviews Materials</i> , 2020 , 5, 828-846	73.3	54
94	Copper regulates rest-activity cycles through the locus coeruleus-norepinephrine system. <i>Nature Chemical Biology</i> , 2018 , 14, 655-663	11.7	53
93	Dephosphorylation of tyrosine 393 in argonaute 2 by protein tyrosine phosphatase 1B regulates gene silencing in oncogenic RAS-induced senescence. <i>Molecular Cell</i> , 2014 , 55, 782-90	17.6	52
92	Transient absorption studies of the Pacman effect in spring-loaded diiron(III) μ -oxo bisporphyrins. <i>Inorganic Chemistry</i> , 2003 , 42, 8270-7	5.1	51
91	Hybrid Catalysts for Artificial Photosynthesis: Merging Approaches from Molecular, Materials, and Biological Catalysis. <i>Accounts of Chemical Research</i> , 2020 , 53, 575-587	24.3	50
90	Porphyrin architectures bearing functionalized xanthene spacers. <i>Journal of Organic Chemistry</i> , 2002 , 67, 1403-6	4.2	50
89	A copper-activated magnetic resonance imaging contrast agent with improved turn-on relaxivity response and anion compatibility. <i>Dalton Transactions</i> , 2010 , 469-76	4.3	49
88	Connecting copper and cancer: from transition metal signalling to metalloplasia. <i>Nature Reviews Cancer</i> , 2021 ,	31.3	48
87	Activity-based ratiometric FRET probe reveals oncogene-driven changes in labile copper pools induced by altered glutathione metabolism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 18285-18294	11.5	47
86	Supramolecular Porphyrin Cages Assembled at Molecular-Materials Interfaces for Electrocatalytic CO Reduction. <i>ACS Central Science</i> , 2017 , 3, 1032-1040	16.8	47

85	Water-Soluble Iron(IV)-Oxo Complexes Supported by Pentapyridine Ligands: Axial Ligand Effects on Hydrogen Atom and Oxygen Atom Transfer Reactivity. <i>Inorganic Chemistry</i> , 2015 , 54, 5879-87	5.1	47
84	Supramolecular Tuning Enables Selective Oxygen Reduction Catalyzed by Cobalt Porphyrins for Direct Electrosynthesis of Hydrogen Peroxide. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 4902-4907	16.4	47
83	Activity-Based Sensing Methods for Monitoring the Reactive Carbon Species Carbon Monoxide and Formaldehyde in Living Systems. <i>Accounts of Chemical Research</i> , 2019 , 52, 2841-2848	24.3	46
82	H ₂ O ₂ production downstream of FLT3 is mediated by p22phox in the endoplasmic reticulum and is required for STAT5 signalling. <i>PLoS ONE</i> , 2012 , 7, e34050	3.7	46
81	A hydrogen-bond facilitated cycle for oxygen reduction by an acid- and base-compatible iron platform. <i>Inorganic Chemistry</i> , 2009 , 48, 10024-35	5.1	45
80	Mitochondrial alarmins released by degenerating motor axon terminals activate perisynaptic Schwann cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E497-505	11.5	43
79	Zinc-secreting Paneth cells studied by ZP fluorescence. <i>Journal of Histochemistry and Cytochemistry</i> , 2006 , 54, 311-6	3.4	43
78	Chemiluminescent Probes for Activity-Based Sensing of Formaldehyde Released from Folate Degradation in Living Mice. <i>Angewandte Chemie</i> , 2018 , 130, 7630-7634	3.6	41
77	A cell-permeable gadolinium contrast agent for magnetic resonance imaging of copper in a Menkes disease model. <i>Chemical Science</i> , 2012 , 3, 1829-1834	9.4	39
76	Inflammation mobilizes copper metabolism to promote colon tumorigenesis via an IL-17-STEAP4-XIAP axis. <i>Nature Communications</i> , 2020 , 11, 900	17.4	38
75	An integrated imaging approach to the study of oxidative stress generation by mitochondrial dysfunction in living cells. <i>Environmental Health Perspectives</i> , 2010 , 118, 902-8	8.4	38
74	Copper transporter 2 regulates intracellular copper and sensitivity to cisplatin. <i>Metallomics</i> , 2014 , 6, 654-61	4.5	37
73	Reversible Nitrogen Atom Transfer between Nitridomanganese(V) and Manganese(III) Schiff-Base Complexes. <i>Inorganic Chemistry</i> , 1997 , 36, 270-271	5.1	37
72	Iron Chaperone Poly rC Binding Protein 1 Protects Mouse Liver From Lipid Peroxidation and Steatosis. <i>Hepatology</i> , 2021 , 73, 1176-1193	11.2	37
71	The Pacman effect: a supramolecular strategy for controlling the excited-state dynamics of pillared cofacial bisporphyrins. <i>Inorganic Chemistry</i> , 2003 , 42, 8262-9	5.1	35
70	A convergent synthetic approach using sterically demanding aryldipyrrylmethanes for tuning the pocket sizes of cofacial bisporphyrins. <i>Inorganic Chemistry</i> , 2002 , 41, 3008-16	5.1	35
69	The histone demethylase Phf2 acts as a molecular checkpoint to prevent NAFLD progression during obesity. <i>Nature Communications</i> , 2018 , 9, 2092	17.4	34
68	Selenoprotein H is an essential regulator of redox homeostasis that cooperates with p53 in development and tumorigenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E5562-71	11.5	33

67	A Physical Organic Approach to Tuning Reagents for Selective and Stable Methionine Bioconjugation. <i>Journal of the American Chemical Society</i> , 2019 , 141, 12657-12662	16.4	33
66	Mfc1 is a novel forespore membrane copper transporter in meiotic and sporulating cells. <i>Journal of Biological Chemistry</i> , 2011 , 286, 34356-72	5.4	33
65	Metal-Ligand Cooperativity via Exchange Coupling Promotes Iron-Catalyzed Electrochemical CO Reduction at Low Overpotentials. <i>Journal of the American Chemical Society</i> , 2020 , 142, 20489-20501	16.4	33
64	Light-activated regulation of cofilin dynamics using a photocaged hydrogen peroxide generator. <i>Journal of the American Chemical Society</i> , 2010 , 132, 17071-3	16.4	31
63	OxyR Regulates the Transcriptional Response to Hydrogen Peroxide. <i>Infection and Immunity</i> , 2019 , 87,	3.7	31
62	Tuning Second Coordination Sphere Interactions in Polypyridyl-Iron Complexes to Achieve Selective Electrocatalytic Reduction of Carbon Dioxide to Carbon Monoxide. <i>Inorganic Chemistry</i> , 2020 , 59, 5206-5217	5.1	30
61	Chelating N-Heterocyclic Carbene Ligands Enable Tuning of Electrocatalytic CO ₂ Reduction to Formate and Carbon Monoxide: Surface Organometallic Chemistry. <i>Angewandte Chemie</i> , 2018 , 130, 5075-5079	3.6	30
60	A seven-coordinate iron platform and its oxo and nitrene reactivity. <i>Inorganica Chimica Acta</i> , 2011 , 369, 82-91	2.7	29
59	Inorganic Chemistry Approaches to Activity-Based Sensing: From Metal Sensors to Bioorthogonal Metal Chemistry. <i>Inorganic Chemistry</i> , 2019 , 58, 13546-13560	5.1	28
58	Caged [(18)F]FDG Glycosylamines for Imaging Acidic Tumor Microenvironments Using Positron Emission Tomography. <i>Bioconjugate Chemistry</i> , 2016 , 27, 170-8	6.3	28
57	Urea-Based Multipoint Hydrogen-Bond Donor Additive Promotes Electrochemical CO ₂ Reduction Catalyzed by Nickel Cyclam. <i>Organometallics</i> , 2019 , 38, 1213-1218	3.8	28
56	Bioinorganic Life and Neural Activity: Toward a Chemistry of Consciousness?. <i>Accounts of Chemical Research</i> , 2017 , 50, 535-538	24.3	26
55	Iron Porphyrins Embedded into a Supramolecular Porous Organic Cage for Electrochemical CO ₂ Reduction in Water. <i>Angewandte Chemie</i> , 2018 , 130, 9832-9836	3.6	25
54	Consistent inclusion of continuum solvation in energy decomposition analysis: theory and application to molecular CO reduction catalysts. <i>Chemical Science</i> , 2020 , 12, 1398-1414	9.4	24
53	A well-defined terminal vanadium(III) oxo complex. <i>Inorganic Chemistry</i> , 2014 , 53, 11388-95	5.1	23
52	Preparation and use of Leadfluor-1, a synthetic fluorophore for live-cell lead imaging. <i>Nature Protocols</i> , 2008 , 3, 777-83	18.8	23
51	Electronic Structures of Nitridomanganese(V) Complexes. <i>Inorganic Chemistry</i> , 1998 , 37, 3107-3110	5.1	23
50	Tuning the Color Palette of Fluorescent Copper Sensors through Systematic Heteroatom Substitution at Rhodol Cores. <i>ACS Chemical Biology</i> , 2018 , 13, 1844-1852	4.9	23

49	Iron detection and remediation with a functionalized porous polymer applied to environmental water samples. <i>Chemical Science</i> , 2019 , 10, 6651-6660	9.4	22
48	Thioether Coordination Chemistry for Molecular Imaging of Copper in Biological Systems. <i>Israel Journal of Chemistry</i> , 2016 , 56, 724-737	3.4	22
47	cAMP signaling regulates DNA hydroxymethylation by augmenting the intracellular labile ferrous iron pool. <i>ELife</i> , 2017 , 6,	8.9	22
46	Ligand-Directed Approach to Activity-Based Sensing: Developing Palladacycle Fluorescent Probes That Enable Endogenous Carbon Monoxide Detection. <i>Journal of the American Chemical Society</i> , 2020 , 142, 15917-15930	16.4	21
45	Multimodal LA-ICP-MS and nanoSIMS imaging enables copper mapping within photoreceptor megamitochondria in a zebrafish model of Menkes disease. <i>Metallomics</i> , 2018 , 10, 474-485	4.5	20
44	Caged luciferins for bioluminescent activity-based sensing. <i>Current Opinion in Biotechnology</i> , 2019 , 60, 198-204	11.4	19
43	An oxidative fluctuation hypothesis of aging generated by imaging HDL levels in live <i>Caenorhabditis elegans</i> with altered lifespans. <i>Biochemical and Biophysical Research Communications</i> , 2015 , 458, 896-900	3.4	19
42	Activity-Based Sensing with a Metal-Directed Acyl Imidazole Strategy Reveals Cell Type-Dependent Pools of Labile Brain Copper. <i>Journal of the American Chemical Society</i> , 2020 , 142, 14993-15003	16.4	19
41	A reactivity-based [¹⁸ F]FDG probe for formaldehyde imaging using positron emission tomography. <i>Chemical Science</i> , 2016 , 7, 5503-5507	9.4	19
40	A Modular Ionophore Platform for Liver-Directed Copper Supplementation in Cells and Animals. <i>Journal of the American Chemical Society</i> , 2018 , 140, 13764-13774	16.4	19
39	Inhibition of copper uptake in yeast reveals the copper transporter Ctr1p as a potential molecular target of saxitoxin. <i>Environmental Science & Technology</i> , 2012 , 46, 2959-66	10.3	18
38	Cobalt Polypyridyl Complexes as Transparent Solution-Processable Solid-State Charge Transport Materials. <i>Advanced Energy Materials</i> , 2016 , 6, 1600874	21.8	17
37	Well-defined vanadium organoazide complexes and their conversion to terminal vanadium imides: structural snapshots and evidence for a nitrene capture mechanism. <i>Inorganic Chemistry</i> , 2012 , 51, 10037-42	5.1	17
36	An animal model of Miller Fisher syndrome: Mitochondrial hydrogen peroxide is produced by the autoimmune attack of nerve terminals and activates Schwann cells. <i>Neurobiology of Disease</i> , 2016 , 96, 95-104	7.5	17
35	Aktivitätsbasierte Sensorik: ein synthetisch-methodischer Ansatz für die selektive molekulare Bildgebung und darüber hinaus.. <i>Angewandte Chemie</i> , 2020 , 132, 13838-13867	3.6	17
34	A tandem activity-based sensing and labeling strategy enables imaging of transcellular hydrogen peroxide signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	17
33	Effects of Copper Chelation on BRAF Positive Colon Carcinoma Cells. <i>Cancers</i> , 2019 , 11,	6.6	15
32	A dual-fluorophore sensor approach for ratiometric fluorescence imaging of potassium in living cells. <i>Chemical Science</i> , 2020 , 12, 1720-1729	9.4	15

31	Computational Study of an Iron(II) Polypyridine Electrocatalyst for CO Reduction: Key Roles for Intramolecular Interactions in CO Binding and Proton Transfer. <i>Inorganic Chemistry</i> , 2020 , 59, 8146-8160 ^{5.1}	14
30	Endogenous hydrogen peroxide production in the epithelium of the developing embryonic lens. <i>Molecular Vision</i> , 2014 , 20, 458-67	2.3 14
29	Systematic identification of engineered methionines and oxaziridines for efficient, stable, and site-specific antibody bioconjugation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 5733-5740	11.5 13
28	Receptor protein-tyrosine phosphatase regulates focal adhesion kinase phosphorylation and ErbB2 oncoprotein-mediated mammary epithelial cell motility. <i>Journal of Biological Chemistry</i> , 2013 , 288, 36926-35	5.4 13
27	A cyano-bridged FeIIReIV(CN) ₂ cluster incorporating two high-magnetic anisotropy building units. <i>Inorganica Chimica Acta</i> , 2011 , 369, 91-96	2.7 13
26	Distinct RNA demethylation pathways catalyzed by nonheme iron ALKBH5 and FTO enzymes enable regulation of formaldehyde release rates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 25284-25292	11.5 13
25	A Surge of DNA Damage Links Transcriptional Reprogramming and Hematopoietic Deficit in Fanconi Anemia. <i>Molecular Cell</i> , 2020 , 80, 1013-1024.e6	17.6 13
24	Magnetotactic Bacteria Accumulate a Large Pool of Iron Distinct from Their Magnetite Crystals. <i>Applied and Environmental Microbiology</i> , 2020 , 86,	4.8 13
23	Zinc Metalloneurochemistry: Physiology, Pathology, and Probes 2006 , 321-370	12
22	An NADH-Inspired Redox Mediator Strategy to Promote Second-Sphere Electron and Proton Transfer for Cooperative Electrochemical CO Reduction Catalyzed by Iron Porphyrin. <i>Inorganic Chemistry</i> , 2020 , 59, 9270-9278	5.1 11
21	Azide-based fluorescent probes: imaging hydrogen sulfide in living systems. <i>Methods in Enzymology</i> , 2015 , 554, 63-80	1.7 11
20	Controlled Single-Electron Transfer via Metal-Ligand Cooperativity Drives Divergent Nickel-Electrocatalyzed Radical Pathways. <i>Journal of the American Chemical Society</i> , 2021 , 143, 6990-7001 ^{16.4}	11
19	An Activity-Based Methionine Bioconjugation Approach To Developing Proximity-Activated Imaging Reporters. <i>ACS Central Science</i> , 2020 , 6, 32-40	16.8 9
18	Lysosomal SLC46A3 modulates hepatic cytosolic copper homeostasis. <i>Nature Communications</i> , 2021 , 12, 290	17.4 9
17	Grand Challenges in Chemistry for 2016 and Beyond. <i>ACS Central Science</i> , 2016 , 2, 1-3	16.8 8
16	Carbon Monoxide, a Retrograde Messenger Generated in Postsynaptic Mushroom Body Neurons, Evokes Noncanonical Dopamine Release. <i>Journal of Neuroscience</i> , 2020 , 40, 3533-3548	6.6 6
15	Supramolecular Tuning Enables Selective Oxygen Reduction Catalyzed by Cobalt Porphyrins for Direct Electrosynthesis of Hydrogen Peroxide. <i>Angewandte Chemie</i> , 2020 , 132, 4932-4937	3.6 6
14	Applying genome-wide CRISPR to identify known and novel genes and pathways that modulate formaldehyde toxicity. <i>Chemosphere</i> , 2021 , 269, 128701	8.4 5

13	Exosomal NADPH Oxidase: Delivering Redox Signaling for Healing. <i>Biochemistry</i> , 2018 , 57, 3993-3994	3.2	4
12	Preface for the forum on imaging and sensing: probing and utilizing the elements of life for studying and improving health and society. <i>Inorganic Chemistry</i> , 2014 , 53, 1791-3	5.1	4
11	Oscillatory cAMP signaling rapidly alters H3K4 methylation. <i>Life Science Alliance</i> , 2020 , 3,	5.8	4
10	A Supramolecular Porous Organic Cage Platform Promotes Electrochemical Hydrogen Evolution from Water Catalyzed by Cobalt Porphyrins. <i>ChemElectroChem</i> , 2021 , 8, 1653-1657	4.3	4
9	PLEKHA5, PLEKHA6, and PLEKHA7 bind to PDZD11 to target the Menkes ATPase ATP7A to the cell periphery and regulate copper homeostasis. <i>Molecular Biology of the Cell</i> , 2021 , 32, ar34	3.5	3
8	Synthesis and Characterization of a Tetrapodal NO ₄ (4-) Ligand and Its Transition Metal Complexes. <i>Inorganic Chemistry</i> , 2016 , 55, 7527-34	5.1	3
7	A Triple Crown of Sustainable Synthesis. <i>ACS Central Science</i> , 2016 , 2, 266-7	16.8	2
6	Neurovascular and Immuno-Imaging: From Mechanisms to Therapies. Proceedings of the Inaugural Symposium. <i>Frontiers in Neuroscience</i> , 2016 , 10, 46	5.1	2
5	Making light of stress. <i>Nature Biotechnology</i> , 2014 , 32, 337-8	44.5	1
4	Systematic identification of engineered methionines and oxaziridines for efficient, stable, and site-specific antibody bioconjugation		1
3	Staphylococcus aureus Peptide Methionine Sulfoxide Reductases Protect from Human Whole-Blood Killing. <i>Infection and Immunity</i> , 2021 , 89, e0014621	3.7	0
2	The Joy of Synthesis. <i>ACS Central Science</i> , 2015 , 1, 409	16.8	
1	A microtubule-localizing activity-based sensing fluorescent probe for imaging hydrogen peroxide in living cells. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021 , 48, 128252	2.9	