

# Mitchell R M Bruce

## List of Publications by Year in descending order

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53  
papers

1,255  
citations

430874

18  
h-index

377865

34  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1206  
citing authors

#	ARTICLE	IF	CITATIONS
1	Creating Representation in Support of Chemical Reasoning to Connect Macroscopic and Submicroscopic Domains of Knowledge. <i>Journal of Chemical Education</i> , 2022, 99, 1734-1746.	2.3	5
2	Conceptual Developments of Aryldiazonium Salts as Modifiers for Gold Colloids and Surfaces. <i>Langmuir</i> , 2021, 37, 8897-8907.	3.5	17
3	Designing a Remote, Synchronous, Hands-On General Chemistry Lab Course. <i>Journal of Chemical Education</i> , 2021, 98, 3131-3142.	2.3	10
4	A Professional Development Activity to Help Teaching Assistants Work as a Team to Assess Lab Reports in a General Chemistry Course. <i>Israel Journal of Chemistry</i> , 2019, 59, 536-545.	2.3	6
5	Synthesis of water-soluble gold-aryl nanoparticles with distinct catalytic performance in the reduction of the environmental pollutant 4-nitrophenol. <i>Catalysis Science and Technology</i> , 2019, 9, 6059-6071.	4.1	29
6	Polymers and Cross-Linking: A CORE Experiment To Help Students Think on the Submicroscopic Level. <i>Journal of Chemical Education</i> , 2016, 93, 1599-1605.	2.3	5
7	A Simple, Student-Built Spectrometer To Explore Infrared Radiation and Greenhouse Gases. <i>Journal of Chemical Education</i> , 2016, 93, 1908-1915.	2.3	9
8	The influence of gold on the mechanism of thiolate, disulfide exchange. <i>Dalton Transactions</i> , 2016, 45, 11261-11266.	3.3	5
9	Disulfide Competition for Phosphine Gold(I) Thiolates: Phosphine Oxide Formation vs. Thiolate Disulfide Exchange. <i>Inorganics</i> , 2015, 3, 40-54.	2.7	6
10	The influence of zinc(ii) on thioredoxin/glutathione disulfide exchange: QM/MM studies to explore how zinc(ii) accelerates exchange in higher dielectric environments. <i>Metallomics</i> , 2015, 7, 1265-1273.	2.4	3
11	Paying Attention to Gesture when Students Talk Chemistry: Interactional Resources for Responsive Teaching. <i>Journal of Chemical Education</i> , 2015, 92, 11-22.	2.3	43
12	Identification of dimethyl sulfide in dimethyl sulfoxide and implications for metal-thiolate disulfide exchange reactions. <i>RSC Advances</i> , 2015, 5, 40603-40606.	3.6	7
13	Students' Understanding of Analogy after a CORE (Chemical Observations, Representations, and Explanations) Activity. <i>Journal of Chemical Education</i> , 2015, 92, 1626-1638.	2.3	18
14	An infrared spectroscopic based method for mercury(II) detection in aqueous solutions. <i>Analytica Chimica Acta</i> , 2012, 728, 57-63.	5.4	14
15	Electrochemical polymerization of aniline on carbon-aluminum electrodes for energy storage. <i>Journal of Power Sources</i> , 2012, 219, 285-291.	7.8	7
16	Application of structural analogs of dimercaptosuccinic acid-functionalized silica nanoparticles (DMSA-[silica]) to adsorption of mercury, cadmium, and lead. <i>Research on Chemical Intermediates</i> , 2011, 37, 791-810.	2.7	12
17	Synthesis, crystal and molecular structure of gold(I) thiophenolate with 4-ferrocenyl[1,1'-biphenyl]isocyanides. <i>Journal of Organometallic Chemistry</i> , 2010, 695, 304-309.	1.8	5
18	The synthesis of triethylphosphine gold(I) 4-nitrobenzenethiolate and solvent dependent visible absorption spectra of 4-nitrobenzenethiolate. <i>Inorganica Chimica Acta</i> , 2010, 363, 279-282.	2.4	2

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19	Preferential adsorption of mercury(II) ions in water: chelation of mercury, cadmium, and lead ions to silica derivatized with meso-2,3-dimercaptosuccinic acid. <i>Journal of Coordination Chemistry</i> , 2010, 63, 731-741.	2.2	11
20	Luminescence, structural, and bonding trends upon varying the halogen in isostructural aurophilic dimers. <i>Dalton Transactions</i> , 2009, , 1522-1533.	3.3	26
21	Structure and Photochemical Isomerization of the Dinuclear Gold(I) Halide Bis(diphenylphosphanyl)ethylene Complexes: Correlation Between Quantum Yield and Aurophilicity. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 4946-4951.	2.0	15
22	InterChemNet: Integrating Instrumentation, Management, and Assessment in the General Chemistry Laboratory Course. <i>Journal of Chemical Education</i> , 2006, 83, 494.	2.3	11
23	Thermotropic liquid crystals based on ferrocenylbiphenyl and ferrocenylterphenyl. <i>Liquid Crystals</i> , 2006, 33, 485-494.	2.2	7
24	Novel metallamacrocyclic gold(I) thiolate cluster complex: structure and luminescence of $[\text{Au}_9(\text{I}^{\frac{1}{4}}\text{-dppm})_4(\text{I}^{\frac{1}{4}}\text{-p-tc})_6](\text{PF}_6)_3$ . <i>Chemical Communications</i> , 2005, , 1575-1577.	4.1	49
25	$\text{I}^{\frac{1}{4}}\text{-Biphenyl-2,2'-dithiolato-I}^{\frac{1}{2}}\text{S}^{\frac{2-}{2}}\text{-bis}[(\text{triphenylphosphine-I}^{\frac{1}{4}}\text{P})\text{gold(I)}]$ . <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2004, 60, m440-m442.	0.4	1
26	Syntheses and crystal structures of ferrocenyl derivatives of biphenyl. <i>Russian Chemical Bulletin</i> , 2003, 52, 607-615.	1.5	8
27	$[\text{I}^{\frac{1}{4}}\text{-o-Phenylenebis(diphenylphosphine)-I}^{\frac{1}{2}}\text{P}^{\frac{2-}{2}}\text{bis}[\text{chlorogold(I)}], \text{dppbz}(\text{AuCl})_2$ . <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2003, 59, m84-m86.	0.4	18
28	Formation of a Cationic Gold(I) Complex and Disulfide by Oxidation of the Antiarthritic Gold Drug Auranofin. <i>Inorganic Chemistry</i> , 2003, 42, 2203-2205.	4.0	43
29	Perspectives in Inorganic and Bioinorganic Gold Sulfur Chemistry. <i>Comments on Inorganic Chemistry</i> , 2002, 23, 321-334.	5.2	24
30	Formation of separated versus contact ion pairs in alkali metal thiolates and selenolates. <i>Dalton Transactions RSC</i> , 2000, , 2167-2173.	2.3	14
31	Reactions of Organic Disulfides and Gold(I) Complexes. <i>Metal-Based Drugs</i> , 1999, 6, 247-253.	3.8	8
32	Cyclic Voltammetry of Auranofin. <i>Metal-Based Drugs</i> , 1999, 6, 233-238.	3.8	18
33	Electronic Structure of Dinuclear Gold(I) Complexes. <i>Metal-Based Drugs</i> , 1999, 6, 255-260.	3.8	1
34	Stripping Analyses of Mercury Using Gold Electrodes: Irreversible Adsorption of Mercury. <i>Analytical Chemistry</i> , 1999, 71, 3181-3186.	6.5	64
35	Electrochemical and Chemical Oxidation of Gold(I) Thiolate Phosphine Complexes: Formation of Gold Clusters and Disulfide. <i>Journal of the American Chemical Society</i> , 1999, 121, 9225-9226.	13.7	40
36	Theoretical Studies on the Photochemistry of the Cis-to-Trans Conversion in Dinuclear Gold Halide Bis(diphenylphosphino)ethylene Complexes. <i>Journal of the American Chemical Society</i> , 1998, 120, 6587-6597.	13.7	74

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37	Electrochemical piezoelectric sensors for trace ionic contaminants. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1998, 45, 1408-1415.	3.0	4
38	<title>Heavy metal detection combining stripping electrochemistry and piezoelectric sensor technology</title>. , 1998, , .		2
39	Solid State EXAFS and Luminescence Studies of Neutral, Dinuclear Gold(I) Complexes. Gold(I)-Gold(I) Interactions in the Solid State. Inorganic Chemistry, 1995, 34, 1996-2001.	4.0	145
40	An Unprecedented Photochemical Cis to Trans Isomerization of Dinuclear Gold(I) Bis(diphenylphosphino)ethylene Complexes. Journal of the American Chemical Society, 1995, 117, 9596-9597.	13.7	25
41	Redox Chemistry of Gold(I) Phosphine Thiolates: Sulfur-Based Oxidation. Metal-Based Drugs, 1994, 1, 419-431.	3.8	9
42	Electronic and Steric Effects in Gold(I) Phosphine Thiolate Complexes. Metal-Based Drugs, 1994, 1, 405-417.	3.8	3
43	Insight into formation and reactivity of molybdenum(0) bent nitrenes. Crystal structure of a phosphine-phosphoranimine chelate. Inorganic Chemistry, 1993, 32, 2202-2206.	4.0	23
44	Synthesis, structure, and electronic spectroscopy of neutral, dinuclear gold(I) complexes. Gold(I)-gold(I) interactions in solution and in the solid state. Inorganic Chemistry, 1993, 32, 2506-2517.	4.0	204
45	Solvent effects on electron delocalization in paramagnetic organometallic complexes: solvent manipulation of the amount of 19-electron character in Co(CO)3L2 (L2 = a chelating phosphine). Journal of the American Chemical Society, 1992, 114, 6418-6424.	13.7	33
46	Reactions of molybdenum(0) tricarbonyl complexes with 8-azidoquinoline. Crystal structure of the phosphinimine complex Mo(CO)4[N(PPh3)(C9H6N)] and evidence for a bent nitrene. Inorganic Chemistry, 1991, 30, 3241-3243.	4.0	18
47	Descriptive photochemistry and electronic structure bis(cyclopentadienyl)oxomolybdenum and bis(methylcyclopentadienyl)oxomolybdenum complexes. Inorganic Chemistry, 1988, 27, 4669-4676.	4.0	20
48	Photochemical consequences of the manipulation of the lowest energy excited states by substitution of the Cp (Cp = $\eta^5$ -cyclopentadienyl) ligands in titanium Cp2TiX2 (X = Br, I) complexes. Inorganic Chemistry, 1986, 25, 2546-2549.	4.0	31
49	Self-consistent-field-X $\alpha$ -scattered-wave molecular orbital calculation of [CpMoS( $\eta^5$ -S)]2, a molecule that undergoes a photochemically induced isomerization. Polyhedron, 1985, 4, 2073-2081.	2.2	4
50	Electronic structure and photochemistry of the ( $\eta^5$ -C5H5)2TiI2 complex. Organometallics, 1985, 4, 528-533.	2.3	25
51	Photochemistry and electronic structure of the bis( $\eta^5$ -cyclopentadienyl)titanium sulfide [( $\eta^5$ -C5H5)2TiS] complex. Journal of the American Chemical Society, 1984, 106, 6660-6664.	13.7	10
52	Photochemistry and electronic structure of the ( $\eta^5$ -C5H5)2MoS2 complex. Organometallics, 1984, 3, 1610-1614.	2.3	8
53	Electronic structures of the ( $\eta^5$ -C5H5)2TiL2 complexes (L = fluorine, chlorine, bromine, iodine, and) Tj ETQq1 1 0,784314 ggBT /Overl 13.7 55	13.7	55