

Christopher J Chang

List of Publications by Year in Descending Order

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Version: 2024-04-25

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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	Connecting copper and cancer: from transition metal signalling to metalloplasia. <i>Nature Reviews Cancer</i> , 2021 ,	31.3	48
227	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
226	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
225	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
224	Staphylococcus aureus Peptide Methionine Sulfoxide Reductases Protect from Human Whole-Blood Killing. <i>Infection and Immunity</i> , 2021 , 89, e0014621	3.7	0
223	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
222	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
221	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
220	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	
219	Lysosomal SLC46A3 modulates hepatic cytosolic copper homeostasis. <i>Nature Communications</i> , 2021 , 12, 290	17.4	9
218	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
217	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
216	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
215	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
214	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
213	MDM2 and MDMX promote ferroptosis by PPAR α -mediated lipid remodeling. <i>Genes and Development</i> , 2020 , 34, 526-543	12.6	60
212	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

211	Oscillatory cAMP signaling rapidly alters H3K4 methylation. <i>Life Science Alliance</i> , 2020 , 3,	5.8	4
210	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
209	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
208	An Activity-Based Methionine Bioconjugation Approach To Developing Proximity-Activated Imaging Reporters. <i>ACS Central Science</i> , 2020 , 6, 32-40	16.8	9
207	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
206	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
205	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
204	Bioinspiration in light harvesting and catalysis. <i>Nature Reviews Materials</i> , 2020 , 5, 828-846	73.3	54
203	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
202	Magnetotactic Bacteria Accumulate a Large Pool of Iron Distinct from Their Magnetite Crystals. <i>Applied and Environmental Microbiology</i> , 2020 , 86,	4.8	13
201	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
200	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
199	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
198	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
197	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
196	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
195	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
194	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

193	Caged luciferins for bioluminescent activity-based sensing. <i>Current Opinion in Biotechnology</i> , 2019 , 60, 198-204	11.4	19
192	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
191	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
190	Effects of Copper Chelation on BRAF Positive Colon Carcinoma Cells. <i>Cancers</i> , 2019 , 11,	6.6	15
189	Bioinspired Thiophosphorodichloridate Reagents for Chemoselective Histidine Bioconjugation. <i>Journal of the American Chemical Society</i> , 2019 , 141, 7294-7301	16.4	58
188	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
187	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
186	OxyR Regulates the Transcriptional Response to Hydrogen Peroxide. <i>Infection and Immunity</i> , 2019 , 87,	3.7	31
185	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
184	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
183	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, 5073-5079 ³⁰	3.6	30
182	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
181	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
180	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
179	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
178	Activity-based sensing fluorescent probes for iron in biological systems. <i>Current Opinion in Chemical Biology</i> , 2018 , 43, 113-118	9.7	60
177	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
176	Copper signaling in the brain and beyond. <i>Journal of Biological Chemistry</i> , 2018 , 293, 4628-4635	5.4	73

175	Copper regulates rest-activity cycles through the locus coeruleus-norepinephrine system. <i>Nature Chemical Biology</i> , 2018 , 14, 655-663	11.7	53
174	Exosomal NADPH Oxidase: Delivering Redox Signaling for Healing. <i>Biochemistry</i> , 2018 , 57, 3993-3994	3.2	4
173	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
172	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
171	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
170	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
169	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
168	Redox-based reagents for chemoselective methionine bioconjugation. <i>Science</i> , 2017 , 355, 597-602	33.3	231
167	Fluorescent probes for imaging formaldehyde in biological systems. <i>Current Opinion in Chemical Biology</i> , 2017 , 39, 17-23	9.7	71
166	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
165	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
164	Bioinorganic Life and Neural Activity: Toward a Chemistry of Consciousness?. <i>Accounts of Chemical Research</i> , 2017 , 50, 535-538	24.3	26
163	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
162	Supramolecular Porphyrin Cages Assembled at Molecular-Materials Interfaces for Electrocatalytic CO Reduction. <i>ACS Central Science</i> , 2017 , 3, 1032-1040	16.8	47
161	Mammals divert endogenous genotoxic formaldehyde into one-carbon metabolism. <i>Nature</i> , 2017 , 548, 549-554	50.4	158
160	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
159	cAMP signaling regulates DNA hydroxymethylation by augmenting the intracellular labile ferrous iron pool. <i>ELife</i> , 2017 , 6,	8.9	22
158	Cobalt Polypyridyl Complexes as Transparent Solution-Processable Solid-State Charge Transport Materials. <i>Advanced Energy Materials</i> , 2016 , 6, 1600874	21.8	17

157	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
156	Thioether Coordination Chemistry for Molecular Imaging of Copper in Biological Systems. <i>Israel Journal of Chemistry</i> , 2016 , 56, 724-737	3.4	22
155	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
154	Copper regulates cyclic-AMP-dependent lipolysis. <i>Nature Chemical Biology</i> , 2016 , 12, 586-92	11.7	87
153	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
152	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
151	A Triple Crown of Sustainable Synthesis. <i>ACS Central Science</i> , 2016 , 2, 266-7	16.8	2
150	Grand Challenges in Chemistry for 2016 and Beyond. <i>ACS Central Science</i> , 2016 , 2, 1-3	16.8	8
149	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
148	Neurovascular and Immuno-Imaging: From Mechanisms to Therapies. Proceedings of the Inaugural Symposium. <i>Frontiers in Neuroscience</i> , 2016 , 10, 46	5.1	2
147	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
146	A reactivity-based probe of the intracellular labile ferrous iron pool. <i>Nature Chemical Biology</i> , 2016 , 12, 680-5	11.7	81
145	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
144	A reactivity-based [F]FDG probe for formaldehyde imaging using positron emission tomography. <i>Chemical Science</i> , 2016 , 7, 5503-5507	9.4	19
143	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
142	An oxidative fluctuation hypothesis of aging generated by imaging H ₂ O ₂ levels in live <i>Caenorhabditis elegans</i> with altered lifespans. <i>Biochemical and Biophysical Research Communications</i> , 2015 , 458, 896-900	3.4	19
141	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
140	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

139	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
138	Nanowire-bacteria hybrids for unassisted solar carbon dioxide fixation to value-added chemicals. <i>Nano Letters</i> , 2015 , 15, 3634-9	11.5	269
137	Searching for harmony in transition-metal signaling. <i>Nature Chemical Biology</i> , 2015 , 11, 744-7	11.7	93
136	Metal-organic frameworks for electrocatalytic reduction of carbon dioxide. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14129-35	16.4	768
135	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
134	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
133	Covalent organic frameworks comprising cobalt porphyrins for catalytic CO ₂ reduction in water. <i>Science</i> , 2015 , 349, 1208-13	33.3	1540
132	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
131	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
130	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
129	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
128	The Joy of Synthesis. <i>ACS Central Science</i> , 2015 , 1, 409	16.8	
127	Azide-based fluorescent probes: imaging hydrogen sulfide in living systems. <i>Methods in Enzymology</i> , 2015 , 554, 63-80	1.7	11
126	Synthetic fluorescent probes for studying copper in biological systems. <i>Chemical Society Reviews</i> , 2015 , 44, 4400-14	58.5	339
125	Making light of stress. <i>Nature Biotechnology</i> , 2014 , 32, 337-8	44.5	1
124	Subcellular metal imaging identifies dynamic sites of Cu accumulation in <i>Chlamydomonas</i> . <i>Nature Chemical Biology</i> , 2014 , 10, 1034-42	11.7	106
123	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
122	Copper transporter 2 regulates intracellular copper and sensitivity to cisplatin. <i>Metallomics</i> , 2014 , 6, 654-61	4.5	37

121	A well-defined terminal vanadium(III) oxo complex. <i>Inorganic Chemistry</i> , 2014 , 53, 11388-95	5.1	23
120	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
119	A boronate-caged [18F]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
118	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
117	Wilson disease protein ATP7B utilizes lysosomal exocytosis to maintain copper homeostasis. <i>Developmental Cell</i> , 2014 , 29, 686-700	10.2	146
116	Improvement of human keratinocyte migration by a redox active bioelectric dressing. <i>PLoS ONE</i> , 2014 , 9, e89239	3.7	56
115	Peptidoglycan recognition proteins kill bacteria by inducing oxidative, thiol, and metal stress. <i>PLoS Pathogens</i> , 2014 , 10, e1004280	7.6	67
114	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
113	Endogenous hydrogen peroxide production in the epithelium of the developing embryonic lens. <i>Molecular Vision</i> , 2014 , 20, 458-67	2.3	14
112	Catalytic proton reduction with transition metal complexes of the redox-active ligand bpy2PYMe. <i>Chemical Science</i> , 2013 , 4, 3934	9.4	141
111	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
110	Boronate-based fluorescent probes: imaging hydrogen peroxide in living systems. <i>Methods in Enzymology</i> , 2013 , 526, 19-43	1.7	104
109	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
108	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
107	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
106	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
105	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
104	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

103	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
102	Receptor protein-tyrosine phosphatase β 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
101	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
100	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
99	Glucose metabolism impacts the spatiotemporal onset and magnitude of HSC induction in vivo. <i>Blood</i> , 2013 , 121, 2483-93	2.2	79
98	Reaction-based small-molecule fluorescent probes for chemoselective bioimaging. <i>Nature Chemistry</i> , 2012 , 4, 973-84	17.6	1370
97	Reactive oxygen species-induced actin glutathionylation controls actin dynamics in neutrophils. <i>Immunity</i> , 2012 , 37, 1037-49	32.3	137
96	Fluorescent probes for sensing and imaging biological hydrogen sulfide. <i>Current Opinion in Chemical Biology</i> , 2012 , 16, 595-601	9.7	219
95	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
94	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
93	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
92	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
91	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
90	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
89	A selective reaction-based fluorescent probe for detecting cobalt in living cells. <i>Chemical Communications</i> , 2012 , 48, 5268-70	5.8	101
88	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
87	A molecular MoS ₂ edge site mimic for catalytic hydrogen generation. <i>Science</i> , 2012 , 335, 698-702	33.3	992
86	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

85	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
84	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
83	Bacterial killing by dry metallic copper surfaces. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 794-803	16.4	331
82	Unraveling the biological roles of reactive oxygen species. <i>Cell Metabolism</i> , 2011 , 13, 361-366	24.6	542
81	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
80	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
79	Molecular cobalt pentapyridine catalysts for generating hydrogen from water. <i>Journal of the American Chemical Society</i> , 2011 , 133, 9212-5	16.4	354
78	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
77	Nox2 redox signaling maintains essential cell populations in the brain. <i>Nature Chemical Biology</i> , 2011 , 7, 106-12	11.7	207
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- 1 Systematic identification of engineered methionines and oxaziridines for efficient, stable, and site-specific antibody bioconjugation 1