Partha Basu

List of Publications by Year
in descending order

83 papers	4,357 citations	136950 32 h-index	114465 63 g-index
90 all docs	90 docs citations	90 times ranked	4415 citing authors

#	Article	IF	Citations
1	S K-edge XAS of CuII, CuI, and ZnII oxidized Dithiolene complexes: Covalent contributions to structure and the Jahn-Teller effect. Journal of Inorganic Biochemistry, 2022, 230, 111752.	3.5	0
2	Synthesis, Redox and Spectroscopic Properties of Pterin of Molybdenum Cofactors. Molecules, 2022, 27, 3324.	3.8	2
3	Kinetic consequences of the endogenous ligand to molybdenum in the DMSO reductase family: a case study with periplasmic nitrate reductase. Journal of Biological Inorganic Chemistry, 2021, 26, 13-28.	2.6	5
4	Interligand communication in a metal mediated LLâ€²CT system â€“ a case study. RSC Advances, 2021, 11, 24381-24386.	3.6	1
5	The Impact of Ligand Oxidation State and Fold Angle on the Charge Transfer Processes of Mo IV Oâ€Dithione Complexes. European Journal of Inorganic Chemistry, 2021, 2021, 914-922.	2.0	4
6	The physiology and evolution of microbial selenium metabolism. Metallomics, 2021, 13, .	2.4	14
7	Determining conventional and unconventional oil and gas well brines in natural sample II: Cation analyses with ICP-MS and ICP-OES. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2020, 55, 11-23.	1.7	10
8	Determining conventional and unconventional oil and gas well brines in natural samples I: Anion analysis with ion chromatography. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2020, 55, 1-10.	1.7	9
9	Methane, arsenic, selenium and the origins of the DMSO reductase family. Scientific Reports, 2020, 10, 10946.	3.3	20
10	Dithione, the antipodal redox partner of ene-1,2-dithiol ligands and their metal complexes. Coordination Chemistry Reviews, 2020, 409, 213211.	18.8	18
11	Functional mononuclear molybdenum enzymes: challenges and triumphs in molecular cloning, expression, and isolation. Journal of Biological Inorganic Chemistry, 2020, 25, 547-569.	2.6	12
12	Syntheses, spectroscopic, redox, and structural properties of homoleptic Iron(III/II) dithione complexes. RSC Advances, 2020, 10, 38294-38303.	3.6	1
13	Design, Synthesis, and Structure of Copper Dithione Complexes: Redoxâ€Dependent Charge Transfer. European Journal of Inorganic Chemistry, 2019, 2019, 4939-4948.	2.0	11
14	Respiratory Selenite Reductase from Bacillus selenitireducens Strain MLS10. Journal of Bacteriology, 2019, 201, .	2.2	37
15	Unraveling the inner workings of respiratory arsenate reductase. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9051-9053.	7.1	8
16	Molecular cloning, expression and biochemical characterization of periplasmic nitrate reductase from Campylobacter jejuni. FEMS Microbiology Letters, 2018, 365, .	1.8	22
17	Structural and Electronic Investigation of Tetrachalcogenidomolybdate Dianions. ChemistrySelect, 2018, 3, 5808-5813.	1.5	0
18	A mixed valence zinc dithiolene system with spectator metal and reactor ligands. Polyhedron, 2016, 114, 370-377.	2.2	11

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19	Large Ligand Folding Distortion in an Oxomolybdenum Donorâ€“Acceptor Complex. Inorganic Chemistry, 2016, 55, 785-793.	4.0	18
20	Designing the Molybdopterin Core through Regioselective Coupling of Building Blocks. Chemistry - A European Journal, 2015, 21, 17057-17072.	3.3	14
21	Recent developments in the study of molybdoenzyme models. Journal of Biological Inorganic Chemistry, 2015, 20, 373-383.	2.6	29
22	Solution, Solid, and Gas Phase Studies on a Nickel Dithiolene System: Spectator Metal and Reactor Ligand. Inorganic Chemistry, 2015, 54, 7703-7716.	4.0	19
23	Sulfite Oxidase Catalyzes Single-Electron Transfer at Molybdenum Domain to Reduce Nitrite to Nitric Oxide. Antioxidants and Redox Signaling, 2015, 23, 283-294.	5.4	68
24	Nitrite Reductase and Nitric-oxide Synthase Activity of the Mitochondrial Molybdopterin Enzymes mARC1 and mARC2. Journal of Biological Chemistry, 2014, 289, 10345-10358.	3.4	136
25	A regioselective synthesis of the dephospho ditholene protected molybdopterin. RSC Advances, 2014, 4, 19072-19076.	3.6	8
26	Mapping the protein profile involved in the biotransformation of organoarsenicals using an arsenic metabolizing bacterium. Metallomics, 2014, 6, 1958-1969.	2.4	12
27	Infrared Multiple Photon Dissociation Spectroscopy of a Gas-Phase Oxo-Molybdenum Complex with 1,2-Dithiolene Ligands. Journal of Physical Chemistry A, 2014, 118, 5407-5418.	2.5	11
28	The Mononuclear Molybdenum Enzymes. Chemical Reviews, 2014, 114, 3963-4038.	47.7	693
29	Nitrate and periplasmic nitrate reductases. Chemical Society Reviews, 2014, 43, 676-706.	38.1	260
30	Quantitation of the ligand effect in oxo-transfer reactions of dioxo-Mo(<scp>vi</scp>) trispyrazolyl borate complexes. Dalton Transactions, 2013, 42, 3071-3081.	3.3	21
31	Continuing Issues with Lead: Recent Advances in Detection. European Journal of Inorganic Chemistry, 2013, 2013, 1086-1096.	2.0	55
32	Dithiolopyranthione Synthesis, Spectroscopy, and an Unusual Reactivity with DDQ. Journal of Heterocyclic Chemistry, 2013, 50, 879-886.	2.6	6
33	Continuing Issues with Lead: Recent Advances in Detection. European Journal of Inorganic Chemistry, 2013, 2013, 1072-1072.	2.0	0
34	Tungsten in Biological Systems. , 2013, , 2274-2283.		2
35	Microbial Reduction of Chromate in the Presence of Nitrate by Three Nitrate Respiring Organisms. Frontiers in Microbiology, 2012, 3, 416.	3.5	41
36	A Valence Bond Description of Dizwitterionic Dithiolene Character in an Oxomolybdenum-Bis(dithione) Complex. European Journal of Inorganic Chemistry, 2011, 2011, 5467-5470.	2.0	24

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37	Pterin chemistry and its relationship to the molybdenum cofactor. Coordination Chemistry Reviews, 2011, 255, 1016-1038.	18.8	114
38	Synthesis, characterization, spectroscopy, electronic and redox properties of a new nickel dithiolene system. Inorganica Chimica Acta, 2010, 363, 2857-2864.	2.4	24
39	A proteome investigation of roxarsone degradation by Alkaliphilus oremlandii strain OhILAs. Metallomics, 2010, 2, 133-139.	2.4	19
40	Influence of the Oxygen Atom Acceptor on the Reaction Coordinate and Mechanism of Oxygen Atom Transfer From the Dioxo-Mo(VI) Complex, TpiPrMoO2(OPh), to Tertiary Phosphines. Inorganic Chemistry, 2010, 49, 4895-4900.	4.0	32
41	Understanding Oxotransferase Reactivity in a Model System Using Singular Value Decomposition Analysis. ACS Symposium Series, 2009, , 199-217.	0.5	4
42	Development of a Fluorescent Pb²⁺ Sensor. Angewandte Chemie - International Edition, 2009, 48, 3996-3998.	13.8	131
43	Substituent Effect on Oxygen Atom Transfer Reactivity from Oxomolybdenum Centers: Synthesis, Structure, Electrochemistry, and Mechanism. Inorganic Chemistry, 2009, 48, 6303-6313.	4.0	39
44	Comparative calculation of EPR spectral parameters in [MoVOX4]â˜’, [MoVOX5]2â˜’, and [MoVOX4(H2O)]â˜’ complexes. Physical Chemistry Chemical Physics, 2009, 11, 10377.	2.8	17
45	Synthesis, characterization and structure of a low coordinate desoxomolybdenum cluster stabilized by a dithione ligand. Dalton Transactions, 2009, , 5023.	3.3	14
46	Synthesis, electrochemistry, geometric and electronic structure of oxo-molybdenum compounds involved in an oxygen atom transferring system. Journal of Inorganic Biochemistry, 2008, 102, 748-756.	3.5	24
47	<i>Transformation of Inorganic and Organic Arsenic by</i><scp>Alkaliphilus oremlandii</scp><i>sp. nov. Strain OhILAs</i>. Annals of the New York Academy of Sciences, 2008, 1125, 230-241.	3.8	90
48	Design, syntheses, and characterization of dioxo-molybdenum(vi) complexes with thiolate ligands: effects of intraligand NHâ‹¯S hydrogen bonding. Dalton Transactions, 2008, , 2569.	3.3	10
49	Angiogenic Potential of 3-Nitro-4-Hydroxy Benzene Arsonic Acid (Roxarsone). Environmental Health Perspectives, 2008, 116, 520-523.	6.0	33
50	Biotransformation of 3-Nitro-4-hydroxybenzene Arsonic Acid (Roxarsone) and Release of Inorganic Arsenic byClostridiumSpecies. Environmental Science & Technology, 2007, 41, 818-823.	10.0	223
51	Design, synthesis, and characterization of a sterically encumbered dioxo molybdenum (VI) core. Inorganica Chimica Acta, 2007, 360, 2092-2099.	2.4	11
52	Arsenic and Selenium in Microbial Metabolism. Annual Review of Microbiology, 2006, 60, 107-130.	7.3	573
53	Synthesis, Molecular and Electronic Structure, and TDDFT and TDDFT-PCM Study of the Solvatochromic Properties of (Me2Pipdt)Mo(CO)4Complex (Me2Pipdt) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 97 Td (N,Nâ€˜-D	4.0	57
54	Mechanistic Investigation of the Oxygen-Atom-Transfer Reactivity of Dioxo-molybdenum(VI) Complexes. Chemistry - A European Journal, 2006, 12, 7501-7509.	3.3	56

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55	Oxygen Atom Transfer in Models for Molybdenum Enzymes: Isolation and Structural, Spectroscopic, and Computational Studies of Intermediates in Oxygen Atom Transfer from Molybdenum(VI) to Phosphorus(III). Chemistry - A European Journal, 2005, 11, 3255-3267.	3.3	55
56	Oxomolybdenum Tetrathiolates with Sterically Encumbering Ligands:Â Modeling the Effect of a Protein Matrix on Electronic Structure and Reduction Potentials. Inorganic Chemistry, 2005, 44, 8216-8222.	4.0	17
57	Oxygen Atom Transfer Reactivity from a Dioxo-Mo(VI) Complex to Tertiary Phosphines:Â Synthesis, Characterization, and Structure of Phosphoryl Intermediate Complexes. Inorganic Chemistry, 2005, 44, 7494-7502.	4.0	48
58	A bifurcated pathway of oxygen atom transfer reactions from a monooxo molybdenum(vi) complex under electrospray ionisation mass spectrometric conditions. Dalton Transactions, 2004, , 1928.	3.3	17
59	Isomerization and Oxygen Atom Transfer Reactivity in Oxoâˆ’Mo Complexes of Relevance to Molybdoenzymes. Inorganic Chemistry, 2004, 43, 7573-7575.	4.0	39
60	Isolation, Characterization of an Intermediate in an Oxygen Atom-Transfer Reaction, and the Determination of the Bond Dissociation Energy. Journal of the American Chemical Society, 2004, 126, 8604-8605.	13.7	51
61	Syntheses, Spectroscopy, and Redox Chemistry of Encapsulated Oxoâˆ’Mo(V) Centers:Â Implications for Pyranopterin-Containing Molybdoenzymes. Inorganic Chemistry, 2003, 42, 7489-7501.	4.0	38
62	The respiratory arsenate reductase fromBacillus selenitireducensstrain MLS10. FEMS Microbiology Letters, 2003, 226, 107-112.	1.8	185
63	Electronic properties of para-substituted thiophenols and disulfides from 13C NMR spectroscopy and ab initio calculations: relations to the Hammett parameters and atomic chargesElectronic supplementary information (ESI) available: all characterization data are tabulated in Table S1. A figure showing the dependence of the natural charge of the C1 atom of the disulfides on the 13C NMR chemical shift is also provided. See http://www.rsc.org/suppdata/nj/b3/b300048f/. New Journal of Chemistry, 2003, 27, 1115.	2.8	37
64	Comparative Theoretical Investigation of the Vertical Excitation Energies and the Electronic Structure of [MoVOCl4]-:â€‰ Influence of Basis Set and Geometry. Inorganic Chemistry, 2003, 42, 4046-4056.	4.0	49
65	Donor Atom Dependent Geometric Isomers in Mononuclear Oxoâˆ’Molybdenum(V) Complexes:Â Implications for Coordinated Endogenous Ligation in Molybdoenzymes. Inorganic Chemistry, 2003, 42, 5999-6007.	4.0	28
66	Synthesis, Characterization, Electrochemistry, Electronic Structure, and Isomerization of Mononuclear Oxoâˆ’Molybdenum(V) Complexes: The Serine Gate Hypothesis in the Function of DMSO Reductases. Inorganic Chemistry, 2002, 41, 1281-1291.	4.0	34
67	An Analogue System Displaying All the Important Processes of the Catalytic Cycles Involving Monooxomolybdenum(VI) and Desoxomolybdenum(IV) Centers. Journal of the American Chemical Society, 2002, 124, 756-757.	13.7	41
68	Electrochemistry and Photoelectron Spectroscopy of Oxomolybdenum(V) Complexes with Phenoxide Ligands:Â Effect ofParaSubstituents on Redox Potentials, Heterogeneous Electron Transfer Rates, and Ionization Energies. Inorganic Chemistry, 2002, 41, 2642-2647.	4.0	19
69	Evolution of Nitrate Reductase: Molecular and Structural Variations on a Common Function. ChemBioChem, 2002, 3, 198-206.	2.6	142
70	Use of EPR Spectroscopy in Elucidating Electronic Structures of Paramagnetic Transition Metal Complexes. Journal of Chemical Education, 2001, 78, 666.	2.3	30
71	Dendrimer Encapsulation of [MoVOS4] Cores:â€‰ Implications for the DMSO Reductase Family of Enzymes. Inorganic Chemistry, 2001, 40, 192-193.	4.0	19
72	Geometric Control of Reduction Potential in Oxomolybdenum Centers:Â Implications to the Serine Coordination in DMSO Reductase. Inorganic Chemistry, 2001, 40, 2632-2633.	4.0	28

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73	Detection, Isolation, and Characterization of Intermediates in Oxygen Atom Transfer Reactions in Molybdoenzyme Model Systems. Journal of the American Chemical Society, 2000, 122, 9298-9299.	13.7	76
74	A heme- C -containing enzyme complex that exhibits nitrate and nitrite reductase activity from the dissimilatory iron-reducing bacterium Geobacter metallireducens. Archives of Microbiology, 1999, 172, 313-320.	2.2	34
75	Ligand K-Edge and Metal L-Edge X-ray Absorption Spectroscopy and Density Functional Calculations of Oxomolybdenum Complexes with Thiolate and Related Ligands:Â Implications for Sulfite Oxidase. Journal of the American Chemical Society, 1999, 121, 10035-10046.	13.7	69
76	A chemical approach to systematically designate the pyranopterin centers of molybdenum and tungsten enzymes and synthetic models. Journal of Inorganic Biochemistry, 1998, 72, 13-21.	3.5	41
77	Oxomolybdenum(V)/Iron(III) Porphyrinate Complexes:Â Effect of Axial Ligand Plane Orientation on Complex Stability, Reduction Potential, and NMR and EPR Spectra. Inorganic Chemistry, 1997, 36, 1088-1094.	4.0	11
78	Multifrequency ESEEM Spectroscopy of Sulfite Oxidase in Phosphate Buffer:Â Direct Evidence for Coordinated Phosphate. Inorganic Chemistry, 1996, 35, 7001-7008.	4.0	63
79	NMR Studies of Hindered Ligand Rotation, Magnetic Anisotropy, Curie Behavior, Proton Spin Relaxation, and Ligand Exchange in Some Novel Oxomolybdenum(V)/Iron(III) Porphyrinate Complexes. Journal of the American Chemical Society, 1995, 117, 9042-9055.	13.7	39
80	Chemistry of ferro- and ferriverdins. Iron redox and geometrical stereodynamism. Inorganic Chemistry, 1989, 28, 2680-2686.	4.0	38
81	Application of Proteomics in Bioremediation. , 0, , 247-P2.		1
82	Methods for Detection of Arsenate-Respiring Bacteria: Advances, Cautions, and Caveats. , 0, , 283-P1.		2
83	Achieving DEIR and Safety Awareness in a Chemistry Graduate Program: â€œSafety, Inclusivity, & Diversity Talksâ€•(â€œSID Talksâ€) as Part of a Colloquium Series. Journal of Chemical Education, 0, , .	2.3	0