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## The Mononuclear Molybdenum Enzymes

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#	Paper	IF	Citations
1477	19. Connecting the biosynthesis of the molybdenum cofactor, Fe-S clusters, and tRNA thiolation in humans.		
1476	Tungstoenzymes. <i>Chemical Reviews</i> , <b>1996</b> , 96, 2817-2840	68.1	302
1475	Multifrequency ESEEM Spectroscopy of Sulfite Oxidase in Phosphate Buffer: Direct Evidence for Coordinated Phosphate. <i>Inorganic Chemistry</i> , <b>1996</b> , 35, 7001-7008	5.1	59
1474	Molybdenum cofactor biosynthesis. The plant protein Cnx1 binds molybdopterin with high affinity. <b>1997</b> , 272, 26811-4		77
1473	Towards the reaction mechanism of xanthine oxidase from EPR studies. <b>1997</b> , 25, 762-8		13
1472	Role of Mo-C bonds in xanthine oxidase action. <b>1997</b> , 25, 774-8		7
1471	ENDOR evidence relating the Fe/S EPR signals from xanthine oxidase to the individual clusters. <b>1997</b> , 25, 527S		6
1470	Chapter 13. Chromium, molybdenum and tungsten. <b>1997</b> , 93, 165		0
1469	Resonance Raman Characterization of the Molybdenum Center in Sulfite Oxidase: Identification of MoO Stretching Modes. <b>1997</b> , 119, 2590-2591		52
1468	Molecular Vibrations of Solvated Uracil. Ab Initio Reaction Field Calculations and Experiment. <b>1997</b> , 101, 10923-10938		33
1467	Structures and Spectral Properties of Iron(II), Cobalt(II), and Copper(II) Complexes Involving 2-(Dimethylamino)-4(3H)-pteridinone. <i>Inorganic Chemistry</i> , <b>1997</b> , 36, 3869-3875	5.1	24
1466	Photoinduced Electron Transfer in Covalently Linked Oxomolybdenum(V) Porphyrin Systems. <i>Inorganic Chemistry</i> , <b>1997</b> , 36, 5676-5677	5.1	13
1465	Rhenium-Catalyzed Oxidation of Thiols and Disulfides with Sulfoxides. <b>1997</b> , 119, 9309-9310		102
1464	Molybdenum-cofactor-containing enzymes: structure and mechanism. <b>1997</b> , 66, 233-67		423
1463	Enzymatic properties and effect of ionic strength on periplasmic nitrate reductase (NAP) from <i>Desulfovibrio desulfuricans</i> ATCC 27774. <b>1997</b> , 239, 816-22		30
1462	Comparative EPR and redox studies of three prokaryotic enzymes of the xanthine oxidase family: quinoline 2-oxidoreductase, quinaldine 4-oxidase, and isoquinoline 1-oxidoreductase. <b>1997</b> , 36, 9780-90		24
1461	Molecular basis of sulfite oxidase deficiency from the structure of sulfite oxidase. <b>1997</b> , 91, 973-83		438

- 1460 Tautomerization of the substrate heterocycle in the course of the reaction of xanthine oxidase. **1997**, 263, 87-93 28
- 1459 Structure and function of molybdopterin containing enzymes. **1997**, 68, 121-44 55
- 1458 Molybdenum cofactor of higher plants: biosynthesis and molecular biology. **1997**, 203, 399-405 54
- 1457 Dioxo-, oxothio- and dithio-tungsten(VI) and tungsten(V) complexes of the ligand N,N'-Dimethyl-N,N'-bis(2-mercaptophenyl)ethylenediamine. **1997**, 2, 623-633 15
- 1456 X-ray absorption spectroscopy of dimethylsulfoxide reductase from *Rhodobacter capsulatus*. **1997**, 2, 634-643 48
- 1455 The molybdenum-cofactor: a crystallographic perspective. **1997**, 2, 773-781 45
- 1454 Resonance Raman as a direct probe for the catalytic mechanism of molybdenum oxotransferases. **1997**, 2, 797-803 19
- 1453 Models for the molybdenum hydroxylases. **1997**, 2, 810-816 30
- 1452 The coordination chemistry and function of the molybdenum centres of the oxomolybdoenzymes. **1997**, 2, 817-822 46
- 1451 Molybdenum 1996. **1998**, 172, 181-245 11
- 1450 Transition metal-saccharide chemistry: synthesis, characterization and solution stability studies of cis-dioxomolybdenum saccharide complexes. **1998**, 311, 147-154 12
- 1449 Synthesis and structural studies on three-dimensionally hydrogen-bonded metal perchlorate complexes with 1,3-dimethylumazine and 1,3,6,7-tetramethylumazine. Crystal structure of diaqua-bis(1,3,6,7-tetramethyl-pteridine-2,4(1H,3H)-dione-O4,N5) copper(II) perchlorate dihydrate. **1998**, 268, 77-83 20
- 1448 The biochemical diversity of life near and above 100°C in marine environments. **1998**, 85 Suppl 1, 108S-117S 21
- 1447 2-Hydroxyisonicotinate dehydrogenase isolated from *Mycobacterium* sp. INA1. **1998**, 164, 311-6 4
- 1446 Mechanistic aspects of molybdenum-containing enzymes. **1998**, 22, 489-501 60
- 1445 A structural comparison of molybdenum cofactor-containing enzymes. **1998**, 22, 503-21 95
- 1444 Elucidation of novel biosynthetic pathways and metabolite flux patterns by retrobiosynthetic NMR analysis. **1998**, 22, 567-598 65
- 1443 Modeling for the active site nitrate reductase. Oxidation of the complex  $[MoVO(O_2CC(S)CH_3Ph)_2]^{2+}$  by nitrate and nitrite in methanol. **1998**, 271, 174-179 3

1442	Molybdenum complexes of the anticancer drug 6-mercaptopurine. <b>1998</b> , 279, 136-143		15
1441	Der bakterielle Abbau von Chinolin und seinen Derivaten [Abbauwege und Biokatalysatoren. <b>1998</b> , 110, 596-617		3
1440	Bacterial degradation of pyridine, indole, quinoline, and their derivatives under different redox conditions. <b>1998</b> , 49, 237-250		213
1439	Synthesis and characterization of $\alpha$ -phosphorylated ketones: Models for the molybdopterin precursor. <b>1998</b> , 54, 10973-10986		3
1438	Photophysical study of the decomposition of water using visible light and tungsten tris(dithiolenes) as photosensitizers-catalysts. <b>1998</b> , 114, 137-144		11
1437	The active sites of molybdenum- and tungsten-containing enzymes. <b>1998</b> , 2, 201-7		48
1436	Hexapotassium $\alpha$ -Oxo-bis[(citrate)dioxomolybdenum] Dihydrate. <b>1998</b> , 54, 1615-1616		7
1435	Xanthine dehydrogenase from the phototrophic purple bacterium <i>Rhodobacter capsulatus</i> is more similar to its eukaryotic counterparts than to prokaryotic molybdenum enzymes. <b>1998</b> , 27, 853-69		91
1434	Redox-state dependent chemical inactivation of arsenite oxidase. <i>Journal of Inorganic Biochemistry</i> , <b>1998</b> , 69, 253-257	4.2	10
1433	A chemical approach to systematically designate the pyranopterin centers of molybdenum and tungsten enzymes and synthetic models. <i>Journal of Inorganic Biochemistry</i> , <b>1998</b> , 72, 13-21	4.2	36
1432	2-Hydroxyisonicotinate dehydrogenase isolated from <i>Mycobacterium</i> sp. INA1. <b>1998</b> , 164, 311-316		2
1431	Molybdate binding by ModA, the periplasmic component of the <i>Escherichia coli</i> mod molybdate transport system. <b>1998</b> , 1370, 337-46		41
1430	Xanthine oxidoreductase catalyses the reduction of nitrates and nitrite to nitric oxide under hypoxic conditions. <b>1998</b> , 427, 225-8		357
1429	Synthesis, Structures, and Oxo Transfer Reactivity of Bis(dithiolene)tungsten(IV,VI) Complexes Related to the Active Sites of Tungstoenzymes. <b>1998</b> , 120, 8102-8112		114
1428	Synthesis, Structures, and Reactivity of Bis(dithiolene)molybdenum(IV,VI) Complexes Related to the Active Sites of Molybdoenzymes. <b>1998</b> , 120, 12869-12881		118
1427	ESEEM Investigations of the High pH and Low pH Forms of Chicken Liver Sulfite Oxidase. <b>1998</b> , 120, 11263-11273		39
1426	Molybdenum and Tungsten Structural Analogues of the Active Sites of the MoIV + [O] $\rightarrow$ MoVIO Oxygen Atom Transfer Couple of DMSO Reductases. <b>1998</b> , 120, 3259-3260		51
1425	Formation of a tyrosyl radical in xanthine oxidase. <b>1998</b> , 37, 7787-91		2

1424	DITHIOCARBAMATES DERIVED FROM NATURALLY OCCURRING AMINO ACIDS AND THEIR COMPLEXES WITH NICKEL AND COPPER. <b>1998</b> , 46, 71-77		1
1423	Selenium-containing formate dehydrogenase H from Escherichia coli: a molybdopterin enzyme that catalyzes formate oxidation without oxygen transfer. <b>1998</b> , 37, 3518-28		105
1422	Molecular Rhenium(V) Oxotransferases: Oxidation of Thiols to Disulfides with Sulfoxides. The Case of Substrate-Inhibited Catalysis. <i>Inorganic Chemistry</i> , <b>1998</b> , 37, 4979-4985	5.1	52
1421	Evaluation of Molybdenum-Sulfur Interactions in Molybdoenzyme Model Complexes by Gas-Phase Photoelectron Spectroscopy. The Electronic Buffer Effect. <b>1998</b> , 120, 3382-3386		95
1420	Molybdopterin radical in bacterial aldehyde dehydrogenases. <b>1998</b> , 37, 11366-75		26
1419	TorD, a cytoplasmic chaperone that interacts with the unfolded trimethylamine N-oxide reductase enzyme (TorA) in Escherichia coli. <b>1998</b> , 273, 16615-20		106
1418	Altered specificity mutations define residues essential for substrate positioning in xanthine dehydrogenase. <b>1998</b> , 278, 431-8		23
1417	Crystal structure of oxidized trimethylamine N-oxide reductase from Shewanella massilia at 2.5 Å resolution. <b>1998</b> , 284, 435-47		148
1416	Comparative Kinetics of Oxo Transfer to Substrate Mediated by Bis(dithiolene)dioxomolybdenum and -tungsten Complexes. <i>Inorganic Chemistry</i> , <b>1998</b> , 37, 1602-1608	5.1	103
1415	Structural analysis of the fds operon encoding the NAD <sup>+</sup> -linked formate dehydrogenase of Ralstonia eutropha. <b>1998</b> , 273, 26349-60		60
1414	Acetogenesis and the primary structure of the NADP-dependent formate dehydrogenase of Clostridium thermoaceticum, a tungsten-selenium-iron protein. <b>1998</b> , 114, 303-308		1
1413	Electron transfer in transition metal-pteridine systems. <b>1998</b> , 67-119		15
1412	Transition metal sulfur chemistry and its relevance to molybdenum and tungsten enzymes. <b>1998</b> , 70, 889-896		28
1411	Consideration of a phlorin structure for haem P-460 of hydroxylamine oxidoreductase and its implications regarding reaction mechanism. <b>1998</b> , 26, 385-9		16
1410	Application of EPR Spectroscopy to the Structural and Functional Study of Iron-Sulfur Proteins. <b>1999</b> , 47, 421-497		53
1409	Simple and Complex Iron-Sulfur Proteins in Sulfate Reducing Bacteria. <b>1999</b> , 47, 361-419		11
1408	Interactions between the molybdenum cofactor and iron-sulfur clusters of Escherichia coli dimethylsulfoxide reductase. <b>1999</b> , 274, 13002-9		22
1407	Crystal structure and mechanism of CO dehydrogenase, a molybdo iron-sulfur flavoprotein containing S-selanyl cysteine. <b>1999</b> , 96, 8884-9		208

1406	Generation and biomimetic chemistry of tungsten-dithiolene complexes containing the hydrotris(3,5-dimethylpyrazol-1-yl)borate ligand. <i>Journal of Inorganic Biochemistry</i> , <b>1999</b> , 76, 39-45	4.2	13
1405	Selenium-containing xanthine dehydrogenase from <i>Eubacterium barkeri</i> . <b>1999</b> , 264, 862-71		50
1404	The hxB gene, necessary for the post-translational activation of purine hydroxylases in <i>Aspergillus nidulans</i> , is independently controlled by the purine utilization and the nicotinate utilization transcriptional activating systems. <b>1999</b> , 31, 1065-73		22
1403	The genetic basis of tetrathionate respiration in <i>Salmonella typhimurium</i> . <b>1999</b> , 32, 275-87		191
1402	Coordination compounds of pteridine, alloxazine and flavin ligands: structures and properties. <b>1999</b> , 182, 323-342		103
1401	Molybdenum Metabolism in Plants. <b>1999</b> , 1, 160-168		49
1400	Bioconversion of pyrimidine by resting cells of quinoline-degrading bacteria. <b>1999</b> , 176, 291-9		6
1399	Bacterial respiration of arsenic and selenium. <b>1999</b> , 23, 615-27		418
1398	An EXAFS study of Mo(VI) and Mo(V) complexes with proline dithiocarbamate. <b>1999</b> , 288, 127-133		6
1397	Structure-function relationships of copper-containing nitrite reductases. <b>1999</b> , 190-192, 245-265		71
1396	NITRATE REDUCTASE STRUCTURE, FUNCTION AND REGULATION: Bridging the Gap between Biochemistry and Physiology. <b>1999</b> , 50, 277-303		501
1395	The Unperturbed OxoSulfido Functional Group cis-MoVIOS Related to That in the Xanthine Oxidase Family of Molybdoenzymes: Synthesis, Structural Characterization, and Reactivity Aspects. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 4104-4114	5.1	47
1394	The pH dependence of intramolecular electron transfer rates in sulfite oxidase at high and low anion concentrations. <b>1999</b> , 4, 390-401		83
1393	Speciation of trace elements in proteins in human and bovine serum by size exclusion chromatography and inductively coupled plasma-mass spectrometry with a magnetic sector mass spectrometer. <b>1999</b> , 4, 546-53		20
1392	Density functional study of the dicationic hypoxanthine tautomeric forms. <b>1999</b> , 468, 39-50		12
1391	Density functional study of the monocationic hypoxanthine tautomers. <b>1999</b> , 489, 73-85		15
1390	Dissimilatory nitrate reductases in bacteria. <b>1999</b> , 1446, 1-23		92
1389	Crystal structure of the first dissimilatory nitrate reductase at 1.9 Å solved by MAD methods. <b>1999</b> , 7, 65-79		257

1388	The strict molybdate-dependence of glucose-degradation by the thermoacidophile <i>Sulfolobus acidocaldarius</i> reveals the first crenarchaeotic molybdenum containing enzyme--an aldehyde oxidoreductase. <b>1999</b> , 260, 540-8		28
1387	Synthesis, Electrochemistry, and Oxygen-Atom Transfer Reactions of Dioxotungsten(VI) and -molybdenum(VI) Complexes with N <sub>2</sub> O <sub>2</sub> and N <sub>2</sub> S <sub>2</sub> Tetradentate Ligands. <b>1999</b> , 1999, 313-321		57
1386	EPR spectroscopy: a powerful technique for the structural and functional investigation of metalloproteins. <b>1999</b> , 5, S3-18		29
1385	Structure of the Molybdenum Site of Dimethyl Sulfoxide Reductase. <b>1999</b> , 121, 1256-1266		132
1384	The thermodynamics of xanthine oxidoreductase catalysis. <b>1999</b> , 1, 371-9		15
1383	Spectroscopic Evidence for a Unique Bonding Interaction in Oxo-Molybdenum Dithiolate Complexes: Implications for Electron Transfer Pathways in the Pyranopterin Dithiolate Centers of Enzymes. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 1401-1410	5.1	110
1382	Structural Changes Induced by Catalytic Turnover at the Molybdenum Site of Arabidopsis Nitrate Reductase. <b>1999</b> , 121, 9730-9731		31
1381	The neurotransmitter receptor-anchoring protein gephyrin reconstitutes molybdenum cofactor biosynthesis in bacteria, plants, and mammalian cells. <b>1999</b> , 96, 1333-8		127
1380	Human molybdopterin synthase gene: identification of a bicistronic transcript with overlapping reading frames. <b>1999</b> , 64, 698-705		80
1379	The kinetic behavior of chicken liver sulfite oxidase. <b>1999</b> , 38, 6668-77		109
1378	Molybdoenzymes and Molybdenum Cofactor in Plants. <b>1999</b> , 18, 33-69		73
1377	Molybdenum Pterin Chemistry. 2. Reinvestigation of Molybdenum(IV) Coordination by Flavin Gives Evidence for Partial Pteridine Reduction. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 2600-2606	5.1	21
1376	Syntheses of Metal Dithiolene Complexes from Thiometalates by Induced Internal Redox Reactions. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 4334-4341	5.1	53
1375	Molybdenum Pterin Chemistry. 1. The Five-Electron Oxidation of an Oxo Molybdenum Dithiolate Complex of a Reduced Pterin. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 2592-2599	5.1	19
1374	Mechanism of Formamide Hydroxylation Catalyzed by a Molybdenum Dithiolene Complex: A Model for Xanthine Oxidase Reactivity. <b>1999</b> , 103, 5406-5412		54
1373	Observation of Ligand-Based Redox Chemistry at the Active Site of a Molybdenum Enzyme. <b>1999</b> , 121, 2625-2626		45
1372	X-ray Absorption Spectroscopy of Chicken Sulfite Oxidase Crystals. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 2539-2540		50
1371	Purification and characterization of a tungsten-containing formate dehydrogenase from <i>Desulfovibrio gigas</i> . <b>1999</b> , 38, 16366-72		55

1370	Synthesis and Reactivity Aspects of the Bis(dithiolene) Chalcogenide Series [WIVQ(S <sub>2</sub> C <sub>2</sub> R <sub>2</sub> ) <sub>2</sub> ] <sub>2</sub> - (Q = O, S, Se). <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 5389-5398	5.1	74
1369	Molybdenum Pterin Chemistry. 3. Use of X-ray Photoelectron Spectroscopy To Assign Oxidation States in Metal Complexes of Noninnocent Ligands. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 2607-2613	5.1	29
1368	An X-ray Spectroscopic Investigation of Bis(dithiolene)molybdenum(IV,V,VI) and -tungsten(IV,V,VI) Complexes: Symmetrized Structural Representations of the Active Sites of Molybdoenzymes in the DMSO Reductase Family and of Tungstoenzymes in the AOR and F(M)DH Families. <b>1999</b> , 121, 10297-10307		41
1367	Ligand K-Edge and Metal L-Edge X-ray Absorption Spectroscopy and Density Functional Calculations of Oxomolybdenum Complexes with Thiolate and Related Ligands: Implications for Sulfite Oxidase. <b>1999</b> , 121, 10035-10046		63
1366	Influences of seed molybdenum and molybdenum application on nitrate reductase activity, shoot dry matter, and grain yields of winter wheat cultivars. <b>1999</b> , 22, 1433-1441		22
1365	A Model for Ferricyanide-Inhibited Sulfite Oxidase. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 4384-4385	5.1	27
1364	Freeze-Quench Magnetic Circular Dichroism Spectroscopic Study of the "Very Rapid" Intermediate in Xanthine Oxidase. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 4963-4970	5.1	55
1363	Computer Modeling of the Oxygen-atom Transfer Reaction between Hydrogen Sulfite and a Molybdenum(VI) Dioxo Complex. <i>Inorganic Chemistry</i> , <b>1999</b> , 38, 1015-1018	5.1	42
1362	Reactions of dimethylsulfoxide reductase from <i>Rhodobacter capsulatus</i> with dimethyl sulfide and with dimethyl sulfoxide: complexities revealed by conventional and stopped-flow spectrophotometry. <b>1999</b> , 38, 8501-11		45
1361	Kinetics and interactions of molybdenum and iron-sulfur centers in bacterial enzymes of the xanthine oxidase family: mechanistic implications. <b>1999</b> , 38, 14077-87		22
1360	The reductive half-reaction of xanthine oxidase. Reaction with aldehyde substrates and identification of the catalytically labile oxygen. <b>1999</b> , 274, 3323-30		68
1359	Formaldehyde ferredoxin oxidoreductase from <i>Pyrococcus furiosus</i> : the 1.85 Å resolution crystal structure and its mechanistic implications. <b>1999</b> , 286, 899-914		106
1358	Molybdenum enzymes. <b>2000</b> , 35, 445-85		3
1357	The Molybdenum Cofactor Biosynthetic Protein Cnx1 Complements Molybdate-Repairable Mutants, Transfers Molybdenum to the Metal Binding Pterin, and Is Associated with the Cytoskeleton. <b>2000</b> , 12, 2455		1
1356	Sequence motif-specific assignment of two [2Fe-2S] clusters in rat xanthine oxidoreductase studied by site-directed mutagenesis. <b>2000</b> , 127, 771-8		36
1355	Control of Xanthine Oxidase Activity by Light. <b>2000</b> , 112, 4044-4046		
1354	Control of Xanthine Oxidase Activity by Light. <b>2000</b> , 39, 3886-3888		5
1353	Six-coordinate monooxo molybdenum(VI) complexes with catecholate and salicylaldehyde thiosemicarbazone ligands. <b>2000</b> , 309, 147-150		19



1352	Comparison of the sequences of the <i>Aspergillus nidulans</i> hxB and <i>Drosophila melanogaster</i> mal genes with nifS from <i>Azotobacter vinelandii</i> suggests a mechanism for the insertion of the terminal sulphur atom in the molybdopterin cofactor. <b>2000</b> , 38, 114-25		46
1351	Aldehyde oxidoreductase activity in <i>Desulfovibrio alaskensis</i> NCIMB 13491 EPR assignment of the proximal [2Fe-2S] cluster to the Mo site. <b>2000</b> , 267, 2054-61		25
1350	A tribute to sulfur. <b>2000</b> , 267, 5657-64		113
1349	Catalytic oxidation of alcohols to aldehydes or ketones using osmium $\pi$ oxo complexes with sulfoxides or N-methylmorpholine-N-oxide as the co-oxidant: a comparative study. <b>2000</b> , 3, 765-769		1
1348	cis-Dioxomolybdenum(VI) complexes with tridentate and tetradentate Schiff base ligands. Preparation, structures and inhibition of aerial oxidation of aldehydes. <b>2000</b> , 19, 1133-1138		69
1347	Synthesis and reactivity studies of model complexes for molybdopterin-dependent enzymes. <i>Journal of Inorganic Biochemistry</i> , <b>2000</b> , 79, 67-74	4.2	32
1346	The role of the [2Fe-2s] cluster centers in xanthine oxidoreductase. <i>Journal of Inorganic Biochemistry</i> , <b>2000</b> , 82, 43-9	4.2	46
1345	Electron spin echo envelope modulation (ESEEM) spectroscopy as a tool to investigate the coordination environment of metal centers. <b>2000</b> , 204, 1-112		140
1344	An MCD spectroscopic study of the molybdenum active site in sulfite oxidase: insight into the role of coordinated cysteine. <i>Journal of Inorganic Biochemistry</i> , <b>2000</b> , 80, 227-33	4.2	27
1343	Density functional study of the monocationic allopurinol tautomers. <b>2000</b> , 504, 105-118		4
1342	Density functional study of three-protonated hypoxanthine 3+ isomeric forms. <b>2000</b> , 532, 143-156		8
1341	Mechanism of the inhibition of milk xanthine oxidase activity by metal ions: a transient kinetic study. <b>2000</b> , 1480, 302-10		6
1340	Steady state and picosecond time-resolved fluorescence studies on native, desulpho and deflavo xanthine oxidase. <b>2000</b> , 1481, 273-82		12
1339	Syntheses of 1,2,4-triazolo[4,3-c]pteridines. Potential substrates for xanthine oxidase. <b>2000</b> , 11/12, 409-417		2
1338	Enzymes involved in the aerobic bacterial degradation of N-heteroaromatic compounds: molybdenum hydroxylases and ring-opening 2,4-dioxygenases. <b>2000</b> , 87, 59-69		42
1337	Spectroscopic studies of the tungsten-containing formaldehyde ferredoxin oxidoreductase from the hyperthermophilic archaeon <i>Thermococcus litoralis</i> . <b>2000</b> , 5, 313-27		17
1336	3D Reconstruction from STEM Images of Xanthine Dehydrogenase and Insulin Receptor: Refinements and Molecular Modelling.. <b>2000</b> , 6, 276-277		
1335	Resonance Raman characterization of biotin sulfoxide reductase. Comparing oxomolybdenum enzymes in the ME(2)SO reductase family. <b>2000</b> , 275, 6798-805		34

1334	The crystal structure of the Escherichia coli MobA protein provides insight into molybdopterin guanine dinucleotide biosynthesis. <b>2000</b> , 275, 40211-7	59
1333	Binding of flavin adenine dinucleotide to molybdenum-containing carbon monoxide dehydrogenase from Oligotropha carboxidovorans. Structural and functional analysis of a carbon monoxide dehydrogenase species in which the native flavoprotein has been replaced by its recombinant counterpart produced in Escherichia coli. <b>2000</b> , 275, 1864-72	38
1332	Cloning of the cDNAs coding for two novel molybdo-flavoproteins showing high similarity with aldehyde oxidase and xanthine oxidoreductase. <b>2000</b> , 275, 30690-700	54
1331	Biomimetic Chemistry of Molybdenum. <b>2000</b> , 415-459	11
1330	The molybdenum cofactor biosynthetic protein Cnx1 complements molybdate-repairable mutants, transfers molybdenum to the metal binding pterin, and is associated with the cytoskeleton. <b>2000</b> , 12, 2455-2472	81
1329	The torYZ (yeck bisZ) operon encodes a third respiratory trimethylamine N-oxide reductase in Escherichia coli. <b>2000</b> , 182, 5779-86	50
1328	Reduction of organic nitrites to nitric oxide catalyzed by xanthine oxidase: possible role in metabolism of nitrovasodilators. <b>2000</b> , 270, 880-5	48
1327	Gene sequence and crystal structure of the aldehyde oxidoreductase from Desulfovibrio desulfuricans ATCC 27774. <b>2000</b> , 297, 135-46	59
1326	Dimethylsulfoxide reductase: an enzyme capable of catalysis with either molybdenum or tungsten at the active site. <b>2000</b> , 299, 593-600	79
1325	The effect of intracellular molybdenum in Hydrogenophaga pseudoflava on the crystallographic structure of the seleno-molybdo-iron-sulfur flavoenzyme carbon monoxide dehydrogenase. <b>2000</b> , 301, 1221-35	71
1324	Metal coordination and mechanism of multicopper nitrite reductase. <b>2000</b> , 33, 728-35	130
1323	A review and proposed nomenclature for major proteins of the milk-fat globule membrane. <b>2000</b> , 83, 203-47	293
1322	Cysteines involved in the interconversion between dehydrogenase and oxidase forms of bovine xanthine oxidoreductase. <b>2000</b> , 83, 499-506	20
1321	Biochemical/spectroscopic characterization and preliminary X-ray analysis of a new aldehyde oxidoreductase isolated from Desulfovibrio desulfuricans ATCC 27774. <b>2000</b> , 268, 745-9	10
1320	A new route to peroxyxynitrite: a role for xanthine oxidoreductase. <b>2000</b> , 475, 93-6	53
1319	Insights into molybdenum cofactor deficiency provided by the crystal structure of the molybdenum cofactor biosynthesis protein MoaC. <b>2000</b> , 8, 709-18	59
1318	The role of Se, Mo and Fe in the structure and function of carbon monoxide dehydrogenase. <b>2000</b> , 381, 865-76	59
1317	Mutations in the molybdenum cofactor biosynthetic protein Cnx1G from Arabidopsis thaliana define functions for molybdopterin binding, molybdenum insertion, and molybdenum cofactor stabilization. <b>2000</b> , 97, 6475-80	37

1316	Crystal structures of bovine milk xanthine dehydrogenase and xanthine oxidase: structure-based mechanism of conversion. <b>2000</b> , 97, 10723-8		542
1315	A Novel Protein-Bound Copper-Molybdenum Cluster. <b>2000</b> , 122, 8321-8322		84
1314	Synthesis and structures of bis(dithiolene)-tungsten(IV) complexes related to the active sites of tungstoenzymes. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 1275-81	5.1	42
1313	Direct Detection of the Proton-Containing Group Coordinated to Mo(V) in the High pH Form of Chicken Liver Sulfite Oxidase by Refocused Primary ESEEM Spectroscopy: Structural and Mechanistic Implications. <b>2000</b> , 122, 5294-5302		57
1312	Synthesis and structures of bis(dithiolene)molybdenum complexes related to the active sites of the DMSO reductase enzyme family. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 263-73	5.1	115
1311	The 1.3 Å Crystal Structure of <i>Rhodobacter sphaeroides</i> Dimethyl Sulfoxide Reductase Reveals Two Distinct Molybdenum Coordination Environments. <b>2000</b> , 122, 7673-7680		142
1310	Toward a Total Model for the Molybdenum Hydroxylases: Synthesis, Redox, and Biomimetic Chemistry of Oxo-thio-Mo(VI) and -Mo(V) Complexes. <b>2000</b> , 122, 2946-2947		37
1309	Analogues for the molybdenum center of sulfite oxidase: oxomolybdenum(V) complexes with three thiolate sulfur donor atoms. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 525-31	5.1	34
1308	Detection, Isolation, and Characterization of Intermediates in Oxygen Atom Transfer Reactions in Molybdoenzyme Model Systems. <b>2000</b> , 122, 9298-9299		69
1307	Control of oxo-molybdenum reduction and ionization potentials by dithiolate donors. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 2273-8	5.1	43
1306	ESEEM and mims ENDOR spectroscopies of cis,trans-(L-N <sub>2</sub> S <sub>2</sub> )MoVO(SCH <sub>2</sub> Ph): detection of the two benzylthiolate alpha protons. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 4989-92	5.1	7
1305	Oxo/sulfidotungstate(VI) as precursors to W(VI)O <sub>2</sub> , W(VI)OS, and W(VI)S <sub>2</sub> complexes and W(IV)-dithiolene chelate rings. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 2843-9	5.1	23
1304	Transformations Leading to the Generation of Dithiolene Ligands Initiated by Reactions of Sulfur-Rich WS(S <sub>2</sub> )(S <sub>2</sub> CNR <sub>2</sub> ) <sub>2</sub> Complexes with Dimethyl Acetylenedicarboxylate and Phenylacetylene. <b>2000</b> , 19, 5643-5653		12
1303	Analysis of the electron paramagnetic resonance properties of the [2Fe-2S] <sup>1+</sup> centers in molybdenum enzymes of the xanthine oxidase family: assignment of signals I and II. <b>2000</b> , 39, 2700-7		49
1302	X-ray spectroscopy of enzyme active site analogues and related molecules: bis(dithiolene)molybdenum(IV) and -tungsten(IV,VI) complexes with variant terminal ligands. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 5238-47	5.1	24
1301	Electronic structure studies of oxomolybdenum tetrathiolate complexes: origin of reduction potential differences and relationship to cysteine-molybdenum bonding in sulfite oxidase. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 5697-706	5.1	41
1300	The Oxo-Gate Hypothesis and DMSO Reductase: Implications for a Pseudo-π-Bonding Interaction Involved in Enzymatic Electron Transfer. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 4386-4387	5.1	41
1299	Structural and Functional Bis(dithiolene)-Molybdenum/Tungsten Active Site Analogues of the Dimethylsulfoxide Reductase Enzyme Family. <b>2000</b> , 122, 7410-7411		59

1298	Reversible dissociation of thiolate ligands from molybdenum in an enzyme of the dimethyl sulfoxide reductase family. <b>2000</b> , 39, 11258-69		74
1297	Charge effects on oxygen atom transfer. <i>Inorganic Chemistry</i> , <b>2000</b> , 39, 325-32	5.1	86
1296	The Literature of Heterocyclic Chemistry, Part VII: 1997-1999. <b>2001</b> , 79, 199-318		16
1295	The theoretical transition state structure of a model complex bears a striking resemblance to the active site structure of DMSO reductase. <b>2001</b> , 123, 5820-1		70
1294	Catalytic protein film voltammetry from a respiratory nitrate reductase provides evidence for complex electrochemical modulation of enzyme activity. <b>2001</b> , 40, 11294-307		102
1293	Crystal structures of human gephyrin and plant Cnx1 G domains: comparative analysis and functional implications. <b>2001</b> , 312, 405-18		84
1292	Reduction of organic nitrates catalysed by xanthine oxidoreductase under anaerobic conditions. <b>2001</b> , 1527, 81-7		42
1291	Molybdate transport. <b>2001</b> , 152, 311-21		116
1290	Reactions of dimethylsulfoxide reductase in the presence of dimethyl sulfide and the structure of the dimethyl sulfide-modified enzyme. <b>2001</b> , 40, 9810-20		36
1289	Structural and Mechanistic Studies of Oxo-Transfer Reactions of Bis(arylimido)oxorhenium(VII). <b>2001</b> , 20, 148-156		8
1288	Electronic spectral studies of molybdenyl complexes. 2. MCD spectroscopy of [MoOS <sub>4</sub> ]- centers. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 687-702	5.1	31
1287	Thermally driven intramolecular charge transfer in an oxo-molybdenum dithiolate complex. <b>2001</b> , 123, 10389-90		32
1286	Dendrimer encapsulation of [MoVOS <sub>4</sub> ] cores: implications for the DMSO reductase family of enzymes. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 192-3	5.1	18
1285	Mechanistic Study of Oxygen-Transfer Reaction Catalyzed by an Oxorhenium(V) Compound. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 994-999	5.1	18
1284	A density functional study of the highly adaptable molecular structure of Mo(V) and W(V) dithiolene complexes: from three-dimensional antiferromagnet to spin ladder. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 371-8	5.1	39
1283	Kinetics and mechanisms of catalytic oxygen atom transfer with oxorhenium(V) oxazoline complexes. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 2185-92	5.1	114
1282	Synthesis, characterization, and electrochemistry of cis-oxothio- and cis-bis(thio)tungsten(VI) complexes of hydrotris(3,5-dimethylpyrazol-1-yl)borate. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 4563-73	5.1	28
1281	Syntheses, structures, and stabilities of [PPh <sub>4</sub> ][WS(3)(SR)](R=(i)Bu,(i)Pr,(i)Bu, benzyl, allyl) and [PPh <sub>4</sub> ][MoS(3)(S(t)Bu)]. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 3141-8	5.1	26

1280	Active site heterogeneity in dimethyl sulfoxide reductase from <i>Rhodobacter capsulatus</i> revealed by Raman spectroscopy. <b>2001</b> , 40, 440-8		23
1279	Monodithiolene molybdenum(V, VI) complexes: a structural analogue of the oxidized active site of the sulfite oxidase enzyme family. <b>2001</b> , 123, 8343-9		74
1278	Geometric control of reduction potential in oxomolybdenum centers: implications to the serine coordination in DMSO reductase. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 2632-3	5.1	27
1277	Synthesis and cleavage reactions of metal-metal-bonded [Mo(2)(S(2)CNR(2))(6)](OTf)(2), a source of the Tris(dithiocarbamate)molybdenum(IV) fragment. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 6676-83	5.1	6
1276	Bis(dithiolene)molybdenum analogues relevant to the DMSO reductase enzyme family: synthesis, structures, and oxygen atom transfer reactions and kinetics. <b>2001</b> , 123, 1920-30		105
1275	Isomer formation and other issues in the substitution reactions of oxorhenium(V) complexes of 2,2'-bipyridine and related ligands. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 6717-24	5.1	16
1274	35 GHz ENDOR characterization of the "very rapid" signal of xanthine oxidase reacted with 2-hydroxy-6-methylpurine ( <sup>13</sup> C8): evidence against direct Mo-C8 interaction. <b>2001</b> , 123, 2658-63		56
1273	A theoretical study of the primary oxo transfer reaction of a dioxo molybdenum(VI) compound with imine thiolate chelating ligands: a molybdenum oxotransferase analogue. <b>2001</b> , 123, 3995-4002		60
1272	Photochromism of Dinuclear Tungsten Complexes with Disulfur and Ethylene-1,2-dithiolate Ligands. <b>2001</b> , 30, 1002-1003		6
1271	Suicide inactivation of xanthine oxidoreductase during reduction of inorganic nitrite to nitric oxide. <b>2001</b> , 358, 325-33		9
1270	Suicide inactivation of xanthine oxidoreductase during reduction of inorganic nitrite to nitric oxide. <b>2001</b> , 358, 325-333		14
1269	Ferredoxin and related enzymes from <i>Sulfolobus</i> . <i>Methods in Enzymology</i> , <b>2001</b> , 334, 3-22	1.7	6
1268	Redox centers of 4-hydroxybenzoyl-CoA reductase, a member of the xanthine oxidase family of molybdenum-containing enzymes. <b>2001</b> , 276, 47853-62		29
1267	The coordination and function of the redox centres of the membrane-bound nitrate reductases. <b>2001</b> , 58, 179-93		82
1266	Structure and function of eukaryotic NAD(P)H:nitrate reductase. <b>2001</b> , 58, 194-204		116
1265	Characterisation of the mob locus of <i>Rhodobacter sphaeroides</i> WS8: mobA is the only gene required for molybdopterin guanine dinucleotide synthesis. <b>2001</b> , 176, 62-8		8
1264	Structure refinement of the aldehyde oxidoreductase from <i>Desulfovibrio gigas</i> (MOP) at 1.28 Å. <b>2001</b> , 6, 791-800		78
1263	Tautomeric energetics of xanthine oxidase substrates: xanthine, 2-oxo-6-methylpurine, and lumazine. <i>Journal of Inorganic Biochemistry</i> , <b>2001</b> , 84, 145-50	4.2	10

1262	Abstracts Poster Presentations (R). <i>Journal of Inorganic Biochemistry</i> , <b>2001</b> , 86, 291-300	4.2
1261	Synthesis, crystal structure and EPR spectra of cis-dioxo-molybdenum(V) with catechol ligand. <b>2001</b> , 562, 89-94	18
1260	The catalytic reduction of nitrobenzene at the [MoVIO <sub>2</sub> (O <sub>2</sub> CC(S)(C <sub>6</sub> H <sub>5</sub> ) <sub>2</sub> ) <sub>2</sub> ] <sub>2</sub> complex intercalated in a Zn(II)/Al(III) layered double hydroxide host: A kinetic model for the molybdenumpterin binding site in nitrate reductase. <b>2001</b> , 33, 212-224	3
1259	First Dioxomolybdenum(VI) Complexes Containing Chiral Oxazoline Ligands: Synthesis, Characterization and Catalytic Activity. <b>2001</b> , 2001, 1071-1076	50
1258	Mononuclear Thiomolybdenyl Complexes: Synthesis and Structural and Spectroscopic Characterization. <b>2001</b> , 2001, 2227-2231	15
1257	In vivo oxo transfer: reactions of native and W-substituted dimethyl sulfoxide reductase monitored by (1)H NMR spectroscopy. <b>2001</b> , 2, 703-6	8
1256	Nicht-VSEPR-Strukturen und chemische Bindung in d0-Systemen. <b>2001</b> , 113, 3642-3677	35
1255	"Non-VSEPR" Structures and Bonding in d(0) Systems. <b>2001</b> , 40, 3534-3565	131
1254	Hydrosulfido complexes of transition metals. <b>2001</b> , 213, 211-305	128
1253	Bis(N-pyrrolidinedithiocarbamate)dioxomolybdenum(VI): synthesis, structure and reactivity. <b>2001</b> , 316, 1-6	11
1252	Monooxo molybdenum(VI) complexes with catecholate and 2,2'-thiobis(phenolate) ligands: preparation and electrochemical and spectroscopic properties. <b>2001</b> , 321, 83-88	9
1251	Synthesis and structural characterization of two tungsten(VI) dioxo complexes with N,O- and N,S-coordinating ligands. <b>2001</b> , 321, 162-166	8
1250	Oxo transfer reactions mediated by bis(dithiolene)tungsten analogues of the active sites of molybdoenzymes in the DMSO reductase family: comparative reactivity of tungsten and molybdenum. <b>2001</b> , 123, 1931-43	80
1249	A mononuclear molybdenum(V) mono-oxo biphenyl-2,2'-dithiolate complex in which the metal resides within a cleft formed by the ligands and that exhibits N-H...S hydrogen bonding in the solid state. <b>2001</b> , 6, 359-66	19
1248	Tungsten-containing formate dehydrogenase from <i>Desulfovibrio gigas</i> : metal identification and preliminary structural data by multi-wavelength crystallography. <b>2001</b> , 6, 398-404	36
1247	Interaction of Cu <sup>2+</sup> ion with milk xanthine oxidase. <b>2001</b> , 1544, 89-95	11
1246	Xanthine dehydrogenase from <i>Pseudomonas putida</i> 86: specificity, oxidation-reduction potentials of its redox-active centers, and first EPR characterization. <b>2001</b> , 1544, 151-65	24
1245	Crystal structure of the 100 kDa arsenite oxidase from <i>Alcaligenes faecalis</i> in two crystal forms at 1.64 Å and 2.03 Å. <b>2001</b> , 9, 125-32	242

1244	ABA3 is a molybdenum cofactor sulfurase required for activation of aldehyde oxidase and xanthine dehydrogenase in <i>Arabidopsis thaliana</i> . <b>2001</b> , 276, 40381-4		227
1243	Coupled electron/proton transfer in complex flavoproteins: solvent kinetic isotope effect studies of electron transfer in xanthine oxidase and trimethylamine dehydrogenase. <b>2001</b> , 276, 31193-201		28
1242	Purification of the aldehyde oxidase homolog 1 (AOH1) protein and cloning of the AOH1 and aldehyde oxidase homolog 2 (AOH2) genes. Identification of a novel molybdo-flavoprotein gene cluster on mouse chromosome 1. <b>2001</b> , 276, 46347-63		42
1241	DNA microarray analysis of the hyperthermophilic archaeon <i>Pyrococcus furiosus</i> : evidence for a new type of sulfur-reducing enzyme complex. <b>2001</b> , 183, 7027-36		84
1240	Substitution and oxidation reactions of bis(dithiolene)tungsten complexes of potential relevance to enzyme sites. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 4518-25	5.1	46
1239	Thiocarboxylation of molybdopterin synthase provides evidence for the mechanism of dithiolene formation in metal-binding pterins. <b>2001</b> , 276, 36268-74		77
1238	Effect of selenite on growth and protein synthesis in the phototrophic bacterium <i>Rhodobacter sphaeroides</i> . <b>2001</b> , 67, 4440-7		70
1237	Identification and biochemical characterization of <i>Arabidopsis thaliana</i> sulfite oxidase. A new player in plant sulfur metabolism. <b>2001</b> , 276, 46989-94		150
1236	Electron transfer and binding of the c-type cytochrome TorC to the trimethylamine N-oxide reductase in <i>Escherichia coli</i> . <b>2001</b> , 276, 11545-51		73
1235	Isolation and characterization of anaerobic ethylbenzene dehydrogenase, a novel Mo-Fe-S enzyme. <b>2001</b> , 183, 4536-42		117
1234	Molybdenum sequestration in Brassica species. A role for anthocyanins?. <b>2001</b> , 126, 1391-402		135
1233	Molybdopterin from molybdenum and tungsten enzymes. <b>2001</b> , 58, 47-94		47
1232	Biosynthesis of riboflavin. <b>2001</b> , 61, 1-49		72
1231	The DMSO Reductase Family of Microbial Molybdenum Enzymes; Molecular Properties and Role in the Dissimilatory Reduction of Toxic Elements. <b>2002</b> , 19, 3-21		96
1230	Catalysis at a dinuclear [CuSMo(=O)OH] cluster in a CO dehydrogenase resolved at 1.1-Å resolution. <b>2002</b> , 99, 15971-6		285
1229	In vivo interactions between gene products involved in the final stages of molybdenum cofactor biosynthesis in <i>Escherichia coli</i> . <b>2002</b> , 277, 48199-204		30
1228	Xanthine oxidase is a peroxynitrite synthase: newly identified roles for a very old enzyme. <b>2002</b> , 7, 65-70		23
1227	Molybdoenzymes and molybdenum cofactor in plants. <b>2002</b> , 53, 1689-98		189

1226	Purification and characterization of multiple forms of rat liver xanthine oxidoreductase expressed in baculovirus-insect cell system. <b>2002</b> , 132, 597-606		12
1225	Expression of <i>Drosophila melanogaster</i> xanthine dehydrogenase in <i>Aspergillus nidulans</i> and some properties of the recombinant enzyme. <b>2002</b> , 362, 223-229		9
1224	The Biogeochemistry of Molybdenum and Tungsten. <b>2002</b> ,		8
1223	Redox Chemistry of Dinuclear Molybdenum Dithiolene Complexes. Interconversion of the Bridging Disulfide and Sulfides. <b>2002</b> , 31, 482-483		4
1222	Kinetics and mechanism of oxygen atom abstraction from a dioxo-rhenium(VII) complex. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 4727-31	5.1	21
1221	Pyridylazole chelation of oxorhenium(V) and imidorhenium(V). Rates and trends of oxygen atom transfer from Re(V)O to tertiary phosphines. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 2616-22	5.1	52
1220	Alkylation reactions of [WS(4)](2)(-) and [(eta(5)-C(5)Me(5))WS(3)](-) with 2,6-bis(bromomethyl)pyridine: the first isolation of bisalkylated tetrathiometalate WS(2)[2,6-(SCH(2))(2)(C(5)H(3)N)]. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 4102-4	5.1	7
1219	The reaction mechanism of xanthine oxidase: evidence for two-electron chemistry rather than sequential one-electron steps. <b>2002</b> , 124, 14554-5		56
1218	Effect of solution viscosity on intramolecular electron transfer in sulfite oxidase. <b>2002</b> , 41, 5816-21		103
1217	Synthesis, characterization, electrochemistry, electronic structure, and isomerization of mononuclear oxo-molybdenum(V) complexes: the serine gate hypothesis in the function of DMSO reductases. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 1281-91	5.1	31
1216	An analogue system displaying all the important processes of the catalytic cycles involving monooxomolybdenum(VI) and desoxomolybdenum(IV) centers. <b>2002</b> , 124, 756-7		36
1215	Electronic spectra and structures of d2 molybdenum-oxo complexes. Effects of structural distortions on orbital energies, two-electron terms, and the mixing of singlet and triplet states. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 6973-85	5.1	22
1214	Oxorhenium(V) dithiolates catalyze the oxidation by tert-butyl hydroperoxide of sulfoxides and sulfides, including 4,6-dimethyldibenzothiophene. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 1272-80	5.1	37
1213	The active site of arsenite oxidase from <i>Alcaligenes faecalis</i> . <b>2002</b> , 124, 11276-7		62
1212	Probing the electronic structure of [MoOS(4)](-) centers using anionic photoelectron spectroscopy. <b>2002</b> , 124, 10182-91		20
1211	Electrochemistry and photoelectron spectroscopy of oxomolybdenum(V) complexes with phenoxide ligands: effect of para substituents on redox potentials, heterogeneous electron transfer rates, and ionization energies. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 2642-7	5.1	18
1210	Oxo, sulfido, and tellurido Mo-enedithiolate models for xanthine oxidase: understanding the basis of enzyme reactivity. <b>2002</b> , 124, 6796-7		34
1209	Adenosine triphosphate-induced electron transfer in 2-hydroxyglutaryl-CoA dehydratase from <i>Acidaminococcus fermentans</i> . <b>2002</b> , 41, 5873-82		41



1208	Active-site stereochemical control of oxygen atom transfer reactivity in sulfite oxidase. <b>2002</b> , 124, 9006-7	40
1207	Site-directed mutagenesis of dimethyl sulfoxide reductase from <i>Rhodobacter capsulatus</i> : characterization of a Y114 --> F mutant. <b>2002</b> , 41, 15762-9	26
1206	Mechanistic study of alcohol oxidation by the Pd(OAc)(2)/O(2)/DMSO catalyst system and implications for the development of improved aerobic oxidation catalysts. <b>2002</b> , 124, 766-7	283
1205	Kinetics and mechanism of rhenium-catalyzed oxygen atom transfer from pyridine N-oxides to phosphines. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 2266-74	5.1 28
1204	Milk Xanthine Oxidase: Hazard or Benefit?. <b>2002</b> , 12, 231-238	5
1203	The first molybdenum dioxo compounds with eta 2-pyrazolate ligands: crystal structure and oxo transfer properties. <i>Chemical Communications</i> , <b>2002</b> , 1676-7	5.8 38
1202	Abstract. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2002</b> , 1555, 1-327	4.6 1
1201	Functional analogue reaction systems of the DMSO reductase isoenzyme family: probable mechanism of S-oxide reduction in oxo transfer reactions mediated by bis(dithiolene)-tungsten(IV,VI) complexes. <b>2002</b> , 124, 4312-20	49
1200	Reduction and Oxidation. <b>2002</b> , 95-174	
1199	Molybdenum and tungsten in biology. <b>2002</b> , 27, 360-7	332
1198	Crystal structures of the active and alloxanthine-inhibited forms of xanthine dehydrogenase from <i>Rhodobacter capsulatus</i> . <b>2002</b> , 10, 115-25	165
1197	Gene sequence and the 1.8 A crystal structure of the tungsten-containing formate dehydrogenase from <i>Desulfovibrio gigas</i> . <b>2002</b> , 10, 1261-72	138
1196	Bacterial Metabolism of n-Alkanes and Ammonia under Oxic, Suboxic and Anoxic Conditions. <b>2002</b> , 22, 299-336	47
1195	PPh(2-C6H4S)2 as a Pincer Ligand in Nickel(II) and Palladium(II) Complexes [X-ray Structure of [Ni{PPh(C6H4S)2}(PPh2Me)], [Pd2(Edppe){PPh(C6H4S)2}2] and [Ni{PPh(C6H4S)2}2]. <b>2002</b> , 2002, 826-833	16
1194	Evolution of nitrate reductase: molecular and structural variations on a common function. <b>2002</b> , 3, 198-206	129
1193	A molybdenum-containing dehydrogenase catalyzing an unusual 2-hydroxylation of nicotinic acid. <b>2002</b> , 58, 612-7	6
1192	MoeA, an enzyme in the molybdopterin synthesis pathway, is required for rifamycin SV production in <i>Amycolatopsis mediterranei</i> U32. <b>2002</b> , 60, 139-46	5
1191	Microbial transformation of elements: the case of arsenic and selenium. <b>2002</b> , 5, 201-7	103

1190	Pulsed ELDOR spectroscopy of the Mo(V)/Fe(III) state of sulfite oxidase prepared by one-electron reduction with Ti(III) citrate. <b>2002</b> , 7, 338-50		45
1189	Hexaaquamagnesium bis{trans-[nitrilotriacetato(2-)]O1,N,O2]-exo-cis-dioxomolybdate(VI)} hexahydrate. <b>2002</b> , 58, m22-m24		2
1188	The absence of molybdenum cofactor sulfuration is the primary cause of the flacca phenotype in tomato plants. <b>2002</b> , 31, 305-17		87
1187	The first synthesis of a cyclic dihydroxyacetone phosphate, a new molecule of biological importance. <b>2002</b> , 43, 503-505		11
1186	The first microwave-assisted regiospecific synthesis of 6-substituted pterins. <b>2002</b> , 43, 8371-8373		45
1185	Expression of the <i>iorAB</i> genes from <i>Brevundimonas diminuta</i> 7 encoding the molybdenum hydroxylase isoquinoline 1-oxidoreductase in <i>Pseudomonas putida</i> . <b>2002</b> , 210, 123-7		3
1184	A hydrogen-bonded oxo-bis[trans-nitrilotriacetato-cis-dioxotungstate(VI)] synthesized directly from an alkali tungstate and nitrilotriacetic acid. <b>2002</b> , 5, 388-390		4
1183	Theoretical study on intermediate in oxygen transfer reaction in molybdoenzyme model system. <b>2002</b> , 5, 446-448		6
1182	Synthesis and characterization of homochiral polymeric S-malato molybdate(VI): toward the potentially stereospecific formation and absolute configuration of iron-molybdenum cofactor in nitrogenase. <i>Journal of Inorganic Biochemistry</i> , <b>2002</b> , 90, 137-43	4.2	23
1181	Remote ligand substituent effects on the properties of oxo-Mo(V) centers with a single ene-1,2-dithiolate ligand. <b>2002</b> , 331, 246-256		23
1180	Six-coordinate molybdenum nitrosyls with a single ene-1,2-dithiolate ligand. <b>2002</b> , 337, 275-286		24
1179	Electron transfer studies of dithiolate complexes: effects of ligand variation and metal substitution. <b>2002</b> , 341, 85-90		12
1178	Structure and function of xanthine oxidoreductase: where are we now?. <b>2002</b> , 33, 774-97		581
1177	A density functional study of oxygen atom transfer reactions between biological oxygen atom donors and molybdenum(IV) bis(dithiolene) complexes. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 6695-702	5.1	59
1176	The first non-turnover voltammetric response from a molybdenum enzyme: direct electrochemistry of dimethylsulfoxide reductase from <i>Rhodobacter capsulatus</i> . <b>2002</b> , 7, 879-83		29
1175	Proterozoic ocean chemistry and evolution: a bioinorganic bridge?. <b>2002</b> , 297, 1137-42		818
1174	Molybdenum Cofactor-Containing Oxidoreductase Family in Plants. <b>2003</b> , 46, 481-490		13
1173	Syntheses, spectroscopy, and redox chemistry of encapsulated oxo-Mo(V) centers: implications for pyranopterin-containing molybdoenzymes. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 7489-501	5.1	35

1172	A triad of rhenium-mediated transformations. <b>2003</b> , 115, 333-339		1
1171	Plant molybdoenzymes and their response to stress. <b>2003</b> , 25, 437-452		7
1170	The crystal structure of plant sulfite oxidase provides insights into sulfite oxidation in plants and animals. <b>2003</b> , 11, 1251-63		116
1169	Oxidation and detoxification of trivalent arsenic species. <b>2003</b> , 193, 1-8		93
1168	Mono-Dithiolene Molybdenum(IV) Complexes of cis-1,2-Dicyano-1,2-ethylenedithiolate (mnt <sub>2</sub> ) <sup>2-</sup> New Models for Molybdenum Enzymes. <b>2003</b> , 2003, 2633-2638		9
1167	Synthesis, Structure, and Reactivity of a New Mononuclear Molybdenum(VI) Complex Resembling the Active Center of Molybdenum Oxotransferases. <b>2003</b> , 2003, 363-369		115
1166	A Ruthenium Pterin Complex Showing Proton-Coupled Electron Transfer: Synthesis and Characterization. <b>2003</b> , 115, 5101-5104		13
1165	A ruthenium pterin complex showing proton-coupled electron transfer: synthesis and characterization. <b>2003</b> , 42, 4951-4		26
1164	Synthesis and structure of [L][MoIVO(mnt) <sub>2</sub> ] {L=[(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> N] <sup>+</sup> , [C <sub>5</sub> H <sub>5</sub> NH] <sup>+</sup> , [(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> NH] <sup>+</sup> , [lysinium] <sup>2+</sup> and (mnt) <sub>2</sub> 1,2-dicyanoethylenedithiolate} in relevance to molybdenum cofactor of diverse class of molybdoenzymes. <b>2003</b> , 656, 169-176		19
1163	The respiratory arsenate reductase from Bacillus selenitireducens strain MLS10. <b>2003</b> , 226, 107-12		152
1162	Recent applications of MCD spectroscopy to metalloenzymes. <b>2003</b> , 7, 220-7		42
1161	Functional expression of the quinoline 2-oxidoreductase genes (qorMSL) in Pseudomonas putida KT2440 pUF1 and in P. putida 86-1 deltaqor pUF1 and analysis of the Qor proteins. <b>2003</b> , 270, 1567-77		21
1160	Factors involved in the assembly of a functional molybdopyranopterin center in recombinant Comamonas acidovorans xanthine dehydrogenase. <b>2003</b> , 270, 4744-54		15
1159	In vivo detection of molybdate-binding proteins using a competition assay with ModE in Escherichia coli. <b>2003</b> , 218, 187-93		10
1158	Cofactor determination and spectroscopic characterization of the selenium-dependent purine hydroxylase from Clostridium purinolyticum. <b>2003</b> , 42, 11382-90		17
1157	Synthesis, structure, and dissociation equilibrium of [Co(eta <sup>5</sup> -C <sub>5</sub> H <sub>5</sub> )(Se <sub>2</sub> C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> ], a novel metalladiselenolene complex. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 1952-5	5.1	16
1156	Synthesis and EPR characterization of new models for the one-electron reduced molybdenum site of sulfite oxidase. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 6194-203	5.1	35
1155	Symmetry and geometry considerations of atom transfer: deoxygenation of (silox) <sub>3</sub> WNO and R <sub>3</sub> PO (R = Me, Ph, (t)Bu) by (silox) <sub>3</sub> M (M = V, Nb, L (L = PMe <sub>3</sub> , 4-picoline), Ta; silox = (t)Bu <sub>3</sub> SiO). <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 6204-24	5.1	93

1154	Direct electrochemistry of a bacterial sulfite dehydrogenase. <b>2003</b> , 125, 530-5		100
1153	Protein film voltammetry of <i>Rhodobacter capsulatus</i> xanthine dehydrogenase. <b>2003</b> , 125, 15352-8		38
1152	Essential role of conserved arginine 160 in intramolecular electron transfer in human sulfite oxidase. <b>2003</b> , 42, 12235-42		44
1151	Proton-Coupled Electron Transfer in Guanine Oxidation: Effects of Isotope, Solvent, and Chemical Modification. <b>2003</b> , 107, 372-378		49
1150	Electrochemical Behavior of Nitrate Reductase Immobilized in Self-Assembled Structures with Redox Polyviologen. <b>2003</b> , 19, 3864-3874		38
1149	X-ray absorption spectroscopy of a structural analogue of the oxidized active sites in the sulfite oxidase enzyme family and related molybdenum(V) complexes. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 5531-6	5.1	20
1148	Direct electron transfer of heme- and molybdopterin cofactor-containing chicken liver sulfite oxidase on alkanethiol-modified gold electrodes. <b>2003</b> , 75, 4841-50		111
1147	Nucleophilic reactivity and oxo/sulfido substitution reactions of MVIO <sub>3</sub> Groups (M = Mo, W). <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 7877-86	5.1	41
1146	Magnetic Circular Dichroism Spectroscopy of Pyranopterin Molybdenum Enzymes. <b>2003</b> , 340-357		5
1145	Involvement of a mate chaperone (TorD) in the maturation pathway of molybdoenzyme TorA. <b>2003</b> , 278, 28787-92		79
1144	Mutagenesis study on the role of a lysine residue highly conserved in formate dehydrogenases and periplasmic nitrate reductases. <b>2003</b> , 310, 40-7		17
1143	Redox characteristics of the tungsten DMSO reductase of <i>Rhodobacter capsulatus</i> . <b>2003</b> , 555, 606-10		27
1142	Biotin sulfoxide reductase: Tryptophan 90 is required for efficient substrate utilization. <b>2003</b> , 409, 315-26		10
1141	The active site of the molybdenum cofactor biosynthetic protein domain Cnx1G. <b>2003</b> , 411, 36-46		21
1140	Kinetic behavior of <i>Desulfovibrio gigas</i> aldehyde oxidoreductase encapsulated in reverse micelles. <b>2003</b> , 308, 73-8		13
1139	Mutations of the silkworm molybdenum cofactor sulfurase gene, og, cause translucent larval skin. <b>2003</b> , 33, 417-27		32
1138	Novel Mo(V)-dithiolene compounds: characterization of nonsymmetric dithiolene complexes by electrospray ionization mass spectrometry. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 6425-31	5.1	16
1137	Synthesis of azo-conjugated metalladithiolenes and their photo- and proton-responsive isomerization reactions. <b>2003</b> , 125, 2964-73		69

1136	Rule Based Control of Combustion Instabilities Using an Adaptive, Fuzzy Algorithm. <b>2003,</b>	
1135	Denitrification. <b>2003, 759-786</b>	19
1134	A novel binuclear [CuSMo] cluster at the active site of carbon monoxide dehydrogenase: characterization by X-ray absorption spectroscopy. <b>2003, 42, 222-30</b>	97
1133	Resonance Raman studies on xanthine oxidase: observation of Mo(VI)-ligand vibrations. <b>2003, 8, 327-33</b>	16
1132	Microwave Assisted Improved Synthesis of 6-Formylpterin and Other Heterocyclic Mono- and Di-aldehydes. <b>2003, 33, 475-480</b>	25
1131	EPR and UV-vis studies of biomimetic complexes of molybdoenzyme and tungstoenzyme. <b>2003, 48, 649-651</b>	
1130	A novel polyoxo(thio)molybdenum(V) sulfite compound: Synthesis and crystal structure of $\{[\text{Mo}_2\text{V}(\text{ES})_2\text{O}_2]_6(\text{B-SO}_3)_4(\text{ESO}_3)_{12}\}_n$ anion. <b>2003, 3668-3670</b>	20
1129	Effect of Root Zone Temperature on Accumulation of Molybdenum and Nitrogen Metabolism in Potato Plants. <b>2003, 26, 443-461</b>	5
1128	Repair system for noncanonical purines in Escherichia coli. <b>2003, 185, 3101-10</b>	46
1127	Ntdin, a tobacco senescence-associated gene, is involved in molybdenum cofactor biosynthesis. <b>2003, 44, 1037-44</b>	22
1126	Molybdenum. <b>2003, 415-527</b>	12
1125	Gene cluster of <i>Arthrobacter ilicis</i> Ru61a involved in the degradation of quinaldine to anthranilate: characterization and functional expression of the quinaldine 4-oxidase qoxLMS genes. <b>2003, 278, 27483-94</b>	30
1124	Investigation of metal-dithiolate fold angle effects: implications for molybdenum and tungsten enzymes. <b>2003, 100, 3719-24</b>	72
1123	Role of conserved tyrosine 343 in intramolecular electron transfer in human sulfite oxidase. <b>2003, 278, 2913-20</b>	26
1122	Biochemical and structural analysis of the molybdenum cofactor biosynthesis protein MobA. <b>2003, 278, 25302-7</b>	23
1121	An extremely potent inhibitor of xanthine oxidoreductase. Crystal structure of the enzyme-inhibitor complex and mechanism of inhibition. <b>2003, 278, 1848-55</b>	296
1120	Convergent neofunctionalization by positive Darwinian selection after ancient recurrent duplications of the xanthine dehydrogenase gene. <b>2003, 100, 13413-7</b>	85
1119	OXYGEN TRANSFER REACTIONS: CATALYSIS BY RHENIUM COMPOUNDS. <b>2003, 54, 157-202</b>	38

1118	Characterization of the chlorate reductase from <i>Pseudomonas chloritidismutans</i> . <b>2003</b> , 185, 3210-3		45
1117	Comparative Study of Nutrient Deficiencies on Growth and Photochemistry of Tobacco. <b>2003</b> , 26, 1605-1616		10
1116	Donor atom dependent geometric isomers in mononuclear oxo-molybdenum(V) complexes: implications for coordinated endogenous ligation in molybdoenzymes. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 5999-6007	5.1	26
1115	A One-pot Synthesis of Cyclic Pyrido[1,2-a]quinoxaline Phosphate, a New Molecule of Biological Importance from a Quinoxaline Derivative of Sugar. <b>2003</b> , 32, 678-679		9
1114	Molybdenum and Tungsten Enzymes. <b>2003</b> , 459-477		22
1113	12. Molybdenum Stable Isotopes: Observations, Interpretations and Directions. <b>2004</b> , 429-456		10
1112	Tandem orientation of duplicated xanthine dehydrogenase genes from <i>Arabidopsis thaliana</i> : differential gene expression and enzyme activities. <b>2004</b> , 279, 13547-54		115
1111	Activity and protein level of AO isoforms in pea plants ( <i>Pisum sativum</i> L.) during vegetative development and in response to stress conditions. <b>2004</b> , 55, 1361-9		22
1110	Pteridines. <b>2004</b> , 556-560		1
1109	The tetrahydropyranopterin structure of the sulfur-free and metal-free molybdenum cofactor precursor. <b>2004</b> , 279, 15994-9		76
1108	Functional and structural analysis of members of the TorD family, a large chaperone family dedicated to molybdoproteins. <b>2004</b> , 150, 935-943		61
1107	The role of active site glutamate residues in catalysis of <i>Rhodobacter capsulatus</i> xanthine dehydrogenase. <b>2004</b> , 279, 40437-44		56
1106	A family of dioxo-molybdenum(VI) complexes of N2X heteroscorpionate ligands of relevance to molybdoenzymes. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 7800-6	5.1	52
1105	Role of xanthine oxidoreductase as an antimicrobial agent. <b>2004</b> , 72, 4933-9		124
1104	Structure of the molybdopterin-bound Cnx1G domain links molybdenum and copper metabolism. <b>2004</b> , 430, 803-6		172
1103	Electron microscopic analysis of KvAP voltage-dependent K <sup>+</sup> channels in an open conformation. <b>2004</b> , 430, 806-10		116
1102	Active site geometry and substrate recognition of the molybdenum hydroxylase quinoline 2-oxidoreductase. <b>2004</b> , 12, 1425-35		69
1101	A review of the enzymology of arsenic metabolism and a new potential role of hydrogen peroxide in the detoxication of the trivalent arsenic species. <b>2004</b> , 198, 327-35		178

1100	Xanthine oxidoreductase is present in bile ducts of normal and cirrhotic liver. <b>2004</b> , 37, 1214-23		17
1099	Redox reactions of the pyranopterin system of the molybdenum cofactor. <b>2004</b> , 9, 59-66		30
1098	Incorporation of either molybdenum or tungsten into formate dehydrogenase from <i>Desulfovibrio alaskensis</i> NCIMB 13491; EPR assignment of the proximal iron-sulfur cluster to the pterin cofactor in formate dehydrogenases from sulfate-reducing bacteria. <b>2004</b> , 9, 145-51		42
1097	Mo and W bis-MGD enzymes: nitrate reductases and formate dehydrogenases. <b>2004</b> , 9, 791-9		105
1096	Spectroelectrochemical study of heme- and molybdopterin cofactor-containing chicken liver sulphite oxidase. <b>2004</b> , 63, 49-53		17
1095	Syntheses, crystal structures and biological relevance of glycolato and S-lactato molybdates. <i>Journal of Inorganic Biochemistry</i> , <b>2004</b> , 98, 1037-44	4.2	34
1094	Symphoria: the success of modeling the active site function of oxo-molybdoenzymes. <i>Journal of Inorganic Biochemistry</i> , <b>2004</b> , 98, 1667-77	4.2	6
1093	Molybdate transport and its effect on nitrogen utilization in the cyanobacterium <i>Anabaena variabilis</i> ATCC 29413. <b>2004</b> , 51, 539-49		43
1092	Molybdenum. <b>2004</b> , 1007-1037		8
1091	Synthesis, spectroscopic characterization and structural studies of chloro dioxotriphenylphosphine oxide (O,O-dialkyl/diphenyl(alkylene)dithiophosphate) molybdenum(VI) complexes: crystal structure of MoO <sub>2</sub> Cl <sub>2</sub> (OSMe <sub>2</sub> ) <sub>2</sub> . <b>2004</b> , 357, 939-945		12
1090	Synthesis, spectroscopic and electrochemical characterization of water soluble [( $\Gamma$ -C <sub>5</sub> H <sub>5</sub> ) <sub>2</sub> Mo(thionucleobase/thionucleoside)]Cl <sub>2</sub> complexes. <b>2004</b> , 357, 1092-1102		10
1089	Studies on the mechanism of action of xanthine oxidase. <i>Journal of Inorganic Biochemistry</i> , <b>2004</b> , 98, 841-82		43
1088	Antagonists Mo and Cu in a heterometallic cluster present on a novel protein (orange protein) isolated from <i>Desulfovibrio gigas</i> . <i>Journal of Inorganic Biochemistry</i> , <b>2004</b> , 98, 833-40	4.2	31
1087	Enantiomeric and mesomeric mandelate complexes of molybdenum -- on their stereospecific formations and absolute configurations. <i>Journal of Inorganic Biochemistry</i> , <b>2004</b> , 98, 1787-94	4.2	16
1086	Sulfur atom transfer reactions of tungsten(VI) and tungsten(IV) chalcogenide complexes. <b>2004</b> , 23, 385-394		20
1085	Ground and excited state spectral comparisons of models for sulfite oxidase. <b>2004</b> , 23, 499-506		10
1084	Synthesis and structure of dioxomolybdenum(VI) complex of amine triphenolato ligand. <b>2004</b> , 7, 691-693		15
1083	An amperometric nitrate reductase-phenosafranin electrode: kinetic aspects and analytical applications. <b>2004</b> , 64, 61-70		13

1082	Synthesis of adenylated molybdopterin: an essential step for molybdenum insertion. <b>2004</b> , 279, 55241-6		71
1081	X-ray absorption spectroscopy of selenate reductase. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 402-4	5.1	30
1080	Multielectron atom transfer reactions of perchlorate and other substrates catalyzed by rhenium oxazoline and thiazoline complexes: reaction kinetics, mechanisms, and density functional theory calculations. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 4036-50	5.1	88
1079	Isomerization and oxygen atom transfer reactivity in oxo-Mo complexes of relevance to molybdoenzymes. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 7573-5	5.1	35
1078	Electronic structure of bent titanocene complexes with chelated dithiolate ligands. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 8110-8	5.1	24
1077	A proteomic investigation of drug-induced steatosis in rat liver. <b>2004</b> , 17, 605-12		57
1076	Electrochemical studies of arsenite oxidase: an unusual example of a highly cooperative two-electron molybdenum center. <b>2004</b> , 43, 1667-74		83
1075	Time-Dependent Density Functional Theory Calculations of Ligand K Edge and Metal L Edge X-ray Absorption of a Series of Oxomolybdenum Complexes. <b>2004</b> , 108, 8467-8477		23
1074	Oxygen/sulfur substitution reactions of tetraoxometalates effected by electrophilic carbon and silicon reagents. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 8609-16	5.1	28
1073	Voltammetric studies of the catalytic mechanism of the respiratory nitrate reductase from <i>Escherichia coli</i> : how nitrate reduction and inhibition depend on the oxidation state of the active site. <b>2004</b> , 43, 799-807		81
1072	Modulation of molybdenum-centered redox potentials and electron-transfer rates by sulfur versus oxygen ligation. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 7389-95	5.1	12
1071	Comparative kinetics and mechanism of oxygen and sulfur atom transfer reactions mediated by bis(dithiolene) complexes of molybdenum and tungsten. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 8092-101	5.1	32
1070	Nature of the oxomolybdenum-thiolate pi-bond: implications for Mo-S bonding in sulfite oxidase and xanthine oxidase. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 1625-37	5.1	22
1069	Photoelectron spectroscopy of the doubly-charged anions [MIVO(mnt) <sub>2</sub> ] <sup>2-</sup> (M = Mo, W; mnt = S <sub>2</sub> C <sub>2</sub> (CN) <sub>2</sub> <sup>2-</sup> ): access to the ground and excited states of the [MVO(mnt) <sub>2</sub> ] <sup>-</sup> anion. <b>2004</b> , 126, 5119-29		23
1068	Coordination chemistry at the molybdenum site of sulfite oxidase: redox-induced structural changes in the cysteine 207 to serine mutant. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 8456-60	5.1	29
1067	An amperometric nitrate reductase?phenosafranin electrode: kinetic aspects and analytical applications. <b>2004</b> ,		
1066	A Numerical Approach to Modeling the Catalytic Voltammetry of Surface-Confined Redox Enzymes. <b>2004</b> , 108, 15900-15909		7
1065	Structural and functional analogue of the active site of polysulfide reductase from <i>Wolinella succinogenes</i> . <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 4532-3	5.1	29



1064	Y-700 [1-[3-Cyano-4-(2,2-dimethylpropoxy)phenyl]-1H-pyrazole-4-carboxylic acid]: a potent xanthine oxidoreductase inhibitor with hepatic excretion. <b>2004</b> , 311, 519-28		94
1063	Superoxide-Dependent Nitrogenase. <b>2004</b> , 309-332		2
1062	Synthetic analogues and reaction systems relevant to the molybdenum and tungsten oxotransferases. <i>Chemical Reviews</i> , <b>2004</b> , 104, 1175-200	68.1	419
1061	Coordination complexes of molybdenum with 3,6-di-tert-butylcatechol. Addition products of DMSO, pyridine N-oxide, and triphenylarsine oxide to the putative [MoVIO(3,6-DBCat) <sub>2</sub> ] monomer and self-assembly of the chiral [(MoVIO(3,6-DBCat) <sub>2</sub> ) <sub>4</sub> ] square. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 2114-24	5.1	31
1060	Unusual reduction of ammonium heptamolybdate to novel molybdenum(IV)-stabilized azo anion radical complexes. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 7456-62	5.1	38
1059	Physiological roles of xanthine oxidoreductase. <b>2004</b> , 36, 363-75		152
1058	Mutagenesis study on amino acids around the molybdenum centre of the periplasmic nitrate reductase from <i>Ralstonia eutropha</i> . <b>2004</b> , 320, 1211-9		16
1057	High-level expression and characterization of a highly functional <i>Comamonas acidovorans</i> xanthine dehydrogenase in <i>Pseudomonas aeruginosa</i> . <b>2004</b> , 37, 72-82		3
1056	Molybdenum Stable Isotopes: Observations, Interpretations and Directions. <b>2004</b> , 55, 429-454		143
1055	The crystal structure of xanthine oxidoreductase during catalysis: implications for reaction mechanism and enzyme inhibition. <b>2004</b> , 101, 7931-6		222
1054	Peroxynitrite formation from the simultaneous reduction of nitrite and oxygen by xanthine oxidase. <b>2004</b> , 562, 129-33		24
1053	The reduction of tris-dithiolene complexes of molybdenum(VI) and tungsten(VI) by hydroxide ion: kinetics and mechanism. <b>2004</b> , 1461-5		11
1052	Physicochemical and kinetic properties of purified sheep's milk xanthine oxidoreductase. <b>2004</b> , 87, 1580-4		27
1051	Selenoenzymes and Selenium Trafficking: An Emerging Target for Therapeutics. <b>2004</b> , 1-8		
1050	Molecular characterization of human xanthine oxidoreductase: the enzyme is grossly deficient in molybdenum and substantially deficient in iron-sulphur centres. <b>2005</b> , 388, 501-8		22
1049	Direct electrochemistry of heme multicofactor-containing enzymes on alkanethiol-modified gold electrodes. <b>2005</b> , 66, 55-63		52
1048	Syntheses, structures and third-order non-linear optical properties of homometal clusters containing molybdenum. <b>2005</b> , 178, 363-369		8
1047	Aqueous oxidation of alcohols catalyzed by artificial metalloenzymes based on the biotin-avidin technology. <b>2005</b> , 690, 4488-4491		37

1046	Dioxomolybdenum(VI) complexes with tri- and tetradentate aminobis(phenolate)s. <b>2005</b> , 24, 257-265		52
1045	Synthesis and structural characterization of dimolybdenum(IV) and molybdenum(VI) complexes with trisbenzenethiolatophosphine ligands. <b>2005</b> , 358, 2149-2154		2
1044	Oxomolybdenum(III, IV and V) complexes of thiofunctional ligands. <b>2005</b> , 358, 1970-1974		7
1043	Study on the reaction of 2,3-dihydroxybenzoic acid with molybdenum in aqueous solution. I. Synthesis and characterization of the oligomeric complexes formed. <b>2005</b> , 358, 2975-2995		9
1042	A novel one-pot two-component synthesis of tricyclic pyrano[2,3-b]quinoxalines. <b>2005</b> , 46, 221-224		14
1041	Syntheses, structures, and properties of oxorhenium(V) complexes with 2-, 5-, and/or 7-substituted 8-quinolinolato ligands. <b>2005</b> , 6, 660-666		19
1040	A bis( $\eta$ -cyclopentadienyl)cobalt complex of a bis-dithiolene: a chemical analogue of the metal centres of the DMSO reductase family of molybdenum and tungsten enzymes, in particular ferredoxin aldehyde oxidoreductase. <b>2005</b> , 61, 11010-11019		16
1039	Luminol chemiluminescence induced by immobilised xanthine oxidase. <b>2005</b> , 541, 89-95		16
1038	Synthesis and crystal structure of a zwitterionic nickel(II) complex. <b>2005</b> , 8, 293-296		1
1037	Ligand K-edge X-ray absorption spectroscopy: covalency of ligand-metal bonds. <b>2005</b> , 249, 97-129		295
1036	DNA facilitating electron transfer reaction of xanthine oxidase. <b>2005</b> , 7, 562-566		14
1035	DOM-fold: a structure with crossing loops found in DmpA, ornithine acetyltransferase, and molybdenum cofactor-binding domain. <b>2005</b> , 14, 1902-10		30
1034	Nanophase iron phosphate, iron arsenate, iron vanadate, and iron molybdate minerals synthesized within the protein cage of ferritin. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 3203-9	5.1	66
1033	Direct Electrochemistry of Proteins and Enzymes. <b>2005</b> , 517-598		45
1032	Analysis of the distribution and diversity in recent Hawaiian volcanic deposits of a putative carbon monoxide dehydrogenase large subunit gene. <b>2005</b> , 7, 1405-12		19
1031	Convergent evolution of hydroxylation mechanisms in the fungal kingdom: molybdenum cofactor-independent hydroxylation of xanthine via alpha-ketoglutarate-dependent dioxygenases. <b>2005</b> , 57, 276-90		36
1030	The plant Mo-hydroxylases aldehyde oxidase and xanthine dehydrogenase have distinct reactive oxygen species signatures and are induced by drought and abscisic acid. <b>2005</b> , 42, 862-76		129
1029	Variable-Valent Rhenium Chemistry of Conjugated Nitrogenous Ligands: Structure and Reactivity. <b>2005</b> , 2005, 4863-4874		8

1028	Interactions with ATP, DNA Cleavage and Anti-tumor Activities of Complexes with Anions [Mo(V)O <sub>2</sub> (O <sub>2</sub> C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> ] <sup>3-</sup> , [Mo(V)O <sub>2</sub> W(V)O <sub>2</sub> (O <sub>2</sub> C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> ] <sup>2.5-</sup> and [W(V)O <sub>2</sub> (O <sub>2</sub> C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> ] <sup>2-</sup> . <b>2005</b> , 23, 781-785	4
1027	A biocatalyst for the removal of sulfite from alcoholic beverages. <b>2005</b> , 89, 123-7	5
1026	Oxygen-Transfer Reactions of Molybdenum- and Tungstendioxo Complexes Containing $\beta$ -Pyrazolate Ligands. <b>2005</b> , 347, 463-472	47
1025	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). <i>Chemistry - A European Journal</i> , <b>2005</b> , 11, 3255-67	4.8 49
1024	Global gene expression analysis revealed an unsuspected deo operon under the control of molybdate sensor, ModE protein, in Escherichia coli. <b>2005</b> , 184, 225-33	18
1023	Mass spectral and theoretical characterisation of non-symmetric Mo(V) dithiolene complexes. <b>2005</b> , 243, 205-214	5
1022	The mechanism of Mo-/Cu-dependent CO dehydrogenase. <b>2005</b> , 10, 490-5	48
1021	Studies on a New Binuclear Tungsten(IV)-pterin Complex Showing Reactivity Towards Trimethylamine N-oxide. <b>2005</b> , 30, 797-803	2
1020	Di- $\mu$ -oxo-bis[(histidinato- $\beta$ N,N,O)oxomolybdenum(V)] trihydrate. <b>2005</b> , 61, m1553-m1555	6
1019	On the purification and preliminary crystallographic analysis of isoquinoline 1-oxidoreductase from Brevundimonas diminuta 7. <b>2005</b> , 61, 137-40	5
1018	Structural basis of eukaryotic nitrate reduction: crystal structures of the nitrate reductase active site. <b>2005</b> , 17, 1167-79	129
1017	Novel bacterial molybdenum and tungsten enzymes: three-dimensional structure, spectroscopy, and reaction mechanism. <b>2005</b> , 386, 999-1006	35
1016	NADH oxidase activity of rat liver xanthine dehydrogenase and xanthine oxidase-contribution for damage mechanisms. <b>2005</b> , 39, 979-86	20
1015	A membrane-bound multienzyme, hydrogen-oxidizing, and sulfur-reducing complex from the hyperthermophilic bacterium Aquifex aeolicus. <b>2005</b> , 280, 42004-15	76
1014	A sulphite respiration system in the chemoheterotrophic human pathogen Campylobacter jejuni. <b>2005</b> , 151, 233-242	77
1013	Genetics and Regulation of Nitrogen Fixation in Free-Living Bacteria. <b>2005</b> ,	3
1012	Synthesis and characterization of molybdenum oxo complexes of two tripodal ligands: reactivity studies of a functional model for molybdenum oxotransferases. <b>2005</b> , 3566-71	25
1011	Reaction systems related to dissimilatory nitrate reductase: nitrate reduction mediated by bis(dithiolene)tungsten complexes. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 1068-72	5.1 42

1010	The nature and function of the catalytic centres of the DMSO reductases. <b>2005</b> , 3572-9		32
1009	Mechanism of the conversion of xanthine dehydrogenase to xanthine oxidase: identification of the two cysteine disulfide bonds and crystal structure of a non-convertible rat liver xanthine dehydrogenase mutant. <b>2005</b> , 280, 24888-94		106
1008	Temperature dependent electrochemical investigations of molybdenum and tungsten oxobisdithiolene complexes. <b>2005</b> , 713-20		29
1007	Molybdenum: biological activity and metabolism. <b>2005</b> , 3404-9		84
1006	A new series of molybdenum-(IV), -(V), and -(VI) dithiolate compounds as active site models of molybdoenzymes: preparation, crystal structures, spectroscopic/electrochemical properties and reactivity in oxygen atom transfer. <b>2005</b> , 3558-65		36
1005	Synthesis and characterisation of second-generation metallodithiolene complexes of the type [Tp*ME(dithiolene)](M=Mo, W; E=O, S) and a novel 'organoscorpionate' complex of tungsten. <b>2005</b> , 3552-7		17
1004	An alpha/beta-fold C-C bond hydrolase is involved in a central step of nicotine catabolism by <i>Arthrobacter nicotinovorans</i> . <b>2005</b> , 187, 8516-9		22
1003	Resonance Raman studies of xanthine oxidase: The reduced enzyme-product complex with violapterin. <b>2005</b> , 109, 3023-31		16
1002	A theoretical study on the mechanism of the reductive half-reaction of xanthine oxidase. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 1466-71	5.1	34
1001	Molybdenum Uptake and Homeostasis. <b>2004</b> , 225-256		3
1000	Formation of mono(dithiolene)-thiocarboxamido complexes in reactions of thio(dithiocarbamate)-Mo/W complexes and dimethyl acetylenedicarboxylate. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 114-21	5.1	13
999	Characterization of an <i>Escherichia coli</i> sulfite oxidase homologue reveals the role of a conserved active site cysteine in assembly and function. <b>2005</b> , 44, 10339-48		63
998	Nature of the catalytically labile oxygen at the active site of xanthine oxidase. <b>2005</b> , 127, 4518-22		77
997	Oxomolybdenum tetrathiolates with sterically encumbering ligands: modeling the effect of a protein matrix on electronic structure and reduction potentials. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 8216-22	5.1	16
996	Synthesis and Structural Elucidation of N,N'-Ditosyl-1,11-diaza-4,8,14,18-tetraselena-cycloicosane and its Copper and Platinum Complexes. <b>2005</b> , 17, 623-628		5
995	Mononuclear five-coordinate molybdenum(IV) and -(V) monosulfide complexes coordinated with dithiolene ligands: reversible redox of Mo(V)/Mo(IV) and irreversible dimerization of [MoVS]- cores to a dinuclear [MoV2(mu-S)2]2- Core. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 6927-9	5.1	19
994	Spectroscopic and kinetic studies of <i>Arabidopsis thaliana</i> sulfite oxidase: nature of the redox-active orbital and electronic structure contributions to catalysis. <b>2005</b> , 127, 16567-77		37
993	Structures of the Mo(V) forms of sulfite oxidase from <i>Arabidopsis thaliana</i> by pulsed EPR spectroscopy. <b>2005</b> , 44, 13274-81		41

992	The pathogenic human sulfite oxidase mutants G473D and A208D are defective in intramolecular electron transfer. <b>2005</b> , 44, 13734-43		15
991	Determination of the g-tensors and their orientations for cis,trans-(L-N <sub>2</sub> S <sub>2</sub> )Mo(V)OX (X = Cl, SCH <sub>2</sub> Ph) by single-crystal EPR spectroscopy and molecular orbital calculations. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 1290-301	5.1	34
990	The Nitrogen Cycle: Denitrification and its Relationship to N <sub>2</sub> Fixation. <b>2005</b> , 277-342		24
989	NADH oxidation and superoxide production by caprine milk xanthine oxidoreductase. <b>2005</b> , 15, 1113-1121		7
988	Molybdenum-containing hydroxylases. <b>2005</b> , 433, 107-16		255
987	Determination of the Stability Constants of the Mo(VI) Complex with Ethylenediaminediacetic Acid at Different Ionic Strengths. <b>2005</b> , 50, 878-881		14
986	Dioxo-molybdenum(VI) and mono-oxo-molybdenum(IV) complexes supported by new aliphatic dithiolene ligands: new models with weakened Mo=O bond characters for the arsenite oxidase active site. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 6386-92	5.1	41
985	Study of the spin-spin interactions between the metal centers of <i>Desulfovibrio gigas</i> aldehyde oxidoreductase: identification of the reducible sites of the [2Fe-2S] <sub>1+,2+</sub> clusters. <b>2005</b> , 44, 11628-35		22
984	Microbial dimethylsulfoxide and trimethylamine-N-oxide respiration. <b>2005</b> , 50, 147-98		81
983	Sulfido-bridged dinuclear molybdenum-copper complexes related to the active site of CO dehydrogenase: [(dithiolate)Mo(O)S <sub>2</sub> Cu(SAr)] <sub>2</sub> - (dithiolate = 1,2-S <sub>2</sub> C <sub>6</sub> H <sub>4</sub> , 1,2-S <sub>2</sub> C <sub>6</sub> H <sub>2</sub> -3,6-Cl <sub>2</sub> , 1,2-S <sub>2</sub> C <sub>2</sub> H <sub>4</sub> ). <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 6034-43	5.1	49
982	Nitrogen Fixation in Agriculture, Forestry, Ecology, and the Environment. <b>2005</b> ,		30
981	Calculations of Electronic Spectra of Transition Metal Complexes. <b>2005</b> , 16, 279-315		16
980	Synthesis of New N-(5-Oxo-2,5-dihydro)pyrrol-3-yl Glycines and N-(5-Oxo-2,5-dihydro)pyrrol-3-yl Glycines Esters. <b>2005</b> , 35, 2453-2466		10
979	[Na <sub>5</sub> (THF) <sub>10</sub> Ce(mnt) <sub>4</sub> ] <sub>infinity</sub> : a honeycomb network polymer that yields homoleptic cerium(III) tetrakis(dithiolene) complexes in donor solvents. <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 10126-30	5.1	19
978	Kinetics, mechanism, and computational studies of rhenium-catalyzed desulfurization reactions of thiiranes (thioepoxides). <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 5351-7	5.1	15
977	Cytochrome c: occurrence and functions. <i>Chemical Reviews</i> , <b>2006</b> , 106, 90-115	68.1	208
976	Unusual oxidation of phosphines employing water as the oxygen atom source and tris(benzene-1,2-dithiolate)molybdenum(VI) as the oxidant. A functional molybdenum hydroxylase analogue system. <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 7357-66	5.1	14
975	Process and catalyst design objectives for specific redox biocatalysis. <b>2006</b> , 59, 53-91		29

974	Dioxomolybdenum(VI) and dioxotungsten(VI) complexes supported by an amido ligand. <b>2006</b> , 1294-301		4
973	Plant sulfite oxidase as novel producer of H <sub>2</sub> O <sub>2</sub> : combination of enzyme catalysis with a subsequent non-enzymatic reaction step. <b>2006</b> , 281, 6884-8		110
972	Effect of a novel molybdenum ascorbate complex on ex vivo myocardial performance in chemical diabetes mellitus. <b>2006</b> , 7, 119-25		2
971	Enzyme Electrochemistry [Biocatalysis on an Electrode]. <b>2006</b> , 59, 233		63
970	Heterometallic dithiolene complexes formed by stepwise displacement of cyclopentadienyl ligands from nickelocene with CpMo(S <sub>2</sub> C <sub>2</sub> Ph <sub>2</sub> ) <sub>2</sub> . <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 10967-75	5.1	14
969	Oxidation-state and metal-ion dependent stereoisomerization in oxo molybdenum and tungsten complexes of a bulky alkoxy heteroscorpionate ligand. <b>2006</b> , 3822-30		18
968	Analogue reaction systems of selenate reductase. <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 2979-88	5.1	38
967	Biology of <i>Pseudomonas stutzeri</i> . <b>2006</b> , 70, 510-47		384
966	Models for the molybdenum hydroxylases: synthesis, characterization and reactivity of cis-oxosulfido-Mo(VI) complexes. <b>2006</b> , 128, 305-16		54
965	Vibrational markers for the open-shell character of transition metal bis-dithiolenes: an infrared, resonance raman, and quantum chemical study. <b>2006</b> , 128, 4422-36		88
964	Molybdenum cofactor biosynthesis and molybdenum enzymes. <b>2006</b> , 57, 623-47		245
963	Theoretical characterization of the "very rapid" Mo(V) species generated in the oxidation of xanthine oxidase. <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 2199-202	5.1	10
962	Understanding the origin of metal-sulfur vibrations in an oxo-molybdenum dithiolene complex: relevance to sulfite oxidase. <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 967-76	5.1	38
961	Chemistry of [Et <sub>4</sub> N][MoIV(SPh)(PPh <sub>3</sub> )(mnt) <sub>2</sub> ] as an analogue of dissimilatory nitrate reductase with its inactivation on substitution of thiolate by chloride. <b>2006</b> , 128, 4196-7		45
960	Oxidation of nitrite by a trans-dioxoruthenium(VI) complex: direct evidence for reversible oxygen atom transfer. <b>2006</b> , 128, 14669-75		22
959	Protein film voltammetry of arsenite oxidase from the chemolithoautotrophic arsenite-oxidizing bacterium NT-26. <b>2006</b> , 45, 2804-9		35
958	Anhydrous photochemical uranyl(VI) reduction: unprecedented retention of equatorial coordination accompanying reversible axial oxo/alkoxide exchange. <b>2006</b> , 128, 14024-5		38
957	Therapeutic effects of xanthine oxidase inhibitors: renaissance half a century after the discovery of allopurinol. <b>2006</b> , 58, 87-114		819

956	Crystal structures and <sup>77</sup> Se NMR spectra of molybdenum(IV) areneselenolates having intramolecular NH...Se hydrogen bonds. <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 9374-80	5.1	17
955	Structure of the active site of sulfite dehydrogenase from <i>Starkeya novella</i> . <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 7488-92	5.1	22
954	Thermodynamic scales for sulfur atom transfer and oxo-for-sulfido exchange reactions. <i>Chemical Reviews</i> , <b>2006</b> , 106, 4747-83	68.1	57
953	Synthesis, molecular and electronic structure, and TDDFT and TDDFT-PCM study of the solvatochromic properties of (Me <sub>2</sub> Pipdt)Mo(CO) <sub>4</sub> complex (Me <sub>2</sub> Pipdt = N,N'-dimethylpiperazine-2,3-dithione). <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 3557-68	5.1	51
952	High-resolution EXAFS of the active site of human sulfite oxidase: comparison with density functional theory and X-ray crystallographic results. <i>Inorganic Chemistry</i> , <b>2006</b> , 45, 493-5	5.1	33
951	Structural and electron paramagnetic resonance (EPR) studies of mononuclear molybdenum enzymes from sulfate-reducing bacteria. <b>2006</b> , 39, 788-96		42
950	Arsenic in the aetiology of cancer. <b>2006</b> , 612, 215-246		230
949	Milk xanthine oxidase: Properties and physiological roles. <b>2006</b> , 16, 546-554		91
948	CO Dehydrogenase. <b>2006</b> ,		
947	Dissimilatory Nitrate Reductase. <b>2006</b> ,		
946	Trimethylamine N-Oxide Reductase. <b>2006</b> ,		
945	Formaldehyde Ferredoxin Oxidoreductase. <b>2006</b> ,		
944	Electrochemistry of xanthine oxidase and its interaction with nitric oxide. <b>2006</b> , 22, 337-40		10
943	Molybdenum: Inorganic & Coordination Chemistry. <b>2006</b> ,		
942	Molybdenum: MPT-Containing Enzymes. <b>2006</b> ,		
941	Dimethylsulfoxide Reductase. <b>2006</b> ,		
940	Accumulation pattern of toxin β-ODAP during lifespan and effect of nutrient elements on β-ODAP content in <i>Lathyrus sativus</i> seedlings. <b>2006</b> , 144, 369-375		31
939	Aldehyde Oxidoreductase (MOP). <b>2006</b> ,		

- 938 (Dimethyl sulfoxide- $D_6$ )[3-hydroxy-2-hydroxymethyl-2-(3-methoxy-2-oxidobenzylideneamino- $2-O_2,N$ )propanolato- $D$ ]dioxomolybdenum(VI) complex. **2006**, 62, m1994-m1996
- 937 Metal limitation of cyanobacterial  $N_2$  fixation and implications for the Precambrian nitrogen cycle. **2006**, 4, 285-297 96
- 936 Molybdenum and tungsten enzymes: the xanthine oxidase family. **2006**, 10, 109-14 92
- 935 Polynuclear oxomolybdenum(VI) complexes of dihydroxybenzoic acids: Synthesis, spectroscopic and structure characterization of a tetranuclear catecholato-type coordinated 2,3-dihydroxybenzoate and a novel tridentate salicylato-type coordinated 2,5-dihydroxybenzoate. **2006**, 35, 1227-1247 19
- 934 Synthesis, spectroscopic characterization and structural studies of bromodioxodimethylsulfoxide (N,N'-dialkyldithiocarbamates and O-alkyl dithiocarbonate)molybdenum(VI) complexes: Crystal structures of  $MoO_2Br_2(OSMe_2)_2$  and  $MoO_2Br_2(C_{12}H_8N_2) \cdot CH_2Cl_2$ . **2006**, 25, 3238-3244 14
- 933 Quantification of uric acid, xanthine and hypoxanthine in human serum by HPLC for pharmacodynamic studies. **2006**, 837, 1-10 133
- 932 Biochemical and spectroscopic characterization of an aldehyde oxidoreductase isolated from *Desulfovibrio aminophilus*. *Journal of Inorganic Biochemistry*, **2006**, 100, 44-50 4.2 11
- 931 Bacterial nitrate reductases: Molecular and biological aspects of nitrate reduction. *Journal of Inorganic Biochemistry*, **2006**, 100, 1015-23 4.2 175
- 930 Metalloenzymes of the denitrification pathway. *Journal of Inorganic Biochemistry*, **2006**, 100, 2087-100 4.2 163
- 929 Catalytic oxidation of a thioether and dibenzothiophenes using an oxorhenium(V) dithiolate complex tethered on silica. **2006**, 243, 158-169 25
- 928 What is the best theoretical method to study molybdenum dithiolene complexes?. **2006**, 773, 59-70 20
- 927 Oxo- and oxoperoxo-molybdenum(VI) complexes with aryl hydroxamates: synthesis, structure, and catalytic uses in highly efficient, selective, and ecologically benign peroxidic epoxidation of olefins. *Inorganic Chemistry*, **2006**, 45, 9843-57 5.1 53
- 926 Determination of the stability constants of the Mo(VI) complex with iminodiacetic acid in different sodium perchlorate aqueous solutions. **2006**, 51, 1982-1986 8
- 925 Photoreactions of p-quinones with dimethyl sulfide and dimethyl sulfoxide in aqueous acetonitrile. goerner@mpi-muelheim.mpg.de. *Photochemistry and Photobiology*, **2006**, 82, 71-7 3.6 19
- 924 Synthesis and characterization of Bis(Sulfido)bis[O,O-dimethyldithiophosphato]oxomolybdenum(V). Crystal structure of  $Mo_2O_2(S_2)[S_2P(OMe)_2]_2 \cdot C_6H_6$ . **2006**, 36, 135-140
- 923 EPR and redox properties of periplasmic nitrate reductase from *Desulfovibrio desulfuricans* ATCC 27774. **2006**, 11, 609-16 37
- 922 Formate-reduced *E. coli* formate dehydrogenase H: The reinterpretation of the crystal structure suggests a new reaction mechanism. **2006**, 11, 849-54 109
- 921 A novel thermostable sulfite oxidase from *Thermus thermophilus*: characterization of the enzyme, gene cloning and expression in *Escherichia coli*. **2006**, 10, 587-98 17



920	Microbiology and biochemistry of nicotine degradation. <b>2006</b> , 69, 493-8	148
919	Cell biology of molybdenum. <b>2006</b> , 1763, 621-35	214
918	Crystal structure of ethylbenzene dehydrogenase from <i>Aromatoleum aromaticum</i> . <b>2006</b> , 14, 1377-88	140
917	Mechanism of nitrate reduction by <i>Desulfovibrio desulfuricans</i> nitrate reductase--a theoretical investigation. <i>Chemistry - A European Journal</i> , <b>2006</b> , 12, 2532-41	4.8 63
916	Experimental and theoretical investigations of the sulfite-based polyoxometalate cluster redox series: alpha- and beta-[Mo(18)O(54)(SO(3))(2)](4-/5-/6-). <i>Chemistry - A European Journal</i> , <b>2006</b> , 12, 8472-83	4.8 50
915	Structural, Electrochemical, and Theoretical Investigations of New Thio- and Selenoether Complexes of Molybdenum and Tungsten. <b>2006</b> , 2006, 628-637	17
914	Structure and Function of Xanthine Oxidoreductase. <b>2006</b> , 2006, 1913-1926	90
913	Modelling the Electron-Transfer Complex Between Aldehyde Oxidoreductase and Flavodoxin. <b>2006</b> , 2006, 3835-3840	9
912	Bis(dithiolene) Molybdenum Complex that Promotes Combined Coupled Electron-Proton Transfer and Oxygen Atom Transfer Reactions: A Water-Active Model of the Arsenite Oxidase Molybdenum Center. <b>2006</b> , 2006, 4494-4497	24
911	The electronic spectrum of jet-cooled copper hydrosulfide (CuSH). <b>2006</b> , 125, 084310	14
910	The Mechanism of nucleotide-assisted molybdenum insertion into molybdopterin. A novel route toward metal cofactor assembly. <b>2006</b> , 281, 18343-50	88
909	NarJ chaperone binds on two distinct sites of the aponitrate reductase of <i>Escherichia coli</i> to coordinate molybdenum cofactor insertion and assembly. <b>2006</b> , 281, 2170-6	52
908	Genetic and biochemical evidence for the involvement of a molybdenum-dependent enzyme in one of the selenite reduction pathways of <i>Rhodobacter sphaeroides</i> f. sp. <i>denitrificans</i> IL106. <b>2006</b> , 72, 3147-53	15
907	Identification and characterization of a novel bacterial sulfite oxidase with no heme binding domain from <i>Deinococcus radiodurans</i> . <b>2006</b> , 188, 694-701	34
906	Function and structure of the molybdenum cofactor carrier protein from <i>Chlamydomonas reinhardtii</i> . <b>2006</b> , 281, 30186-94	50
905	A functional mobA gene for molybdopterin cytosine dinucleotide cofactor biosynthesis is required for activity and holoenzyme assembly of the heterotrimeric nicotine dehydrogenases of <i>Arthrobacter nicotinovorans</i> . <b>2006</b> , 72, 5126-31	21
904	<i>Rhodobacter capsulatus</i> XdhC is involved in molybdenum cofactor binding and insertion into xanthine dehydrogenase. <b>2006</b> , 281, 15701-8	54
903	Spectroscopic and kinetic studies of Y114F and W116F mutants of Me2SO reductase from <i>Rhodobacter capsulatus</i> . <b>2007</b> , 282, 35519-29	13

902	The role of arginine 310 in catalysis and substrate specificity in xanthine dehydrogenase from <i>Rhodobacter capsulatus</i> . <b>2007</b> , 282, 12785-90	35
901	Biology of the molybdenum cofactor. <b>2007</b> , 58, 2289-96	75
900	Molybdate and Tungstate: Uptake, Homeostasis, Cofactors, and Enzymes. <b>2007</b> , 421-451	16
899	Drug Metabolism. <b>2007</b> ,	6
898	Natural Flavonoids for the treatment of Hyperuricemia, Molecular Docking studies. <b>2007</b> , 178-182	1
897	Two mutations convert mammalian xanthine oxidoreductase to highly superoxide-productive xanthine oxidase. <b>2007</b> , 141, 525-34	23
896	Transfer of the molybdenum cofactor synthesized by <i>Rhodobacter capsulatus</i> MoeA to XdhC and MobA. <b>2007</b> , 282, 28493-28500	33
895	S- and N-Oxide Reductases. <b>2007</b> , 2,	9
894	Construction of a dimethyl sulfoxide sensor based on dimethyl sulfoxide reductase immobilized on a Au film electrode. <b>2007</b> , 23, 55-8	8
893	Oxidative Removal of Heterocyclic Alkyl or Sugar Side Chain by Microwave: A Simple Step to Xanthopterin, 6-Formylpterin, and 3-Hydroxymethyl-2(1H)-quinoxalinone. <b>2007</b> , 36, 1118-1119	10
892	Dissimilatory nitrate and nitrite ammonification by sulphate-reducing eubacteria. 241-264	14
891	Characterization of superoxide production from aldehyde oxidase: an important source of oxidants in biological tissues. <b>2007</b> , 460, 113-21	75
890	Joint spectroscopic and theoretical investigations of transition metal complexes involving non-innocent ligands. <b>2007</b> , 1552-66	272
889	Functional anthology of intrinsic disorder. 3. Ligands, post-translational modifications, and diseases associated with intrinsically disordered proteins. <b>2007</b> , 6, 1917-32	322
888	Direct demonstration of the presence of coordinated sulfate in the reaction pathway of <i>Arabidopsis thaliana</i> sulfite oxidase using <sup>33</sup> S labeling and ESEEM spectroscopy. <b>2007</b> , 129, 14800-10	35
887	Chapter 3 Emerging biocatalytic processes. <b>2007</b> , 164, 65-226	2
886	Ultrafast and ultraslow oxygen atom transfer reactions between late metal centers. <b>2007</b> , 129, 588-600	24
885	Synthesis, structural characterization, and multifrequency electron paramagnetic resonance studies of mononuclear thiomolybdenyl complexes. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 2373-87	5.1 31

884	Molecular oxygen activation by a molybdenum(IV) monooxo bis(beta-ketiminato) complex. <i>Chemical Communications</i> , <b>2007</b> , 701-3	5.8	38
883	Tetrahydrobiopterin and Related Biologically Important Pterins. <b>2007</b> , 127-171		12
882	Identification of a <i>Rhodobacter capsulatus</i> L-cysteine desulfurase that sulfurates the molybdenum cofactor when bound to XdhC and before its insertion into xanthine dehydrogenase. <b>2007</b> , 46, 9586-95		40
881	Modulating Electronic Coupling Using O- and S-donor Linkers. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 7840-7	5.1	24
880	Interaction of product analogues with the active site of <i>rhodobacter sphaeroides</i> dimethyl sulfoxide reductase. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 3097-104	5.1	19
879	Structural, electrochemical and oxygen atom transfer properties of a molybdenum selenoether complex [Mo2O4(OC3H6SeC3H6O)2] and its thioether analogue [Mo2O4(OC3H6SC3H6O)2]. <b>2007</b> , 1773-80		18
878	Metal and cofactor insertion. <b>2007</b> , 24, 963-71		31
877	Computational studies of electron paramagnetic resonance parameters for paramagnetic molybdenum complexes. 1. Method validation on small and medium-sized systems. <b>2007</b> , 111, 4616-29		30
876	Computational studies of EPR parameters for paramagnetic molybdenum complexes. II. Larger MoV systems relevant to molybdenum enzymes. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 8146-61	5.1	25
875	Kinetics and mechanism of oxygen-independent hydrocarbon hydroxylation by ethylbenzene dehydrogenase. <b>2007</b> , 46, 7637-46		61
874	Modified active site coordination in a clinical mutant of sulfite oxidase. <b>2007</b> , 129, 9421-8		28
873	Synthesis, characterization, and biomimetic chemistry of cis-oxosulfidomolybdenum(VI) complexes stabilized by an intramolecular Mo(O)=S...S interaction. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 939-48	5.1	28
872	Photoelectron spectroscopy and electronic structure calculations of d1 vanadocene compounds with chelated dithiolate ligands: implications for pyranopterin Mo/W enzymes. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 10639-46	5.1	30
871	Desoxo molybdenum(IV) and tungsten(IV) bis(dithiolene) complexes: monomer-dimer interconversion involving reversible thiol bridge formation. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 6136-47	5.1	12
870	Sulfur K-edge spectroscopic investigation of second coordination sphere effects in oxomolybdenum-thiolates: relationship to molybdenum-cysteine covalency and electron transfer in sulfite oxidase. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 1259-67	5.1	21
869	Synthesis of structural analogues of the oxidized sites in the xanthine oxidoreductase enzyme family. <b>2007</b> , 129, 7512-3		29
868	Synthesis and structures of bis(dithiolene)tungsten(IV,VI) thiolate and selenolate complexes: approaches to the active sites of molybdenum and tungsten formate dehydrogenases. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 4090-102	5.1	46
867	Silylation, sulfidation, and benzene-1,2-dithiolate complexation reactions of oxo- and oxosulfidomolybdates(VI) and -tungstates(VI). <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 11156-64	5.1	16

866	Phosphine-substituted dithiolene complexes as ligands: communication between ruthenium(II) centers through a dimolybdenum bis(dithiolene) core. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 9790-807	5.1	8
865	Oxidation reaction by xanthine oxidase: theoretical study of reaction mechanism. <b>2007</b> , 129, 8131-8		37
864	An apparent violation of microscopic reversibility: mechanisms for ligand substitution reactions of oxorhenium(V) dithiolate complexes. <b>2007</b> , 129, 1560-7		16
863	Preparation and isolation of dithiolene thiophosphoryl molecules as stable, protected forms of dithiolene ligands. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 3283-8	5.1	14
862	Principles of Drug Metabolism 1: Redox Reactions. <b>2007</b> , 87-132		11
861	Inhibition of respiration and nitrate assimilation enhances photohydrogen evolution under low oxygen concentrations in <i>Synechocystis</i> sp. PCC 6803. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2007</b> , 1767, 161-9	4.6	83
860	Oxo-molybdenum(VI,V,IV) complexes of the facially coordinating tris(mercaptoimidazolyl)borate ligand: synthesis, characterization, and oxygen atom transfer reactivity. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 5429-38	5.1	29
859	Short-term Response of Soil Iron to Nitrate Addition. <b>2007</b> , 71, 108-117		21
858	Investigation of the mechanism of action of pyrogallol-phloroglucinol transhydroxylase by using putative intermediates. <i>Chemistry - A European Journal</i> , <b>2007</b> , 13, 2805-11	4.8	10
857	Description of the ground-state covalencies of the bis(dithiolato) transition-metal complexes from X-ray absorption spectroscopy and time-dependent density-functional calculations. <i>Chemistry - A European Journal</i> , <b>2007</b> , 13, 2783-97	4.8	181
856	Push-pull molybdenum trisdithiolenes allow rapid nonconventional binding of ethylene at ligand sulfur atoms. <b>2007</b> , 46, 7644-7		40
855	PushPull Molybdenum Trisdithiolenes Allow Rapid Nonconventional Binding of Ethylene at Ligand Sulfur Atoms. <b>2007</b> , 119, 7788-7791		2
854	Polymer-Supported Dioxido-MoVI Complexes as Truly Functional Molybdenum Oxotransferase Model Systems. <b>2007</b> , 2007, 1020-1026		32
853	Synthesis and Characterization of Bis(dithiolene) Tungsten(VI), -(V), and -(IV) Complexes and Their Reactivities in Coupled Electron-Proton Transfer: A New Series of Active Site Models of Tungstoenzymes. <b>2007</b> , 2007, 4663-4668		13
852	Xanthine Sensors Based on Anodic and Cathodic Detection of Enzymatically Generated Hydrogen Peroxide. <b>2007</b> , 19, 631-637		39
851	Bioelectrocatalytic detection of theophylline at theophylline oxidase electrodes. <b>2007</b> , 22, 2508-15		47
850	Electrospray ionization photoelectron spectroscopy: Probing the electronic structure of inorganic metal complexes in the gas-phase. <b>2007</b> , 251, 474-491		32
849	Direct electron transfer of xanthine oxidase and its catalytic reduction to nitrate. <b>2007</b> , 602, 181-6		16

848	Sulfite oxidizing enzymes. <b>2007</b> , 1774, 527-39			138
847	Synthesis and characterization of heteroscorpionate dioxo-tungsten(VI) complexes. <b>2007</b> , 360, 1961-1969			9
846	Comparison of structural features of three new cis-dioxomolybdenum(VI) complexes with 2-hydroxy-1-naphthaldehyde-S-methylisothiosemicarbazone: Possible role of intermolecular interactions on the geometry of the cis-MoO <sub>2</sub> unit. <b>2007</b> , 360, 2197-2206			23
845	Oxomolybdenum(VI) and (IV) complexes of pyrazole derived ONO donor ligands: synthesis, crystal structure studies and spectroelectrochemical correlation. <b>2007</b> , 26, 133-141			61
844	Synthesis and characterization of binuclear oxomolybdenum(V) and dioxomolybdenum(VI) O,O'-ditolyl dithiophosphate complexes.: Crystal structures of Mo <sub>2</sub> O <sub>3</sub> [S <sub>2</sub> P(OC <sub>6</sub> H <sub>4</sub> Me-o) <sub>2</sub> ] <sub>4</sub> , Mo <sub>2</sub> O <sub>3</sub> [S <sub>2</sub> P(OC <sub>6</sub> H <sub>4</sub> Me-m) <sub>2</sub> ] <sub>4</sub> and MoO <sub>2</sub> [S <sub>2</sub> P(OC <sub>6</sub> H <sub>4</sub> Me-p) <sub>2</sub> ] <sub>2</sub> . <b>2007</b> , 26, 3973-3979			11
843	Alkoxo, chlorido, and methyl derivatives of oxidomolybdenum(VI) complexes with tetradentate [O <sub>3</sub> N]-type ligands. <b>2007</b> , 26, 5293-5300			13
842	EPR characterization of the molybdenum(V) forms of formate dehydrogenase from <i>Desulfovibrio desulfuricans</i> ATCC 27774 upon formate reduction. <i>Journal of Inorganic Biochemistry</i> , <b>2007</b> , 101, 1617-22	4.2		35
841	Toward modeling the high chloride, low pH form of sulfite oxidase: Ka-band ESEEM of equatorial chloro ligands in oxomolybdenum(V) complexes. <i>Journal of Inorganic Biochemistry</i> , <b>2007</b> , 101, 1623-9	4.2		19
840	Facets of early transition metal-sulfur chemistry: metal-sulfur ligand redox, induced internal electron transfer, and the reactions of metal-sulfur complexes with alkynes. <i>Journal of Inorganic Biochemistry</i> , <b>2007</b> , 101, 1562-85	4.2		29
839	Sulfur K-edge XAS of WVO vs. MoVO bis(dithiolene) complexes: contributions of relativistic effects to electronic structure and reactivity of tungsten enzymes. <i>Journal of Inorganic Biochemistry</i> , <b>2007</b> , 101, 1594-600	4.2		20
838	N-(7-Dimethoxymethyl-4-oxo-3,4-dihydropteridin-2-yl)-2,2-dimethylpropionamide monohydrate. <b>2007</b> , 63, o4249-o4250			
837	Heterodimeric nitrate reductase (NapAB) from <i>Cupriavidus necator</i> H16: purification, crystallization and preliminary X-ray analysis. <b>2007</b> , 63, 516-9			18
836	Nature and position of functional group on thiopurine substrates influence activity of xanthine oxidase--enzymatic reaction pathways of 6-mercaptopurine and 2-mercaptopurine are different. <b>2007</b> , 72, 170-7			4
835	The tightly regulated promoter of the xanA gene of <i>Aspergillus nidulans</i> is included in a helitron. <b>2007</b> , 63, 1577-87			33
834	Structure of the Michaelis complex and function of the catalytic center in the reductive half-reaction of computational and synthetic models of sulfite oxidase. <b>2007</b> , 2, 956-64			24
833	Electrochemical behavior of nitrogen gas species adsorbed onto boron-doped diamond (BDD) electrodes. <b>2007</b> , 23, 11413-6			14
832	Human xanthine oxidase changes its substrate specificity to aldehyde oxidase type upon mutation of amino acid residues in the active site: roles of active site residues in binding and activation of purine substrate. <b>2007</b> , 141, 513-24			96
831	Photoreactivation of Alloxanthine-inhibited Xanthine Oxidase. <i>Photochemistry and Photobiology</i> , <b>2007</b> , 73, 439-446		3.6	

830	cis-Dioxomolybdenum(VI) complexes of sterically encumbered phenol-based tetradentate N2O2 ligands: Structural, spectroscopic, and electrochemical studies. <b>2007</b> , 18, 187-193		6
829	Studies on a new dinuclear CoIIβterin complex exhibiting reactivity towards phenylalanine and bromobenzene. <b>2007</b> , 32, 737-745		1
828	Biosensors based on direct electron transfer in redox proteins. <b>2007</b> , 159, 1-17		122
827	Correlating EPR and X-ray structural analysis of arsenite-inhibited forms of aldehyde oxidoreductase. <b>2007</b> , 12, 353-66		13
826	NADH oxidase activity of rat and human liver xanthine oxidoreductase: potential role in superoxide production. <b>2007</b> , 12, 777-87		31
825	Density functional theory studies of model complexes for molybdenum-dependent nitrate reductase active sites. <b>2007</b> , 12, 989-1001		26
824	Probing the role of copper in the biosynthesis of the molybdenum cofactor in Escherichia coli and Rhodobacter sphaeroides. <b>2007</b> , 12, 1129-39		14
823	A steady-state and pre-steady-state kinetics study of the tungstoenzyme formaldehyde ferredoxin oxidoreductase from Pyrococcus furiosus. <b>2008</b> , 13, 75-84		6
822	Experimental and theoretical study of a truly functional biomimetic molybdenum oxotransferase analogue system. <i>Journal of Inorganic Biochemistry</i> , <b>2008</b> , 102, 1199-211	4.2	28
821	Molecular cloning, characterization and expression analysis of three aldehyde oxidase genes from Pisum sativum L. <b>2008</b> , 46, 19-28		33
820	The Selective Oxidation of Methanol on Iron Molybdate Catalysts. <b>2008</b> , 48, 158-165		29
819	A Nano-Hybrid of Molybdenum Oxide Intercalated by Dithiocarbamate as an Oxidation Catalyst. <b>2008</b> , 18, 472-476		7
818	Periplasmic nitrate reductase revisited: a sulfur atom completes the sixth coordination of the catalytic molybdenum. <b>2008</b> , 13, 737-53		86
817	Biochemical and spectroscopic characterization of the membrane-bound nitrate reductase from Marinobacter hydrocarbonoclasticus 617. <b>2008</b> , 13, 1321-33		18
816	The 1.38 Å crystal structure of DmsD protein from Salmonella typhimurium, a proofreading chaperone on the Tat pathway. <b>2008</b> , 71, 525-33		24
815	Structural and Catalytic Aspects of Dioxomolybdenum(VI) Complexes with β-Hydroxy Functionalized N-Salicylidene Hydrazides. <b>2008</b> , 634, 2291-2298		33
814	Reaction mechanism of molybdoenzyme formate dehydrogenase. <i>Chemistry - A European Journal</i> , <b>2008</b> , 14, 8674-81	4.8	43
813	The Role of Axial Ligation in Nitrate Reductase: A Model Study by DFT Calculations on the Mechanism of Nitrate Reduction. <b>2008</b> , 2008, 5338-5349		5

812	Proton shift upon one-electron reduction in ruthenium(II)-coordinated pterins. <b>2008</b> , 47, 9669-72		11
811	Proton Shift upon One-Electron Reduction in Ruthenium(II)-Coordinated Pterins. <b>2008</b> , 120, 9815-9818		5
810	Synthesis, crystal structure and catalytic activity of a novel Mo(VI)oxazoline complex in highly efficient oxidation of sulfides to sulfoxides by urea hydrogen peroxide. <b>2008</b> , 361, 2019-2024		69
809	Acetato complexes of molybdenum(V): A novel tetranuclear core based on the metal-metal bonded {Mo <sub>2</sub> O <sub>4</sub> } <sup>2+</sup> units. <b>2008</b> , 361, 2863-2870		14
808	Quantum chemical modelling of the C-H cleavage mechanism in oxidation of ethylbenzene and its derivatives by ethylbenzene dehydrogenase. <b>2008</b> , 286, 128-136		21
807	Chemical analogues relevant to molybdenum and tungsten enzyme reaction centres toward structural dynamics and reaction diversity. <b>2008</b> , 37, 2609-19		101
806	Inhibitors of the molybdenum cofactor containing 4-hydroxybenzoyl-CoA reductase. <b>2008</b> , 47, 4964-72		14
805	Structure of the molybdenum site of Escherichia coli trimethylamine N-oxide reductase. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 1074-8	5.1	30
804	Mammalian xanthine oxidoreductase - mechanism of transition from xanthine dehydrogenase to xanthine oxidase. <b>2008</b> , 275, 3278-89		230
803	Heavy metal ions inhibit molybdoenzyme activity by binding to the dithiolene moiety of molybdopterin in Escherichia coli. <b>2008</b> , 275, 5678-89		30
802	Molecular mechanism of energy conservation in polysulfide respiration. <b>2008</b> , 15, 730-7		125
801	Photosensitized oxidation of hypoxanthine and xanthine by aluminum phthalocyanine tetrasulfonate. Role of the alkylating quinone 2,5-dichloro-diaziridinyl-1,4-benzoquinone. <i>Photochemistry and Photobiology</i> , <b>2008</b> , 84, 1583-8	3.6	8
800	Effects of sulphite supplementation on vascular responsiveness in sulphite oxidase-deficient rats. <b>2008</b> , 35, 268-72		1
799	In silico identification of genes involved in selenium metabolism: evidence for a third selenium utilization trait. <b>2008</b> , 9, 251		39
798	Protein electrodes with direct electrochemical communication. <b>2008</b> , 109, 19-64		16
797	Sulfur metabolism in phototrophic sulfur bacteria. <b>2009</b> , 54, 103-200		215
796	Direct electrochemistry of redox enzymes as a tool for mechanistic studies. <i>Chemical Reviews</i> , <b>2008</b> , 108, 2379-438	68.1	590
795	Direct catalytic electrochemistry of sulfite dehydrogenase: mechanistic insights and contrasts with related Mo enzymes. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2008</b> , 1777, 1319-25	4.6	25

794	Microbial Sulfur Metabolism. <b>2008</b> ,		24
793	MoV electron paramagnetic resonance of sulfite oxidase revisited: the low-pH chloride signal. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 2033-8	5.1	25
792	Molybdoproteomes and evolution of molybdenum utilization. <b>2008</b> , 379, 881-99		140
791	The prokaryotic complex iron-sulfur molybdoenzyme family. <b>2008</b> , 1778, 1897-929		176
790	Inorganic Sulfur Compounds as Electron Donors in Purple Sulfur Bacteria. <b>2008</b> , 289-317		30
789	Heterocyclic nitrogenous pollutants in the environment and their treatment options--an overview. <b>2008</b> , 99, 4029-43		128
788	Bacterial Sulfite-Oxidizing Enzymes [Enzymes for Chemolithotrophs Only?]. <b>2008</b> , 151-169		12
787	One- and Two-Electron-Mediated Reduction of Quinones: Enzymology and Toxicological Implications. <b>2008</b> , 1-29		3
786	Biocatalysis of theophylline oxidation by microbial theophylline oxidase in the presence of non-physiological electron acceptors. <b>2008</b> , 26, 455-465		19
785	Electronic structure description of the cis-MoOS unit in models for molybdenum hydroxylases. <b>2008</b> , 130, 55-65		46
784	Biologically relevant O,S-donor compounds. Synthesis, molybdenum complexation and xanthine oxidase inhibition. <b>2008</b> , 1773-82		15
783	Infrared Spectra, Structure, and Bonding of the Group 6 and Ammonia M:NH <sub>3</sub> , H <sub>2</sub> NMH, and N <sup>+</sup> MH <sub>3</sub> Reaction Products in Solid Argon. <b>2008</b> , 27, 4885-4891		19
782	Function of MoaB proteins in the biosynthesis of the molybdenum and tungsten cofactors. <b>2008</b> , 47, 949-56		33
781	Thermodynamic characterization of the redox centers within dimethylsulfide dehydrogenase. <b>2008</b> , 47, 3770-6		19
780	Formation and reactivity of a persistent radical in a dinuclear molybdenum complex. <b>2008</b> , 130, 8940-51		10
779	Electronic control of the "Bailar twist" in formally d <sup>0</sup> -d <sup>2</sup> molybdenum tris(dithiolene) complexes: a sulfur K-edge X-ray absorption spectroscopy and density functional theory study. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 6382-92	5.1	47
778	Selectivity of thiolate ligand and preference of substrate in model reactions of dissimilatory nitrate reductase. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 3393-401	5.1	28
777	Proton-coupled electron transfer in ruthenium(II)-pterin complexes: formation of ruthenium-coordinated pterin radicals and their electronic structures. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 3333-43	5.1	27



- 776 Trithio-chloro molybdate [MoClS<sub>3</sub>]-: a versatile precursor for molybdenum trisulfido complexes. *Inorganic Chemistry*, **2008**, 47, 3763-71 5.1 4
- 775 Molybdenum oxo and imido complexes of beta-diketiminato ligands: synthesis and structural aspects. *Inorganic Chemistry*, **2008**, 47, 113-20 5.1 26
- 774 Electronic state of the dimethyl sulfoxide reductase active site. *Inorganic Chemistry*, **2008**, 47, 5546-8 5.1 17
- 773 Major Mo(V) EPR signature of *Rhodobacter sphaeroides* periplasmic nitrate reductase arising from a dead-end species that activates upon reduction. Relation to other molybdoenzymes from the DMSO reductase family. **2008**, 112, 15478-86 41
- 772 A new class of sulfido/oxo(dithiolene)-molybdenum(IV) complexes derived from sulfido/oxo-bis(tetrasulfido)molybdenum(IV) anions. *Inorganic Chemistry*, **2008**, 47, 10150-7 5.1 12
- 771 Complexation of molybdenum(V) with glycolic acid: an unusual orientation of glycolato ligand in {Mo<sub>2</sub>O<sub>4</sub>}<sup>2+</sup> complexes. *Inorganic Chemistry*, **2008**, 47, 3625-33 5.1 36
- 770 Selenidobis(dithiolene)metal(IV) complexes (metal M = Mo, W) potentially related to the nicotinic acid hydroxylase reaction center: redox aspects in electrochemistry and oxygen atom transfer from Me<sub>3</sub>NO to M(IV) centers. *Inorganic Chemistry*, **2008**, 47, 7465-7 5.1 17
- 769 Crystal structure of a molybdopterin synthase-precursor Z complex: insight into its sulfur transfer mechanism and its role in molybdenum cofactor deficiency. **2008**, 47, 615-26 39
- 768 Spectroscopic and electronic structure studies of symmetrized models for reduced members of the dimethylsulfoxide reductase enzyme family. **2008**, 130, 4628-36 27
- 767 Spectroscopic and density functional theory studies of the blue-copper site in M121SeM and C112SeC azurin: Cu-Se versus Cu-S bonding. **2008**, 130, 3866-77 43
- 766 A biomimetic approach to oxidized sites in the xanthine oxidoreductase family: synthesis and stereochemistry of tungsten(VI) analogue complexes. **2008**, 130, 12794-807 35
- 765 Structural studies of the molybdenum center of the pathogenic R160Q mutant of human sulfite oxidase by pulsed EPR spectroscopy and <sup>17</sup>O and <sup>33</sup>S labeling. **2008**, 130, 8471-80 40
- 764 Toward multifunctional Mo(VI-IV) complexes: cis-dioxomolybdenum(VI) complexes containing hydrogen-bond acceptors or donors. *Inorganic Chemistry*, **2008**, 47, 1044-52 5.1 23
- 763 Natural and Synthetic Receptors for Nitrate Anion. **2008**, 20, 169-190 29
- 762 Substrate orientation in xanthine oxidase: crystal structure of enzyme in reaction with 2-hydroxy-6-methylpurine. **2008**, 283, 4818-24 70
- 761 The mechanism of assembly and cofactor insertion into *Rhodobacter capsulatus* xanthine dehydrogenase. **2008**, 283, 16602-11 30
- 760 Binding of sulfurated molybdenum cofactor to the C-terminal domain of ABA3 from *Arabidopsis thaliana* provides insight into the mechanism of molybdenum cofactor sulfuration. **2008**, 283, 9642-50 60
- 759 A novel role for human Nfs1 in the cytoplasm: Nfs1 acts as a sulfur donor for MOCS3, a protein involved in molybdenum cofactor biosynthesis. **2008**, 283, 25178-25185 102

758	Evolutionary persistence of the molybdopyranopterin-containing sulfite oxidase protein fold. <b>2008</b> , 72, 228-48, table of contents		38
757	Molybdenum Speciation in Raw Phloem Sap of Castor Bean. <b>2008</b> , 41, 1773-1784		1
756	Structures and reaction pathways of the molybdenum centres of sulfite-oxidizing enzymes by pulsed EPR spectroscopy. <b>2008</b> , 36, 1129-33		8
755	Xanthine Oxidoreductase. <b>2008</b> ,		
754	4-Hydroxybenzoyl-Coenzyme A Reductase. <b>2009</b> ,		
753	Reaction Coordinate of Pyranopterin Molybdenum Enzymes. <b>2009</b> ,		
752	Site directed mutagenesis of amino acid residues at the active site of mouse aldehyde oxidase AOX1. <i>PLoS ONE</i> , <b>2009</b> , 4, e5348	3-7	40
751	Oxidative half-reaction of arabidopsis thaliana sulfite oxidase: generation of superoxide by a peroxisomal enzyme. <b>2009</b> , 284, 35479-84		31
750	Molecular basis for enzymatic sulfite oxidation: how three conserved active site residues shape enzyme activity. <b>2009</b> , 284, 2053-63		31
749	Substrate Orientation and Catalysis at the Molybdenum Site in Xanthine Oxidase: CRYSTAL STRUCTURES IN COMPLEX WITH XANTHINE AND LUMAZINE. <b>2009</b> , 284, 8760-7		73
748	Synthesis, chemical and electrochemical studies of complexes of a tridentate ONS chelating ligand built around the elusive [MoVIOS] <sub>2</sub> <sup>+</sup> core. <b>2009</b> , 62, 3522-3531		10
747	NADPH oxidase has a directional response to shear stress. <b>2009</b> , 296, H152-8		47
746	Physiological functions of mineral micronutrients (Cu, Zn, Mn, Fe, Ni, Mo, B, Cl). <b>2009</b> , 12, 259-66		849
745	On the synthesis and chemical behaviour of the elusive bis(hydrosulfido)-bridged dinuclear rhodium(I) complexes [Rh( $\mu$ -SH)(CO)(PR(3)) <sub>2</sub> ] <sub>2</sub> . <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 12212-22	4.8	12
744	The Smallest Vicinal Tricarbonyl Compound as a Monohydrate and Tetracarbonyl Compound as a Thiane Derivative [First Effective Synthesis, Characterization and Chemistry. <b>2009</b> , 2009, 1417-1426		32
743	The effect of the sixth sulfur ligand in the catalytic mechanism of periplasmic nitrate reductase. <b>2009</b> , 30, 2466-84		46
742	Mediated electrochemistry of dimethyl sulfoxide reductase from <i>Rhodobacter capsulatus</i> . <b>2009</b> , 14, 409-19		19
741	Density functional theory study of model complexes for the revised nitrate reductase active site in <i>Desulfovibrio desulfuricans</i> NapA. <b>2009</b> , 14, 1023-35		28

740	Which functional groups of the molybdopterin ligand should be considered when modeling the active sites of the molybdenum and tungsten cofactors? A density functional theory study. <b>2009</b> , 14, 1053-64	21
739	Relativistic two-component calculations of electronic g-tensor for oxo-molybdenum(V) and oxo-tungsten(V) complexes: The important role of higher-order spin-orbit contributions. <b>2009</b> , 356, 229-235	20
738	Effect of an Ionic Liquid on the Catalytic Performance of Thiocyanatodioxomolybdenum(VI) Complexes for the Oxidation of Cyclooctene and Benzyl Alcohol. <b>2009</b> , 129, 350-357	31
737	The Crystal and Molecular Structure of the Dinuclear Mo(VI) Species: [(cis-MoO <sub>2</sub> L)(ED)(cis-MoOL(OH) <sub>2</sub> )] $\cdot$ CHCl <sub>3</sub> where L = (S-benzyl 3-(2-Hydroxyphenyl)Methylenedithiocarbazate). <b>2009</b> , 39, 261-265	3
736	A multiconfigurational perturbation theory study of the electronic structure and EPR g values of an oxomolybdenum enzyme model complex. <b>2009</b> , 124, 251-259	5
735	Synthesis, Structure and Characterization of Dinuclear Pentacoordinate Molybdenum(V) Complexes with Thiosemicarbazone Ligands. <b>2009</b> , 635, 1242-1248	8
734	A role for tungsten in the biology of <i>Campylobacter jejuni</i> : tungstate stimulates formate dehydrogenase activity and is transported via an ultra-high affinity ABC system distinct from the molybdate transporter. <b>2009</b> , 74, 742-57	36
733	Eukaryotization of the early biosphere: A biogeochemical aspect. <b>2009</b> , 47, 1265-1333	12
732	Multiple roles of TorD-like chaperones in the biogenesis of molybdoenzymes. <b>2009</b> , 297, 1-9	33
731	Biochemistry and molecular biology of lithotrophic sulfur oxidation by taxonomically and ecologically diverse bacteria and archaea. <b>2009</b> , 33, 999-1043	324
730	A periplasmic aldehyde oxidoreductase represents the first molybdopterin cytosine dinucleotide cofactor containing molybdo-flavoenzyme from <i>Escherichia coli</i> . <b>2009</b> , 276, 2762-74	63
729	A kinetic model for the oxidation of benzenethiol catalyzed by the [MoVIO <sub>2</sub> (O <sub>2</sub> CC(S)(C <sub>6</sub> H <sub>5</sub> ) <sub>2</sub> ) <sub>2</sub> ] $\cdot$ complex intercalated in a Zn(II)/Al(III) layered double hydroxide host. <b>2009</b> , 304, 174-179	4
728	Molybdenum complexes with O,N,S donor ligands as models for active sites in oxotransferases and hydroxylases. <b>2009</b> , 362, 915-928	23
727	Insights into the Nature of Mo(V) Species in Solution: Modeling Catalytic Cycles for Molybdenum Enzymes. <b>2009</b> , 362, 4603-4608	26
726	MoO <sub>2</sub> Cl <sub>2</sub> as a novel catalyst for Friedel-Crafts acylation and sulfonylation. <b>2009</b> , 50, 1407-1410	44
725	EPR studies of the Mo-enzyme aldehyde oxidoreductase from <i>Desulfovibrio gigas</i> : an application of the Bloch-Wangsness-Redfield theory to a system containing weakly-coupled paramagnetic redox centers with different relaxation rates. <i>Journal of Inorganic Biochemistry</i> , <b>2009</b> , 103, 1342-6	4.2 5
724	Synthesis and characterization of three novel molybdenum(VI) complexes: Mononuclear [MoO <sub>2</sub> (C <sub>6</sub> H <sub>4</sub> (O)CHNCH(COO)CH <sub>2</sub> C(O)NH <sub>2</sub> )], [MoO <sub>2</sub> (C <sub>19</sub> H <sub>19</sub> N <sub>2</sub> O <sub>5</sub> )(CH <sub>3</sub> OH)]Cl $\cdot$ CH <sub>3</sub> OH and dinuclear [Mo <sub>2</sub> O <sub>4</sub> (C <sub>6</sub> H <sub>4</sub> (O)CHNCH(COO)CH <sub>2</sub> C(O)NH <sub>2</sub> ) <sub>2</sub> ]. <b>2009</b> , 28, 562-568	10
723	Molybdenum(VI) complexes of a few pyrimidine derived ligands and the study of metal mediated CN bond cleavage resulting in ligand transformation during complex formation. <b>2009</b> , 28, 711-720	29

- 722 Synthesis, characterization and crystal structure of a dioxomolybdenum(VI) complex with a N,O type bidentate Schiff base ligand as a catalyst for homogeneous oxidation of olefins. **2009**, 28, 2517-2521 66
- 721 Oxidomolybdenum(VI) complexes with atrane-type [O3N] ligands. **2009**, 28, 4051-4055 15
- 720 A new method for the quantification of different redox-species of molybdenum (V and VI) in seawater. **2009**, 113, 250-256 27
- 719 The bioinorganic chemistry of tungsten. **2009**, 253, 269-290 120
- 718 Synthesis, X-ray structure, spectroscopic properties, and theoretical investigations of dinuclear imidazole molybdenum(VI) complex with long MoO bands. **2009**, 12, 252-254 13
- 717 A chiral diamine bis-phenolate complex of dioxomolybdenum(VI). **2009**, 12, 1004-1006 9
- 716 Nitrogen cycle electrocatalysis. *Chemical Reviews*, **2009**, 109, 2209-44 68.1 770
- 715 Molybdenum and tungsten enzymes: a crystallographic and mechanistic overview. **2009**, 4053-68 149
- 714 Electronic effects in oxo transfer reactions catalysed by salan molybdenum(VI) cis-dioxo complexes. **2009**, 2337-44 51
- 713 Biomimetic chemistry of iron, nickel, molybdenum, and tungsten in sulfur-ligated protein sites. **2009**, 48, 2310-20 78
- 712 The Mo-Se active site of nicotinate dehydrogenase. **2009**, 106, 11055-60 39
- 711 Theoretical Studies of Models of the Active Site of the Tungstoenzyme Acetylene Hydratase. **2009**, 28, 4938-4944 35
- 710 A series of mononuclear quasi-two-coordinate copper(I) complexes employing a sterically demanding thiolate ligand. *Inorganic Chemistry*, **2009**, 48, 621-7 5.1 49
- 709 Functional and structural alterations induced by copper in xanthine oxidase. **2009**, 41, 603-17 21
- 708 Intramolecular electron transfer in sulfite-oxidizing enzymes: elucidating the role of a conserved active site arginine. **2009**, 48, 2156-63 33
- 707 Free energy landscapes for S-H bonds in Cp\*2Mo2S4 complexes. **2009**, 131, 5224-32 37
- 706 A theoretical study of the magnetic circular dichroism spectrum for sulfite oxidase based on time-dependent density functional theory. *Inorganic Chemistry*, **2009**, 48, 2880-6 5.1 7
- 705 Efficient transfer of either one or two dithiolene ligands from nickel to ruthenium: synthesis and crystal structures of [Ru(SCR=CPhS)(2)(PPh(3))] and [RuCl(2)(SCR=CPhS)(PPh(3))(2)] (R = Ph, H). *Inorganic Chemistry*, **2009**, 48, 11945-53 5.1 7

704	Spectroscopic characterization of YedY: the role of sulfur coordination in a Mo(V) sulfite oxidase family enzyme form. <b>2009</b> , 131, 15612-4		23
703	Determination of S-H Bond Strengths in Dimolybdenum Tetrasulfide Complexes. <b>2009</b> , 28, 749-754		30
702	Dioxomolybdenum(VI) complexes with ene-1,2-dithiolate ligands: synthesis, spectroscopy, and oxygen atom transfer reactivity. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 10581-90	5.1	25
701	Evidence of disruption of conjugation involving delta bonds in intramolecular electronic coupling. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 11847-52	5.1	7
700	Direct detection and characterization of chloride in the active site of the low-pH form of sulfite oxidase using electron spin echo envelope modulation spectroscopy, isotopic labeling, and density functional theory calculations. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 4743-52	5.1	31
699	Reductive half-reaction of aldehyde oxidoreductase toward acetaldehyde: a combined QM/MM study. <b>2009</b> , 131, 4628-40		37
698	New insights into solvolysis and reorganization energy from gas-phase, electrochemical, and theoretical studies of oxo-Tp*Mo(V) molecules. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 8856-62	5.1	11
697	Molybdenum trafficking for nitrogen fixation. <b>2009</b> , 48, 9711-21		46
696	A combined QM/MM study on the reductive half-reaction of xanthine oxidase: substrate orientation and mechanism. <b>2009</b> , 131, 14885-902		64
695	Theoretical study of the oxidation reaction and electron spin resonance parameters involving sulfite oxidase. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 1323-33	5.1	18
694	The Electrochemistry and Electrochemical Technology of Nitrate. <b>2009</b> , 1-61		13
693	Genomic view of energy metabolism in <i>Ralstonia eutropha</i> H16. <b>2009</b> , 16, 38-52		90
692	Comparative genomics of trace elements: emerging dynamic view of trace element utilization and function. <i>Chemical Reviews</i> , <b>2009</b> , 109, 4828-61	68.1	97
691	Kinetic, structural, and EPR studies reveal that aldehyde oxidoreductase from <i>Desulfovibrio gigas</i> does not need a sulfido ligand for catalysis and give evidence for a direct Mo-C interaction in a biological system. <b>2009</b> , 131, 7990-8		29
690	Infrared spectra and density functional calculations for SMO <sub>2</sub> molecules (M = Cr, Mo, W). <b>2009</b> , 113, 8934-41		12
689	Molybdenum(VI) dioxo complexes with tridentate phenolate ligands. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 10215-21		21
688	Proton-coupled electron transfer of ruthenium(III)-pterin complexes: a mechanistic insight. <b>2009</b> , 131, 11615-24		56
687	Oxo-molybdenum and oxo-tungsten complexes of Schiff bases relevant to molybdoenzymes. <b>2009</b> , 5655-65		49

686	Comparative calculation of EPR spectral parameters in [Mo(V)OX <sub>4</sub> ]-, [Mo(V)OX <sub>5</sub> ] <sup>2-</sup> , and [Mo(V)OX <sub>4</sub> (H <sub>2</sub> O)]- complexes. <b>2009</b> , 11, 10377-84	15
685	Density-functional theory models of xanthine oxidoreductase activity: comparison of substrate tautomerization and protonation. <b>2009</b> , 2306-14	19
684	Exchangeable oxygens in the vicinity of the molybdenum center of the high-pH form of sulfite oxidase and sulfite dehydrogenase. <b>2009</b> , 11, 6733-42	20
683	Necessity of fine tuning in Mo(IV) bis(dithiolene) complexes to warrant nitrate reduction. <b>2009</b> , 1927-38	15
682	A <i>Bombyx mandarina</i> mutant exhibiting translucent larval skin is controlled by the molybdenum cofactor sulfurase gene. <b>2009</b> , 84, 147-52	7
681	Environmental Technologies to Treat Nitrogen Pollution. <b>2009</b> , 8,	20
680	Reduction of dimethylsulfoxide to dimethylsulfide by marine phytoplankton. <b>2009</b> , 54, 560-570	52
679	The Biosynthesis of Folate and Pterins and Their Enzymology. <b>2010</b> , 599-648	6
678	The biological and toxicological importance of molybdenum in the environment and in the nutrition of plants, animals and man. <b>2010</b> , 39, 12-26	10
677	EPR Studies of Xanthine Oxidoreductase and Other Molybdenum-Containing Hydroxylases. <b>2010</b> , 91-120	7
676	Tungsten's redox potential is more temperature sensitive than that of molybdenum. <b>2010</b> , 39, 5623-9	21
675	Crystal structures of urate bound form of xanthine oxidoreductase: substrate orientation and structure of the key reaction intermediate. <b>2010</b> , 132, 17080-3	37
674	Active transition metal oxo and hydroxo moieties in nature's redox, enzymes and their synthetic models: Structure and reactivity relationships. <b>2010</b> , 254, 1826-1842	52
673	Assessment of density functional methods for the study of vanadium and rhenium complexes with thiolato ligands. <b>2010</b> , 941, 1-9	31
672	Pulsed EPR investigations of the Mo(V) centers of the R55Q and R55M variants of sulfite dehydrogenase from <i>Starkeya novella</i> . <b>2010</b> , 15, 505-14	13
671	Electron transfer and interfacial behavior of redox proteins. <b>2010</b> , 53, 720-736	6
670	Synthesis, characterization and spectrochemical studies on a few binuclear $\mu$ -oxo molybdenum(V) complexes of pyrimidine derived Schiff base ligands. <b>2010</b> , 122, 239-245	5
669	Crystal Structure and EPR Spectra of cis-Dioxo-molybdenum(V) Complex with o-Aminophenol. <b>2010</b> , 20, 617-621	5

- 668 Synthesis, Crystal Structure of Cis-dioxo-catecholatotungsten(VI) Complex and Its NMR Studies on the Interaction with ATP. **2010**, 21, 650-654
- 667 Synthesis, Crystal Structure, UV-vis and EPR Studies of  $(\text{NH}_3\text{CH}_2\text{CH}_2\text{NH}_2)_2.5 [\text{Mo(V)}_0.5\text{W(VI)}_0.5\text{O}_2(\text{OC}_6\text{H}_4\text{O})_2]$ . **2010**, 21, 1474-1477 7
- 666 Synthesis, Crystal Structure, and Catalytic Properties of Novel Dioxidomolybdenum(VI) Complexes with Tridentate Schiff Base Ligands in the Biomimetic and Highly Selective Oxygenation of Alkenes and Sulfides. **2010**, 2010, 799-806 40
- 665 Oxidomolybdenum(IV), -(V), -(VI) Complexes with Relevance to Molybdenum Enzymes: Oxygen Atom Transfer, Redox Chemistry and EPR Spectroscopy. **2010**, 2010, 1939-1947 22
- 664 Novel O,O'-Donor Oxo-MoIV Hydrotris(3-isopropylpyrazolyl)borate Complexes Formed by Chelation of Potentially Hydrogen-Bonding Phenolate Ligands on Reduction of Dioxo-MoVI Complexes. **2010**, 2010, 3261-3269 6
- 663 ChemInform Abstract: The Mononuclear Molybdenum Enzymes. **2010**, 28, no-no 2
- 662 Crystal and supramolecular structures of dioxomolybdenum(VI) and dioxotungsten(VI) complexes of dihydroxybenzoic acids. **2010**, 29, 719-730 7
- 661 The difference one ligand atom makes [An altered oxygen transfer reaction mechanism caused by an exchange of selenium for sulfur. **2010**, 29, 664-668 6
- 660 Synthesis, characterization and pronounced epoxidation activity of cis-dioxo-molybdenum(VI) tridentate Schiff base complexes using tert-butyl hydroperoxide. **2010**, 29, 2703-2709 71
- 659 Synthesis, characterization and structural analysis of isostructural dinuclear molybdenum and tungsten oxo-bis-sulfido-benzenedithiolene complexes. **2010**, 363, 4140-4144 4
- 658 Theoretical study of three predominant tautomers of 2-oxo-6-methylpurine and their two transition state structures. **2010**, 51, 354-356 2
- 657 Oxo ligand functionalization in the uranyl ion ( $\text{UO}_2^{2+}$ ). **2010**, 254, 197-214 250
- 656 Dithiolene complexes and the nature of molybdopterin. **2010**, 254, 1570-1579 67
- 655 Xanthine Oxidoreductase and Aldehyde Oxidase\*. **2010**, 185-205 3
- 654 Substrate orientation and catalytic specificity in the action of xanthine oxidase: the sequential hydroxylation of hypoxanthine to uric acid. **2010**, 285, 28044-53 65
- 653 Oxo-bis{[2,2-bis-(3,5-dimethyl-1H-pyrazol-1-yl)acetato- $\kappa^2$ ,O,N]chloridooxidomolybdenum(V)} mono-hydrate. **2010**, 66, m1648-9 1
- 652 Sensitive nitrate determination in water and meat samples by amperometric biosensor. **2010**, 40, 119-28 11
- 651 Protein crystallography reveals a role for the FS0 cluster of Escherichia coli nitrate reductase A (NarGH1) in enzyme maturation. **2010**, 285, 8801-7 30

- 650 Unexpected Ebxo five-member ring intermediates for oxygen atom transfer between osmium complexes. **2010**, 63, 2846-2853
- 649 The twists and turns of enzyme function. **2010**, 192, 2023-5 2
- 648 Kinetic and spectroscopic studies of the molybdenum-copper CO dehydrogenase from *Oligotropha carboxidovorans*. **2010**, 285, 12571-8 51
- 647 The periplasmic nitrate reductase in *Shewanella*: the resolution, distribution and functional implications of two NAP isoforms, NapEDABC and NapDAGHB. **2010**, 156, 302-312 59
- 646 Reductive half-reaction of aldehyde oxidoreductase toward acetaldehyde: Ab initio and free energy quantum mechanical/molecular mechanical calculations. **2010**, 132, 035101 31
- 645 Calculation of Magnetic Circular Dichroism Spectra With Time-Dependent Density Functional Theory. **2010**, 41-109 15
- 644 Biochemical and spectroscopic characterization of the human mitochondrial amidoxime reducing components hmARC-1 and hmARC-2 suggests the existence of a new molybdenum enzyme family in eukaryotes. **2010**, 285, 37847-59 79
- 643 Complexes of hydroxy(thio)pyrone and hydroxy(thio)pyridinone with Zn(II) and Mo(VI). Thermodynamic stability and insulin-mimetic activity. **2010**, 2, 220-7 24
- 642 Sulfur K-edge X-ray absorption spectroscopy and density functional calculations on Mo(IV) and Mo(VI)=O bis-dithiolenes: insights into the mechanism of oxo transfer in DMSO reductase and related functional analogues. **2010**, 132, 8359-71 44
- 641 25 NO Chemistry by Heme-Enzymes. **2010**, 123-163 1
- 640 Cell Biology of Molybdenum. **2010**, 119-143 13
- 639 Design and synthesis of water soluble (metallo)porphyrins with pendant arms: studies of binding to xanthine oxidase. **2010**, 34, 1125 9
- 638 Some molecular moments of the hadean and archaean aeons: a retrospective overview from the interfacing years of the second to third millennia. *Chemical Reviews*, **2010**, 110, 5191-215 68.1 9
- 637 Reassessing the strategies for trapping catalytic intermediates during nitrate reductase turnover. **2010**, 114, 3341-7 28
- 636 Highly Efficient Reduction of Sulfoxides with the System Borane/Oxo-rhenium Complexes **2010**, 29, 5517-5525 61
- 635 cis-Dioxo- and cis-(hydroxo)oxo-Mo(V) complexes stabilized by intramolecular hydrogen-bonding. *Inorganic Chemistry*, **2010**, 49, 9460-9 5.1 18
- 634 Ab initio modeling of ethylbenzene dehydrogenase reaction mechanism. **2010**, 132, 6014-24 50
- 633 Effects of interdomain tether length and flexibility on the kinetics of intramolecular electron transfer in human sulfite oxidase. **2010**, 49, 1290-6 40



632	The structure of formaldehyde-inhibited xanthine oxidase determined by 35 GHz 2H ENDOR spectroscopy. <b>2010</b> , 132, 14015-7		19
631	Monooxomolybdenum(VI) complexes possessing olefinic dithiolene ligands: probing Mo-S covalency contributions to electron transfer in dimethyl sulfoxide reductase family molybdoenzymes. <i>Inorganic Chemistry</i> , <b>2010</b> , 49, 5368-70	5.1	32
630	Enzymatic Reduction of Nitrate to Nitrite: Insight from Density Functional Calculations. <b>2010</b> , 29, 436-441		16
629	Reactions of monodithiolene tungsten(VI) sulfido complexes with copper(I) in relation to the structure of the active site of carbon monoxide dehydrogenase. <i>Inorganic Chemistry</i> , <b>2010</b> , 49, 1082-9	5.1	29
628	Sulfur-based redox reactions in Mo <sub>3</sub> S <sub>7</sub> (4+) and Mo <sub>3</sub> S <sub>4</sub> (4+) clusters bearing halide and 1,2-dithiolene ligands: a mass spectrometric and density functional theory study. <i>Inorganic Chemistry</i> , <b>2010</b> , 49, 8045-55	5.1	11
627	Characterization of chloride-depleted human sulfite oxidase by electron paramagnetic resonance spectroscopy: experimental evidence for the role of anions in product release. <b>2010</b> , 49, 5154-9		22
626	Noninnocent dithiolene ligands: a new oxomolybdenum complex possessing a donor-acceptor dithiolene ligand. <b>2010</b> , 132, 7830-1		35
625	Elucidating the catalytic mechanism of sulfite oxidizing enzymes using structural, spectroscopic, and kinetic analyses. <b>2010</b> , 49, 7242-54		35
624	Theoretical study of the mechanism of inhibition of xanthine oxidase by flavonoids and gallic acid derivatives. <b>2010</b> , 114, 921-8		37
623	Oxido-reduction is not the only mechanism allowing ions to traverse the ferritin protein shell. <b>2010</b> , 1800, 745-59		62
622	The activity pattern and gene expression profile of aldehyde oxidase during the development of <i>Pisum sativum</i> seeds. <b>2010</b> , 179, 543-8		14
621	Kinetic study on the inhibition of xanthine oxidase by extracts from two selected Algerian plants traditionally used for the treatment of inflammatory diseases. <b>2010</b> , 13, 896-904		15
620	Highly sensitive and stable electrochemical sulfite biosensor incorporating a bacterial sulfite dehydrogenase. <b>2010</b> , 82, 7374-9		58
619	Three-Dimensional Structural Model of Chicken Liver Sulfite Oxidase in its Activated Form. <b>2010</b> , 1, 2159-2164		27
618	Influences of Mo on Nitrate Reductase, Glutamine Synthetase and Nitrogen Accumulation and Utilization in Mo-Efficient and Mo-Inefficient Winter Wheat Cultivars. <b>2010</b> , 9, 355-361		18
617	QM/MM studies of xanthine oxidase: variations of cofactor, substrate, and active-site Glu802. <b>2010</b> , 114, 1506-17		27
616	Structure and Function. <b>2010</b> ,		4
615	Reactivity of a rhenium hydroxo-carbonyl complex toward carbon disulfide: insights from theory. <b>2010</b> , 39, 874-82		6

614	Effects of large-scale amino acid substitution in the polypeptide tether connecting the heme and molybdenum domains on catalysis in human sulfite oxidase. <b>2010</b> , 2, 766-70		4
613	A tungsten-mediated closed cycle of reactivity for the reduction of CO(2) to CO. <b>2010</b> , 39, 9662-71		20
612	Density functional theory study of the electron paramagnetic resonance parameters and the magnetic circular dichroism spectrum for model compounds of dimethyl sulfoxide reductase. <i>Inorganic Chemistry</i> , <b>2010</b> , 49, 1566-76	5.1	16
611	Replacement of an oxo by an imido group in oxotransferase model compounds: influence on the oxygen atom transfer. <i>Inorganic Chemistry</i> , <b>2010</b> , 49, 8914-21	5.1	31
610	A kinetic study of dimethyl sulfoxide reductase based on density functional theory. <b>2010</b> , 88, 683-693		13
609	A DFT study of the possible role of vinylidene and carbene intermediates in the mechanism of the enzyme acetylene hydratase. <b>2010</b> , 39, 3816-22		31
608	Structural studies of the molybdenum center of mitochondrial amidoxime reducing component (mARC) by pulsed EPR spectroscopy and 17O-labeling. <b>2011</b> , 50, 8813-22		17
607	Synthesis and characterization of molybdenum(V,VI) complexes derived from bis(2-hydroxy-1-naphthaldehyde)malonyldihydrazone. <b>2011</b> , 64, 1393-1410		6
606	Implications for the mechanism of sulfite oxidizing enzymes from pulsed EPR spectroscopy and DFT calculations for "difficult" nuclei. <b>2011</b> , 148, 249-67; discussion 299-314		13
605	Generation of bis(dithiolene)dioxomolybdenum(VI) complexes from bis(dithiolene)monooxomolybdenum(IV) complexes by proton-coupled electron transfer in aqueous media. <b>2011</b> , 40, 2358-65		11
604	A straightforward zinc-catalysed reduction of sulfoxides to sulfides. <b>2011</b> , 1, 104		47
603	X-ray crystal structure of arsenite-inhibited xanthine oxidase: Sulfido, Sxo double bridge between molybdenum and arsenic in the active site. <b>2011</b> , 133, 12414-7		15
602	Paramagnetic oxotungsten(V) complexes containing the hydrotris(3,5-dimethylpyrazol-1-yl)borate ligand. <i>Inorganic Chemistry</i> , <b>2011</b> , 50, 4503-14	5.1	8
601	Molybdenum speciation in uranium mine tailings using X-ray absorption spectroscopy. <b>2011</b> , 45, 455-60		45
600	Structure of the molybdenum site in YedY, a sulfite oxidase homologue from Escherichia coli. <i>Inorganic Chemistry</i> , <b>2011</b> , 50, 741-8	5.1	38
599	Molybdenum site structure of Escherichia coli YedY, a novel bacterial oxidoreductase. <i>Inorganic Chemistry</i> , <b>2011</b> , 50, 732-40	5.1	21
598	Faster oxygen atom transfer catalysis with a tungsten dioxo complex than with its molybdenum analog. <b>2011</b> , 40, 7850-7		15
597	Reaction of the molybdenum- and copper-containing carbon monoxide dehydrogenase from Oligotropha carboxydovorans with quinones. <b>2011</b> , 50, 1910-6		30

596	CO Dehydrogenase. <b>2011,</b>		
595	Preparation, characterization, and DNA binding studies of water-soluble quercetin--molybdenum(VI) complex. <b>2011, 30, 517-23</b>		49
594	The fourth mammalian molybdenum enzyme mARC: current state of research. <b>2011, 43, 524-39</b>		54
593	Nitrogen atom transfer from iron(IV) nitrido complexes: a dual-nature transition state for atom transfer. <i>Inorganic Chemistry</i> , <b>2011, 50, 9508-17</b>	5.1	57
592	Spectroscopic and electronic structure studies probing covalency contributions to C-H bond activation and transition-state stabilization in xanthine oxidase. <i>Inorganic Chemistry</i> , <b>2011, 50, 10919-28</b>	5.1	20
591	Cold adaptation of the mononuclear molybdoenzyme periplasmic nitrate reductase from the Antarctic bacterium <i>Shewanella gelidimarina</i> . <b>2011, 414, 783-8</b>		10
590	Identification and characterization of up-regulated genes in the halophyte <i>Limoniastrum monopetalum</i> (L.) Boiss grown under crude oil pollution. <b>2011, 9, 137-148</b>		5
589	The crystal structure of <i>Cupriavidus necator</i> nitrate reductase in oxidized and partially reduced states. <b>2011, 408, 932-48</b>		68
588	Xanthine dehydrogenase electrocatalysis: autocatalysis and novel activity. <b>2011, 115, 2655-62</b>		15
587	Trimethylamine N-Oxide Reductase. <b>2011,</b>		
586	Formaldehyde Ferredoxin Oxidoreductase. <b>2011,</b>		
585	4-Hydroxybenzoyl-Coenzyme A Reductase. <b>2011,</b>		1
584	Dissimilatory Nitrate Reductase. <b>2011,</b>		
583	Dimethylsulfoxide Reductase. <b>2011,</b>		
582	Reaction Coordinate of Pyranopterin Molybdenum Enzymes. <b>2011,</b>		
581	How are "Atypical" Sulfite Dehydrogenases Linked to Cell Metabolism? Interactions between the SorT Sulfite Dehydrogenase and Small Redox Proteins. <b>2011, 2, 58</b>		17
580	<i>Mariprofundus ferrooxydans</i> PV-1 the first genome of a marine Fe(II) oxidizing Zetaproteobacterium. <i>PLoS ONE</i> , <b>2011, 6, e25386</b>	3.7	112
579	Molybdenum: MPT-Containing Enzymes. <b>2011,</b>		

578 Molybdenum: Inorganic & Coordination Chemistry. **2011**,

577 Xanthine Oxidoreductase. **2011**,

576 Identification of an Arabidopsis solute carrier critical for intracellular transport and inter-organ allocation of molybdate. **2011**, 13, 710-8 77

575 Molybdenum isotope fractionation by cyanobacterial assimilation during nitrate utilization and N<sub>2</sub> fixation. **2011**, 9, 94-106 40

574 Exchange of isonitrile ligands in the complex [Mo(O)Cl(CNMe)<sub>4</sub>]<sup>+</sup> by the tetraphos ligand prP4: Stereochemical influences on the reaction course. **2011**, 374, 472-479 9

573 Bacterial sulfite-oxidizing enzymes. *Biochimica Et Biophysica Acta - Bioenergetics*, **2011**, 1807, 1-10 4.6 58

572 Short circuiting a sulfite oxidising enzyme with direct electrochemistry: active site substitutions and their effect on catalysis and electron transfer. *Biochimica Et Biophysica Acta - Bioenergetics*, **2011**, 1807, 108-18 4.6 19

571 A Facile and Efficient Iron-Catalyzed Reduction of Sulfoxides to Sulfides. **2011**, 3, 666-670 52

570 Selective sulfoxidation of thioethers and thioaryl boranes with nitrate, promoted by a molybdenum-copper catalytic system. **2011**, 76, 5240-6 28

569 Exploiting the versatility and selectivity of Mo enzymes with electrochemistry. *Chemical Communications*, **2011**, 47, 1663-73 5.8 15

568 A radical pathway to synthesise Mo and W dithiolene complexes. *Chemical Communications*, **2011**, 47, 953-4 5.8 3

567 Synthesis, structure and redox properties of bis(cyclopentadienyl)dithiolene complexes of molybdenum and tungsten. **2011**, 40, 10457-72 11

566 Spectroscopic and electronic structure studies of a dimethyl sulfoxide reductase catalytic intermediate: implications for electron- and atom-transfer reactivity. **2011**, 133, 9762-74 32

565 Reduction of Sulfoxides to Sulfides in the Presence of Copper Catalysts. **2011**, 141, 833-838 22

564 Cobalt hexaamine mediated electrocatalytic voltammetry of dimethyl sulfoxide reductase: driving force effects on catalysis. **2011**, 16, 227-34 10

563 Nitrite reduction by xanthine oxidase family enzymes: a new class of nitrite reductases. **2011**, 16, 443-60 54

562 Structure-reactivity relationships in inorganic electrochemistry. **2011**, 15, 1833-1843 6

561 Purification, characterization, and cloning of a bifunctional molybdoenzyme with hydratase and alcohol dehydrogenase activity. **2011**, 89, 1831-40 17

560	Synthesis, structure and applications of [cis-dioxomolybdenum(VI)-(ONO)] type complexes. <b>2011</b> , 123, 187-199		33
559	Proteomic analysis of the hepatic tissue of Long-Evans Cinnamon (LEC) rats according to the natural course of Wilson disease. <b>2011</b> , 11, 3698-705		15
558	The different kinetic and mechanistic behaviors of molybdenum and tungsten in the reduction of tris(benzene-1,2-dithiolato)Mo(VI) and W(VI) complexes by ascorbic acid in aqueous media. <b>2011</b> , 43, 279-291		1
557	Molybdenum and Tungsten Oxidoreductase Models. <b>2011</b> , 2011, 1189-1199		51
556	A Crystallographic and Mo K-Edge XAS Study of Molybdenum Oxo Bis-, Mono-, and Non-Dithiolene Complexes [First-Sphere Coordination Geometry and Noninnocence of Ligands. <b>2011</b> , 2011, 4387-4399		19
555	A Valence Bond Description of Dizwitterionic Dithiolene Character in an Oxomolybdenum-bis(dithione). <b>2011</b> , 2011, 5467-5470		21
554	Synthesis, activity testing and molybdenum(VI) complexation of Schiff bases derived from 2,4,6-trihydroxybenzaldehyde investigated as xanthine oxidase inhibitors. <b>2011</b> , 6, 612-6		12
553	Inhibition of xanthine oxidase by thiosemicarbazones, hydrazones and dithiocarbazates derived from hydroxy-substituted benzaldehydes. <b>2011</b> , 6, 1107-18		21
552	Molybdenum enzymes and molybdenum cofactor in mycobacteria. <b>2011</b> , 112, 2721-8		12
551	Mechanistic insight into the reactivity of oxotransferases by novel asymmetric dioxomolybdenum(VI) model complexes. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 704-13	4.8	42
550	Synthesis and structural characterization of mono- and dinuclear Mo(V)-oxo-complexes containing bis(3,5-dimethylpyrazol-1-yl)acetate anion as ligand. <b>2011</b> , 14, 276-280		4
549	Synthesis and crystal structure of novel mononuclear Mo(IV) and Mo(III) complexes containing bis(3,5-dimethylpyrazol-1-yl)acetate anion as ligand. <b>2011</b> , 14, 470-473		3
548	Comparative molecular chemistry of molybdenum and tungsten and its relation to hydroxylase and oxotransferase enzymes. <b>2011</b> , 255, 993-1015		126
547	Structural aspects of mononuclear Mo/W-enzymes. <b>2011</b> , 255, 1104-1116		61
546	Bioinorganic chemistry of molybdenum and tungsten enzymes: A structural and functional modeling approach. <b>2011</b> , 255, 1039-1054		116
545	Molybdenum enzymes in higher organisms. <b>2011</b> , 255, 1179-1205		161
544	The History of the Discovery of the Molybdenum Cofactor and Novel Aspects of its Biosynthesis in Bacteria. <b>2011</b> , 255, 1129-1144		106
543	Molybdenum enzymes in bacteria and their maturation. <b>2011</b> , 255, 1159-1178		86

542	Theoretical studies on the reactivity of molybdenum enzymes. <b>2011</b> , 255, 1085-1103	47
541	Spectroscopic studies of molybdenum and tungsten enzymes. <b>2011</b> , 255, 1055-1084	67
540	Comparative Genomics and Evolution of Molybdenum Utilization. <b>2011</b> , 255, 1206-1217	50
539	Microbial nitrate respiration--genes, enzymes and environmental distribution. <b>2011</b> , 155, 104-17	247
538	Regulation of xanthine oxidase activity by substrates at active sites via cooperative interactions between catalytic subunits: implication to drug pharmacokinetics. <b>2011</b> , 18, 69-78	2
537	Chalcogenidobis(ene-1,2-dithiolate)molybdenum(IV) complexes (chalcogenide E = O, S, Se): probing Mo?E and ene-1,2-dithiolate substituent effects on geometric and electronic structure. <b>2011</b> , 40, 1119-31	10
536	Synthesis, chemical, electrochemical, and structural characterization of binuclear dioxo-bridged molybdenum(VI) complexes of tridentate ONS donors. <b>2011</b> , 64, 1207-1215	8
535	Characterization and crystallization of mouse aldehyde oxidase 3: from mouse liver to Escherichia coli heterologous protein expression. <b>2011</b> , 39, 1939-45	28
534	Aldehyde Oxidoreductase (MOP). <b>2011</b> ,	
533	The role of system-specific molecular chaperones in the maturation of molybdoenzymes in bacteria. <b>2011</b> , 2011, 850924	25
532	Complex biotransformations catalyzed by radical S-adenosylmethionine enzymes. <b>2011</b> , 286, 30245-30252	24
531	The impact of single nucleotide polymorphisms on human aldehyde oxidase. <b>2012</b> , 40, 856-64	77
530	Mutations associated with functional disorder of xanthine oxidoreductase and hereditary xanthinuria in humans. <i>International Journal of Molecular Sciences</i> , <b>2012</b> , 13, 15475-95	6.3 55
529	Unified nomenclature for genes involved in prokaryotic aerobic arsenite oxidation. <b>2012</b> , 194, 207-8	85
528	The first mammalian aldehyde oxidase crystal structure: insights into substrate specificity. <b>2012</b> , 287, 40690-702	79
527	Pyranopterin conformation defines the function of molybdenum and tungsten enzymes. <b>2012</b> , 109, 14773-8	64
526	High Valent Oxo-molybdenum Complexes as Efficient Catalysts for C-X Bond Forming Reactions. <b>2012</b> , 16, 33-64	25
525	Identification of persulfide-binding and disulfide-forming cysteine residues in the NifS-like domain of the molybdenum cofactor sulfurase ABA3 by cysteine-scanning mutagenesis. <b>2012</b> , 441, 823-32	20

524	Catalytic electrochemistry of xanthine dehydrogenase. <b>2012</b> , 116, 11600-7		15
523	Molybdenum(VI) coordination chemistry of the N,N-disubstituted bis(hydroxylamido)-1,3,5-triazine ligand, H <sub>2</sub> bihyat. Water-assisted activation of the Mo(VI)=O bond and reversible dimerization of cis-[Mo(VI)O <sub>2</sub> (bihyat)] to [Mo(VI)O <sub>2</sub> (bihyat) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub> ]. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 13138-47	5.1	11
522	Adsorption of sulfite oxidase on self-assembled monolayers from molecular dynamics simulations. <b>2012</b> , 28, 5761-9		16
521	Protein conformational gating of enzymatic activity in xanthine oxidoreductase. <b>2012</b> , 134, 999-1009		40
520	Deoxygenation of Sulfoxides to Sulfides in the Presence of Zinc Catalysts and Boranes as Reducing Reagents. <b>2012</b> , 142, 1003-1010		23
519	Zinc-Catalyzed Deoxygenation of Sulfoxides to Sulfides Applying [B(Pin)] <sub>2</sub> as Deoxygenation Reagents. <b>2012</b> , 142, 1306-1311		20
518	Identification of superoxide production by Arabidopsis thaliana aldehyde oxidases AAO1 and AAO3. <b>2012</b> , 80, 659-71		17
517	Interaction of cetyltrimethylammonium bromide and its gemini homologue bis(cetyldimethylammonium)butane dibromide with xanthine oxidase. <b>2012</b> , 116, 5711-8		35
516	Identity of the exchangeable sulfur-containing ligand at the Mo(V) center of R160Q human sulfite oxidase. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 1408-18	5.1	29
515	Unusual nonoctahedral geometry with molybdenum oxoimido complexes containing $\eta^2$ -pyrazolate ligands. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 150-6	5.1	14
514	Determination of the distance between the Mo(V) and Fe(III) heme centers of wild type human sulfite oxidase by pulsed EPR spectroscopy. <b>2012</b> , 116, 1942-50		28
513	Different inhibitory potency of febuxostat towards mammalian and bacterial xanthine oxidoreductases: insight from molecular dynamics. <b>2012</b> , 2, 331		16
512	O-atom exchange between H <sub>2</sub> O and CO <sub>2</sub> mediated by a bis(dithiolene)tungsten complex. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 7951-3	5.1	6
511	Aldehyde oxidase functions as a superoxide generating NADH oxidase: an important redox regulated pathway of cellular oxygen radical formation. <b>2012</b> , 51, 2930-9		74
510	Molybdenum(VI) dioxo and oxo-imido complexes of fluorinated $\beta$ -ketiminato ligands and their use in OAT reactions. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 1440-9	5.1	32
509	Mono(maleonitriledithiolene)molybdenum(IV) and bis( $\beta$ -sulfido)-bridged dimolybdenum(V) complexes with Mo=S moiety. <b>2012</b> , 9, 1867-79		6
508	Kinetic and thermodynamic effects of mutations of human sulfite oxidase. <b>2012</b> , 9, 1621-34		13
507	Correlating C-H bond cleavage with molybdenum reduction in xanthine oxidase. <b>2012</b> , 9, 1756-60		6

506	High-valent oxo-molybdenum and oxo-rhenium complexes as efficient catalysts for X-H (X = Si, B, P and H) bond activation and for organic reductions. <b>2012</b> , 41, 5641-53		85
505	Human sulfite oxidase electrochemistry on gold nanoparticles modified electrode. <b>2012</b> , 87, 33-41		46
504	Expression, purification and partial characterization of a xanthine oxidase (XOD) in <i>Arthrobacter</i> sp.. <b>2012</b> , 47, 1539-1544		9
503	Selective and effective stabilization of Mo(VI)=O bonds by NH <sub>3</sub> hydrogen bonds via trans influence. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 11688-97	5.1	24
502	Low-potential amperometric enzyme biosensor for xanthine and hypoxanthine. <b>2012</b> , 84, 10359-65		32
501	A New-Generation Uric Acid Production Inhibitor: Febuxostat. <b>2012</b> , 365-376		
500	Oxomolybdenum monodithiolene complexes linked with sulfur bridged iron: antiferromagnetically coupled Fe(III)Mo(V) systems. <b>2012</b> , 41, 12926-35		7
499	The Role of Abiotic and Coupled Biotic/Abiotic Mineral Controlled Redox Processes in Nitrate Reduction. <b>2012</b> , 115, 181-214		17
498	Overexpression of a maize sulfite oxidase gene in tobacco enhances tolerance to sulfite stress via sulfite oxidation and CAT-mediated H <sub>2</sub> O <sub>2</sub> scavenging. <i>PLoS ONE</i> , <b>2012</b> , 7, e37383	3.7	28
497	Effect of salinity and molybdenum application on photosynthesis, nitrogenase activity and yield of barley inoculated with <i>Azospirillum brasilense</i> . <b>2012</b> , 40, 235-245		2
496	Redox chemistry of molybdenum in natural waters and its involvement in biological evolution. <b>2012</b> , 3, 427		24
495	Economical Oxygenation of Olefins and Sulfides Catalyzed by New Molybdenum(VI) Tridentate Schiff Base Complexes: Synthesis and Crystal Structure. <b>2012</b> , 638, 1023-1030		22
494	Proteomic analysis of salt-responsive ubiquitin-related proteins in rice roots. <b>2012</b> , 26, 1649-60		36
493	Substrate and metal control of barrier heights for oxo transfer to Mo and W bis-dithiolene sites. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 3436-42	5.1	25
492	The syntheses and characterizations of molybdenum(VI) complexes with catechol and 2,3-dihydroxynaphthalene, and the structure-effect relationship in their in vitro anticancer activities. <b>2012</b> , 41, 8697-702		17
491	DFT investigation of the molybdenum cofactor in periplasmic nitrate reductases: structure of the Mo(V) EPR-active species. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 3409-19	5.1	30
490	Stereochemical consequences of oxygen atom transfer and electron transfer in imido/oxido molybdenum(IV, V, VI) complexes with two unsymmetric bidentate ligands. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 4180-92	5.1	31
489	Epoxidation of cis-cyclooctene using diamine bis(phenolate) vanadium, molybdenum and tungsten complexes as catalysts. <b>2012</b> , 383, 152-156		49



488	Remarkably fast and selective aromatization of Hantzsch esters with MoOCl <sub>4</sub> and MoCl <sub>5</sub> : a chemical model for possible biologically relevant properties of molybdenum-containing enzymes. <b>2012</b> , 22, 3676-81	14
487	The use of a cis-dioxomolybdenum(VI) dinuclear complex with quadridentate 1,4-benzenediylbis(benzylidithiocarbamate)(2-) as model compound for the active site of oxo transfer molybdoenzymes: reactivity, kinetics, and catalysis. <b>2012</b> , 88, 210-5	1
486	Mixed-ligand aroylhydrazone complexes of molybdenum: Synthesis, structure and biological activity. <b>2012</b> , 38, 198-204	51
485	Overexpression, purification, crystallization and preliminary X-ray analysis of putative molybdenum cofactor biosynthesis protein C (MoaC2) from <i>Mycobacterium tuberculosis</i> H37Rv. <b>2012</b> , 68, 687-91	5
484	Molecular cloning and functional characterization of a putative sulfite oxidase (SO) ortholog from <i>Nicotiana benthamiana</i> . <b>2012</b> , 39, 2429-37	12
483	Intramolecular electron transfer in sulfite-oxidizing enzymes: probing the role of aromatic amino acids. <b>2012</b> , 17, 345-52	12
482	Small electron-transfer proteins as mediators in enzymatic electrochemical biosensors. <b>2013</b> , 405, 3619-35	24
481	Expression analysis of the impact of culture filtrates from the biocontrol agent, <i>Phlebiopsis gigantea</i> on the conifer pathogen, <i>Heterobasidion annosum</i> s.s. Transcriptome. <b>2013</b> , 66, 669-81	7
480	Synthesis, characterization, and catalysis of recyclable new piperazine-bridged Mo(VI) polymers [MoO <sub>2</sub> (Salen)(piperazine)] <sub>n</sub> in highly selective oxygenation of alkenes and sulfides. <b>2013</b> , 66, 2885-2900	34
479	Encyclopedia of Metalloproteins. <b>2013</b> , 1357-1362	
478	Encyclopedia of Metalloproteins. <b>2013</b> , 1372-1375	
477	Encyclopedia of Metalloproteins. <b>2013</b> , 1367-1372	
476	Water-soluble scorpionate ligands and their reactions with molybdenum complexes. Crystal structures of lithium tris(3-isopropylpyrazol-1-yl)methanesulfonate and MoVOCl <sub>3</sub> (OPPh <sub>3</sub> ) <sub>2</sub> [MoVIO <sub>2</sub> Cl <sub>2</sub> (OPPh <sub>3</sub> ) <sub>2</sub> ]. <b>2013</b> , 66, 1252-1263	5
475	Potassium nitrate effect on the development of neurological disorders in experimental brain ischemia. <b>2013</b> , 68, 1-4	1
474	Encyclopedia of Metalloproteins. <b>2013</b> , 1297-1303	5
473	Molybdenum Enzymes. <b>2013</b> , 263-293	16
472	Molybdenum- and Tungsten-Mediated Oxidations. <b>2013</b> , 569-591	1
471	Probing the role of a conserved salt bridge in the intramolecular electron transfer kinetics of human sulfite oxidase. <b>2013</b> , 18, 645-53	6

- 470 Why is the molybdenum-substituted tungsten-dependent formaldehyde ferredoxin oxidoreductase not active? A quantum chemical study. **2013**, 18, 175-81 8
- 469 Denitrification and N<sub>2</sub>O:N<sub>2</sub> production in temperate grasslands: processes, measurements, modelling and mitigating negative impacts. **2013**, 465, 173-95 308
- 468 Quantum chemical calculations and X-ray crystallographic studies of cis-dioxomolybdenum(VI) Schiff base complex. **2013**, 6, 407-411
- 467 Analysis of the interaction of the molybdenum hydroxylase PaoABC from *Escherichia coli* with positively and negatively charged metal complexes. **2013**, 37, 5-7 7
- 466 The reaction mechanism of chiral hydroxylation of p-OH and p-NH<sub>2</sub> substituted compounds by ethylbenzene dehydrogenase. **2013**, 91, 775-786 8
- 465 The oxygen-tolerant and NAD<sup>+</sup>-dependent formate dehydrogenase from *Rhodobacter capsulatus* is able to catalyze the reduction of CO<sub>2</sub> to formate. **2013**, 280, 6083-96 89
- 464 Effect of exchange of the cysteine molybdenum ligand with selenocysteine on the structure and function of the active site in human sulfite oxidase. **2013**, 52, 8295-303 18
- 463 (<sup>13</sup>C and (<sup>63,65</sup>Cu ENDOR studies of CO dehydrogenase from *Oligotropha carboxidovorans*. Experimental evidence in support of a copper-carbonyl intermediate. **2013**, 135, 17775-82 34
- 462 Molybdenum enzymes, their maturation and molybdenum cofactor biosynthesis in *Escherichia coli*. *Biochimica Et Biophysica Acta - Bioenergetics*, **2013**, 1827, 1086-101 4.6 109
- 461 Oxidative stress and innate immunity status in chickens exposed to high dose of ascorbic acid. **2013**, 31, 551-9 2
- 460 Encyclopedia of Biophysics. **2013**, 2015-2015
- 459 Effects of mutating aromatic surface residues of the heme domain of human sulfite oxidase on its heme midpoint potential, intramolecular electron transfer, and steady-state kinetics. **2013**, 42, 3043-9 5
- 458 A new series of bis(ene-1,2-dithiolato)tungsten(IV), -(V), -(VI) complexes as reaction centre models of tungsten enzymes: preparation, crystal structures and spectroscopic properties. **2013**, 42, 3059-70 4
- 457 Pteridines. **2013**, 666-669 2
- 456 Quantitation of the ligand effect in oxo-transfer reactions of dioxo-Mo(VI) trispyrazolyl borate complexes. **2013**, 42, 3071-81 19
- 455 Oxo-carboxylato-molybdenum(VI) complexes possessing dithiolene ligands related to the active site of type II DMSOR family molybdoenzymes. **2013**, 42, 15927-30 12
- 454 New molybdenum(VI) complex with ONS-donor thiosemicarbazone ligand: Preparation, structural characterization, and catalytic applications in olefin epoxidation. **2013**, 27, 26-30 34
- 453 Applications of pulsed EPR spectroscopy to structural studies of sulfite oxidizing enzymes(). **2013**, 257, 110-118 22

452	The molybdenum oxotransferases and related enzymes. <b>2013</b> , 42, 3029-42		90
451	Periplasmic nitrate reductases and formate dehydrogenases: Biological control of the chemical properties of Mo and W for fine tuning of reactivity, substrate specificity and metabolic role. <b>2013</b> , 257, 315-331		37
450	Systematic investigation of relationship between strength of NH <sub>3</sub> hydrogen bond and reactivity of molybdoenzyme models. <i>Inorganic Chemistry</i> , <b>2013</b> , 52, 381-94	5.1	22
449	Microbial metabolism of oxochlorates: a bioenergetic perspective. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2013</b> , 1827, 189-97	4.6	28
448	Photoluminescent Mo(IV) and W(IV) bis-dithiolene complexes with bidentate phosphonodithioato ligand derived from Lawesson's reagent. <b>2013</b> , 52, 900-908		11
447	The prokaryotic Mo/W-bisPGD enzymes family: a catalytic workhorse in bioenergetic. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2013</b> , 1827, 1048-85	4.6	98
446	Deoxygenation of mono-oxo bis(dithiolene) Mo and W complexes by protonation. <i>Inorganic Chemistry</i> , <b>2013</b> , 52, 8706-12	5.1	8
445	A cocrystal of two Mo(VI) complexes bearing different diastereomers of the 2,4-di-tert-butyl-6-[[[(1-oxido-1-phenylpropan-2-yl)(methyl)amino]methyl]phenolate ligand derived from (+)-ephedrine. <b>2013</b> , 69, 509-12		2
444	Induced peroxidase activity of haem containing nitrate reductases revealed by protein film electrochemistry. <b>2013</b> , 693, 105-113		6
443	Dimer formation by symbiotic donor-acceptor interaction between two molecules of a specially designed dioxomolybdenum(VI) complex containing both donor and acceptor centers: A structural, spectroscopic and DFT study. <b>2013</b> , 55, 192-200		15
442	Molybdenum and tungsten complexes of bis(phenolate) ligands, O,X,O (X=S or Se): Synthesis, characterization and catalytic oxygen atom transfer properties. <b>2013</b> , 395, 218-224		6
441	Encyclopedia of Biophysics. <b>2013</b> , 1862-1862		
440	Mediated electrochemistry of nitrate reductase from <i>Arabidopsis thaliana</i> . <b>2013</b> , 117, 7569-77		15
439	Dioxygen activation in photooxidation of diphenylmethane by a dioxomolybdenum(VI) complex anchored covalently onto mesoporous titania. <b>2013</b> , 38, 119-127		10
438	Encyclopedia of Biophysics. <b>2013</b> , 1912-1919		
437	Synthesis and characterization of oxomolybdenum(V) dinuclear complexes with $\beta$ -alanine, l-serine and dl-isoleucine. <b>2013</b> , 52, 268-275		10
436	Oxo-Mo(IV)(dithiolene)thiolato complexes: analogue of reduced sulfite oxidase. <i>Inorganic Chemistry</i> , <b>2013</b> , 52, 3032-42	5.1	12
435	Preparation, Characterization, and Crystal Structures of Dioxomolybdenum(VI) Complexes With Tridentate Schiff Base Ligands. <b>2013</b> , 43, 1029-1033		

- 434 Encyclopedia of Metalloproteins. **2013**, 1283-1283
- 433 Strong NH $\cdots$ S hydrogen bonds in molybdoenzyme models containing anilide moieties. **2013**, 42, 7569-78 8
- 432 An Enantiopure N,N,O Heteroscorpionate Ligand Derived from (1R)-Menthone. **2013**, 639, 1433-1437 3
- 431 Synthesis, characterization, crystal structure and density functional theory (DFT) calculations of dioxomolybdenum (VI) complexes of an ONS donor ligand derived from benzoylacetone and S-benzyl dithiocarbazate. **2013**, 50, 602-611 10
- 430 The molybdoproteome of *Starkeya novella*--insights into the diversity and functions of molybdenum containing proteins in response to changing growth conditions. **2013**, 5, 325-34 22
- 429 Detrimental effect of the 6 His C-terminal tag on YedY enzymatic activity and influence of the TAT signal sequence on YedY synthesis. **2013**, 14, 28 41
- 428 Synthesis, Characterization, and Crystal Structures of Dioxomolybdenum(VI) Complexes [MoO<sub>2</sub>L<sub>1</sub>(CH<sub>3</sub>OH)] and [MoO<sub>2</sub>L<sub>2</sub>(CH<sub>3</sub>OH)] Derived from 4-Halo-2-[(2-hydroxypropylimino)methyl]phenol. **2013**, 43, 933-936 1
- 427 Large Density-Functional and Basis-Set Effects for the DMSO Reductase Catalyzed Oxo-Transfer Reaction. **2013**, 9, 1799-807 36
- 426 Identification of a cyclic nucleotide as a cryptic intermediate in molybdenum cofactor biosynthesis. **2013**, 135, 7019-32 62
- 425 Replica of a fishy enzyme: structure-function analogue of trimethylamine-N-oxide reductase. *Inorganic Chemistry*, **2013**, 52, 5316-27 5.1 19
- 424 The sulfur shift: an activation mechanism for periplasmic nitrate reductase and formate dehydrogenase. *Inorganic Chemistry*, **2013**, 52, 10766-72 5.1 42
- 423 Metal insertion into the molybdenum cofactor: product-substrate channelling demonstrates the functional origin of domain fusion in gephyrin. **2013**, 450, 149-57 40
- 422 Encyclopedia of Metalloproteins. **2013**, 1410-1410
- 421 Anaerobic and aerobic cleavage of the steroid core ring structure by *Steroidobacter denitrificans*. **2013**, 54, 1493-504 43
- 420 Comparative genomics analysis of the metallomes. **2013**, 12, 529-80 9
- 419 Dithiolopyranthione Synthesis, Spectroscopy and an Unusual Reactivity with DDQ. **2013**, 50, 879-886 6
- 418 Molybdenum in human health and disease. **2013**, 13, 415-50 44
- 417 Synthesis of pyrimidones and evaluation of their xanthine oxidase inhibitory and antioxidant activities. **2013**, 346, 805-11 2

416	Identification of a bis-molybdopterin intermediate in molybdenum cofactor biosynthesis in <i>Escherichia coli</i> . <b>2013</b> , 288, 29736-45		39
415	Variation in meiotic recombination frequencies between allelic transgenes inserted at different sites in the <i>Drosophila melanogaster</i> genome. <b>2013</b> , 3, 1419-27		7
414	An Update on WII and Moll Carbonyl Precursors and Their Application in the Synthesis of Potentially Bio-Inspired Thiophenolate-Oxazoline Complexes. <b>2013</b> , 639, 1559-1567		14
413	Synthesis, Structure and Catalytic Properties of Dinuclear MoVI Complexes with Ditopic Diaminotetraphenols. <b>2013</b> , 2013, 1499-1508		10
412	Mono-oxo-bis-dithioveratrol-molybdate In Solution a Model for Arsenite Oxidase and in the Solid State a Coordination Polymer with Unprecedented Binding Motifs. <b>2013</b> , 639, 1552-1558		9
411	Chemical nature and reaction mechanisms of the molybdenum cofactor of xanthine oxidoreductase. <b>2013</b> , 19, 2606-14		50
410	Identification of crucial amino acids in mouse aldehyde oxidase 3 that determine substrate specificity. <i>PLoS ONE</i> , <b>2013</b> , 8, e82285	3-7	19
409	The Biosynthesis of the Molybdenum Cofactor in <i>Escherichia coli</i> and Its Connection to FeS Cluster Assembly and the Thiolation of tRNA. <b>2014</b> , 2014, 1-21		14
408	Alternative Excision Repair of DNA. <b>2014</b> , 379-388		
407	8. Molybdenum-containing iron-sulfur enzymes.		2
406	Crystal and molecular structure of dicesium bis(malonato)-di-µsulphido-bis[oxomolybdate(V)] dihydrate: Cs <sub>2</sub> [Mo <sub>2</sub> O <sub>2</sub> S <sub>2</sub> (malonate) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub> ]·2H <sub>2</sub> O. <b>2014</b> , 55, 1419-1425		
405	Structural data on the periplasmic aldehyde oxidoreductase PaoABC from <i>Escherichia coli</i> : SAXS and preliminary X-ray crystallography analysis. <i>International Journal of Molecular Sciences</i> , <b>2014</b> , 15, 2223-236	6-36	9
404	Hydrogen sulfide: a toxic gas produced by dissimilatory sulfate and sulfur reduction and consumed by microbial oxidation. <b>2014</b> , 14, 237-77		40
403	The Metal-Driven Biogeochemistry of Gaseous Compounds in the Environment. <b>2014</b> ,		2
402	Valence state parameters of all transition metal atoms in metalloproteins--development of ABEEM-fluctuating charge force field. <b>2014</b> , 35, 1690-706		26
401	Molybdenum complex with bulky chelates as a functional model for molybdenum oxidases. <i>Inorganic Chemistry</i> , <b>2014</b> , 53, 12416-27	5-1	24
400	Carbon monoxide. Toxic gas and fuel for anaerobes and aerobes: carbon monoxide dehydrogenases. <b>2014</b> , 14, 37-69		34
399	Small substrate transport and mechanism of a molybdate ATP binding cassette transporter in a lipid environment. <b>2014</b> , 289, 15005-13		9

398	Electrochemically driven catalysis of <i>Rhizobium</i> sp. NT-26 arsenite oxidase with its native electron acceptor cytochrome c552. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2014</b> , 1837, 112-20	4.6	18
397	Structural and functional models in molybdenum and tungsten bioinorganic chemistry: description of selected model complexes, present scenario and possible future scopes. <b>2014</b> , 43, 8990-9003		29
396	Synthesis, antioxidant, and xanthine oxidase inhibitory activities of 5-[4-[2-(5-ethyl-2-pyridinyl)ethoxy]phenyl]methyl]-2,4-thiazolidinedione derivatives. <b>2014</b> , 347, 247-55		10
395	Synthesis of an Oxidation-Stable Analogue of Cyclic Pyranopterin Monophosphate (cPMP). <b>2014</b> , 2014, 2231-2241		4
394	Michael hydratase alcohol dehydrogenase or just alcohol dehydrogenase?. <b>2014</b> , 4, 30		5
393	N-oxide reduction of quinoxaline-1,4-dioxides catalyzed by porcine aldehyde oxidase SsAOX1. <b>2014</b> , 42, 511-9		18
392	How biology handles nitrite. <i>Chemical Reviews</i> , <b>2014</b> , 114, 5273-357	68.1	166
391	Substrate orientation and specificity in xanthine oxidase: crystal structures of the enzyme in complex with indole-3-acetaldehyde and guanine. <b>2014</b> , 53, 533-41		19
390	Quantum chemical studies of mechanisms for metalloenzymes. <i>Chemical Reviews</i> , <b>2014</b> , 114, 3601-58	68.1	407
389	Comparison of the active-site design of molybdenum oxo-transfer enzymes by quantum mechanical calculations. <i>Inorganic Chemistry</i> , <b>2014</b> , 53, 11913-24	5.1	17
388	Intramolecular electron transfer between molybdenum and iron mimicking bacterial sulphite dehydrogenase. <i>Chemical Communications</i> , <b>2014</b> , 50, 4285-8	5.8	21
387	A Regioselective Synthesis of the Dephospho Dithiolene Protected Molybdopterin. <b>2014</b> , 4, 19072-19076		8
386	Behavior of anionic molybdenum(IV, VI) and tungsten(IV, VI) complexes containing bulky hydrophobic dithiolate ligands and intramolecular NH $\cdots$ S hydrogen bonds in nonpolar solvents. <b>2014</b> , 43, 15491-502		17
385	Oxidovanadium(IV), oxidomolybdenum(VI) and cobalt(III) complexes of o-phenylenediamine derivatives: oxidative dehydrogenation and photoluminescence. <b>2014</b> , 1, 331-341		4
384	Orbital contributions to CO oxidation in Mo-Cu carbon monoxide dehydrogenase. <i>Chemical Communications</i> , <b>2014</b> , 50, 1104-6	5.8	23
383	The four aldehyde oxidases of <i>Drosophila melanogaster</i> have different gene expression patterns and enzyme substrate specificities. <b>2014</b> , 217, 2201-11		23
382	Improving and Fining of Nanostructures by Mixing W with Mo in Metal Organic Hybrid Crystal. <b>2014</b> , 14, 3249-3256		3
381	A quantum-mechanical study of the reaction mechanism of sulfite oxidase. <b>2014</b> , 19, 1165-79		18

380	X-ray crystal structure of a xanthine oxidase complex with the flavonoid inhibitor quercetin. <b>2014</b> , 77, 1693-9	59
379	Molybdenum(VI) dioxo complexes for the epoxidation of allylic alcohols and olefins. <b>2014</b> , 772-773, 271-279	15
378	Trapping of the putative 1,2-dinitrosoarene intermediate of benzofuroxan tautomerization by coordination at ruthenium and exploration of its redox non-innocence. <b>2014</b> , 5, 3883-3887	18
377	Sulfur K-edge X-ray absorption spectroscopy and density functional theory calculations on monooxo Mo(IV) and bisoxo Mo(VI) bis-dithiolenes: insights into the mechanism of oxo transfer in sulfite oxidase and its relation to the mechanism of DMSO reductase. <b>2014</b> , 136, 9094-105	19
376	Bioinorganic modeling chemistry of carbon monoxide dehydrogenases: description of model complexes, current status and possible future scopes. <b>2014</b> , 43, 12135-45	26
375	Infrared multiple photon dissociation spectroscopy of a gas-phase oxo-molybdenum complex with 1,2-dithiolene ligands. <b>2014</b> , 118, 5407-18	9
374	Dioxomolybdenum(VI) complexes with naphtholate-oxazoline ligands in catalytic epoxidation of olefins. <b>2014</b> , 385, 54-60	22
373	The mononuclear molybdenum enzymes. <i>Chemical Reviews</i> , <b>2014</b> , 114, 3963-4038	68.1 386
372	Ketoxime coupling of p-acetylphenylalanine at neutral pH for site-directed spin labeling of human sulfite oxidase. <b>2014</b> , 118, 7077-84	13
371	Characterization and expression patterns of nitrate reductase from <i>Dunaliella bardawil</i> under osmotic stress and dilution shock. <b>2014</b> , 173, 1274-92	4
370	Two mononuclear molybdenum(VI) oxo complexes with tridentate hydrazone ligands: Synthesis, structures, and thermal stability. <b>2014</b> , 55, 332-336	3
369	Molybdenum and Tungsten Oxidoreductase Models. <b>2014</b> , 349-382	3
368	The chaperone FdsC for <i>Rhodobacter capsulatus</i> formate dehydrogenase binds the bis-molybdopterin guanine dinucleotide cofactor. <b>2014</b> , 588, 531-7	19
367	Synthesis, structural studies and catalytic activity of dioxidomolybdenum(VI) complexes with aroylhydrazones of naphthol-derivative. <b>2014</b> , 67, 1-10	48
366	Solid Phases as Protective Environments for Biomimetic Catalysts. <b>2014</b> , 423-452	
365	Nitrate and periplasmic nitrate reductases. <b>2014</b> , 43, 676-706	172
364	Tris(dithiolene) Chemistry: A Golden Jubilee. <b>2014</b> , 1-144	14
363	Mechanistic basis for the enantioselectivity of the anaerobic hydroxylation of alkylaromatic compounds by ethylbenzene dehydrogenase. <i>Journal of Inorganic Biochemistry</i> , <b>2014</b> , 139, 9-20	4.2 28

362	Synthesis, characterization, reactivity and catalytic activity of dioxidomolybdenum(VI) complexes derived from tribasic ONS donor ligands. <b>2014</b> , 81, 154-167		30
361	Metalloproteins containing cytochrome, iron-sulfur, or copper redox centers. <i>Chemical Reviews</i> , <b>2014</b> , 114, 4366-469	68.1	473
360	Molybdenum cofactor: a key component of Mycobacterium tuberculosis pathogenesis?. <b>2014</b> , 40, 18-29		32
359	Biosynthesis and Insertion of the Molybdenum Cofactor. <b>2015</b> , 6,		14
358	Coordinative Saturation of the Pterin Heterocycle by Ferrocenylcopper(I) Complex Fragments. <b>2015</b> , 641, 261-265		2
357	Designing the Molybdopterin Core through Regioselective Coupling of Building Blocks. <i>Chemistry - A European Journal</i> , <b>2015</b> , 21, 17057-72	4.8	12
356	Structural and mechanistic insights on nitrate reductases. <b>2015</b> , 24, 1901-11		28
355	Synthesis, Structure and Redox Properties of Asymmetric (Cyclopentadienyl)(ene-1,2-dithiolate)cobalt(III) Complexes Containing Phenyl, Pyridyl and Pyrazinyl Units. <b>2015</b> , 2015, 3550-3561		8
354	11 The Reaction Mechanism of the Molybdenum Hydroxylase Xanthine Oxidoreductase: Evidence Against the Formation of Intermediates Having Metal-Carbon Bonds. <b>2015</b> , 395-416		
353	The effects of acute waterborne exposure to sublethal concentrations of molybdenum on the stress response in rainbow trout, <i>Oncorhynchus mykiss</i> . <i>PLoS ONE</i> , <b>2015</b> , 10, e0115334	3.7	7
352	Overexpression of a GmCnx1 gene enhanced activity of nitrate reductase and aldehyde oxidase, and boosted mosaic virus resistance in soybean. <i>PLoS ONE</i> , <b>2015</b> , 10, e0124273	3.7	8
351	Exome sequencing and array-based comparative genomic hybridisation analysis of preferential 6-methylmercaptopurine producers. <b>2015</b> , 15, 414-21		4
350	Two types of nitrito support for μ-oxido-bridged [Cu <sub>2</sub> ] complexes: synthesis, crystal structures, magnetic properties and DFT analysis. <b>2015</b> , 44, 6107-17		12
349	Bioinspired functional analogs of the active site of molybdenum enzymes: Intermediates and mechanisms. <b>2015</b> , 300, 121-141		35
348	Molybdenum Cofactor-Containing Enzymes and Pathways. <b>2015</b> , 33-52		1
347	The C-terminal peptide plays a role in the formation of an intermediate form during the transition between xanthine dehydrogenase and xanthine oxidase. <b>2015</b> , 282, 3075-90		23
346	Molybdenum and tungsten-dependent formate dehydrogenases. <b>2015</b> , 20, 287-309		76
345	Theoretical studies on mechanisms of some Mo enzymes. <b>2015</b> , 20, 323-35		22



344	A computational study on high-valent mono-oxo-rhenium(V) complex-catalyzed hydrosilylation of carbonyls: What a difference an oxo ligand makes. <b>2015</b> , 400, 31-41	6
343	Nitrite reductase activity of rat and human xanthine oxidase, xanthine dehydrogenase, and aldehyde oxidase: evaluation of their contribution to NO formation in vivo. <b>2015</b> , 54, 685-710	45
342	Electrocatalytic hydrocarbon hydroxylation by ethylbenzene dehydrogenase from <i>Aromatoleum aromaticum</i> . <b>2015</b> , 119, 3456-63	13
341	Synthesis, spectral characterization and crystal structure studies of a new hydrazone Schiff base and its dioxomolybdenum(VI) complex. <b>2015</b> , 68, 1441-1451	26
340	A phosphetane catalyzes deoxygenative condensation of $\beta$ -keto esters and carboxylic acids via P(III)/P(V)=O redox cycling. <b>2015</b> , 137, 616-9	107
339	Nitrite reduction by molybdoenzymes: a new class of nitric oxide-forming nitrite reductases. <b>2015</b> , 20, 403-33	51
338	Synthesis and Characterization of Glucose Derived Dioxo-molybdenum (VI) Complexes and Their Application in Sulphide Oxidation. <b>2015</b> , 145, 905-909	9
337	Reactivity of uranium(III) with HE (E = S, Se, Te): synthesis of a series of mononuclear and dinuclear uranium(IV) hydrochalcogenido complexes. <b>2015</b> , 6, 275-282	17
336	Aromatic aldehydes at the active site of aldehyde oxidoreductase from <i>Desulfovibrio gigas</i> : reactivity and molecular details of the enzyme-substrate and enzyme-product interaction. <b>2015</b> , 20, 219-29	3
335	Recent developments in the study of molybdoenzyme models. <b>2015</b> , 20, 373-83	25
334	Complexes of cis-dioxomolybdenum(VI) with unsymmetrical tripodal NO <sub>3</sub> -donor ligands: Synthesis, characterization and catalytic applications. <b>2015</b> , 430, 66-73	13
333	Role of a putative tungsten-dependent formylmethanofuran dehydrogenase in <i>Methanosarcina acetivorans</i> . <b>2015</b> , 197, 379-88	10
332	A sensitive and stable amperometric nitrate biosensor employing <i>Arabidopsis thaliana</i> nitrate reductase. <b>2015</b> , 20, 385-93	15
331	The biosynthesis of the molybdenum cofactors. <b>2015</b> , 20, 337-47	70
330	Shifting the metallocentric molybdoenzyme paradigm: the importance of pyranopterin coordination. <b>2015</b> , 20, 349-72	31
329	The mammalian molybdenum enzymes of mARC. <b>2015</b> , 20, 265-75	42
328	Mechanistic insights into xanthine oxidoreductase from development studies of candidate drugs to treat hyperuricemia and gout. <b>2015</b> , 20, 195-207	50
327	Arsenite oxidation by <i>Pseudomonas arsenicoxydans</i> immobilized on zeolite and its potential biotechnological application. <b>2015</b> , 94, 667-73	10

326	Characterization of a Novel Dioxomolybdenum Complex by Cyclic Voltammetry. <b>2015</b> , 48, 2369-2379		3
325	Molybdenum Cofactors and Their role in the Evolution of Metabolic Pathways. <b>2015</b> ,		2
324	QM and QM/MM Methods Compared: Case Studies on Reaction Mechanisms of Metalloenzymes. <b>2015</b> , 100, 187-224		10
323	Conformational alterations induced by novel green 16-E2-16 gemini surfactant in xanthine oxidase: Biophysical insights from tensiometry, spectroscopy, microscopy and molecular modeling. <b>2015</b> , 150, 440-50		23
322	Synthesis and structure of heterobimetallic Mo <sup>VI</sup> [M = Na, Co, Ni and Zn] compounds and synthesis of nanostructured mixed metal oxides MMoO <sub>4</sub> and MoO <sub>3</sub> [M = Co, Ni and Zn] from the heterobimetallic complexes. <b>2015</b> , 99, 122-131		6
321	Oxidation pathways underlying the pro-oxidant effects of apigenin. <b>2015</b> , 87, 169-80		15
320	The aerobic CO dehydrogenase from <i>Oligotropha carboxidovorans</i> . <b>2015</b> , 20, 243-51		44
319	Electronic structure contributions to reactivity in xanthine oxidase family enzymes. <b>2015</b> , 20, 183-94		23
318	Sulfido and cysteine ligation changes at the molybdenum cofactor during substrate conversion by formate dehydrogenase (FDH) from <i>Rhodobacter capsulatus</i> . <i>Inorganic Chemistry</i> , <b>2015</b> , 54, 3260-71	5:1	37
317	Aminobisphenolate supported tungsten disulphido and dithiolene complexes. <b>2015</b> , 44, 9409-16		2
316	Electronic Fine-Tuning of Oxygen Atom Transfer Reactivity of cis-Dioxomolybdenum(VI) Complexes with Thiosemicarbazone Ligands. <b>2015</b> , 2015, 3562-3571		14
315	Incorporation of molybdenum in rubredoxin: models for mononuclear molybdenum enzymes. <b>2015</b> , 20, 821-9		7
314	cis-[MoO <sub>2</sub> ] <sup>2+</sup> assisted Mannich-type addition of acetylacetonate methine to the azomethine of tridentate Schiff bases: racemic complexes with chiral transformed ligands. <b>2015</b> , 44, 2401-8		9
313	Interaction of a green ester-bonded gemini surfactant with xanthine oxidase: Biophysical perspective. <b>2015</b> , 78, 62-71		24
312	Using Next-Generation Sequencing to Identify a Mutation in Human MCSU that is Responsible for Type II Xanthinuria. <b>2015</b> , 35, 2412-21		13
311	Synthesis and nanostructure of [Mo(C <sub>6</sub> H <sub>4</sub> O <sub>2</sub> ) <sub>3</sub> ] <sub>2</sub> (C <sub>4</sub> H <sub>8</sub> N <sub>2</sub> O) and the synthesis from 1,2-PDA to (C <sub>4</sub> H <sub>8</sub> N <sub>2</sub> O). <b>2015</b> , 60, 77-81		2
310	A New Class of Tungsten-Containing Oxidoreductase in <i>Caldicellulosiruptor</i> , a Genus of Plant Biomass-Degrading Thermophilic Bacteria. <b>2015</b> , 81, 7339-47		18
309	Oxocomplexes of Mo(VI) and W(VI) with 8-hydroxyquinoline-5-sulfonate in solution: structural studies and the effect of the metal ion on the photophysical behaviour. <b>2015</b> , 44, 19076-89		10

308	Assessment of DFT methods for computing activation energies of Mo/W-mediated reactions. <b>2015</b> , 11, 4601-14	42
307	Effect of Mo and V on the Hydrothermal Crystallization of Hematite from Ferrihydrite: An in Situ Energy Dispersive X-ray Diffraction and X-ray Absorption Spectroscopy Study. <b>2015</b> , 15, 4768-4780	26
306	Structural characterization of amino acid complexes of molybdates: a spectroscopic and DFT study. <b>2015</b> , 5, 9010-9018	8
305	Effective Electrochemistry of Human Sulfite Oxidase Immobilized on Quantum-Dots-Modified Indium Tin Oxide Electrode. <b>2015</b> , 7, 21487-94	27
304	Assembly and catalysis of molybdenum or tungsten-containing formate dehydrogenases from bacteria. <b>2015</b> , 1854, 1090-100	51
303	bis-Molybdopterin guanine dinucleotide is required for persistence of Mycobacterium tuberculosis in guinea pigs. <b>2015</b> , 83, 544-50	15
302	Transfer hydrogenation in aqueous media. <b>2015</b> , 247, 104-116	40
301	Dioxomolybdenum(VI) chelates of bioinorganic, catalytic, and medicinal relevance: Studies on some cis-dioxomolybdenum(VI) complexes involving O, N-donor 4-oximino-2-pyrazoline-5-one derivatives. <b>2015</b> , 8, 293-306	4
300	Miniature direct electron transfer based sulphite/oxygen enzymatic fuel cells. <b>2015</b> , 66, 39-42	20
299	Isotropic exchange interaction between Mo and the proximal FeS center in the xanthine oxidase family member aldehyde oxidoreductase from Desulfovibrio gigas on native and polyalcohol inhibited samples: an EPR and QM/MM study. <b>2015</b> , 20, 233-42	6
298	Dehydrogenation of formic acid by Ir-bisMETAMORPhos complexes: experimental and computational insight into the role of a cooperative ligand. <b>2015</b> , 6, 1027-1034	61
297	Efficient deoxygenation methodologies catalyzed by oxo-molybdenum and oxo-rhenium complexes. <b>2015</b> , 284, 67-92	65
296	Binuclear dioxomolybdenum(VI) complexes of some tridentate ONS donor ligand containing [MoO <sub>2</sub> ] <sup>2+</sup> as the acceptor center: Synthesis, crystal structure, supramolecular architectures via hydrogen bonds, $\pi$ -stacking and DFT calculations. <b>2015</b> , 85, 196-207	16
295	Oxoperoxomolybdenum(VI) complexes of catalytic and biomedical relevance: Synthesis, characterization, antibacterial activity and 3D-molecular modeling of some oxoperoxomolybdenum(VI) chelates in mixed (O,O) coordination environment involving maltol and methylglyoxal. <b>2015</b> , 2, 2150-2160	
294	Mechanistic Insights into C-H Oxidations by Ruthenium(III)-Pterin Complexes: Impact of Basicity of the Pterin Ligand and Electron Acceptability of the Metal Center on the Transition States. <b>2016</b> , 138, 9508-20	18
293	Role of Conductive Nanoparticles in the Direct Unmediated Bioelectrocatalysis of Immobilized Sulfite Oxidase. <b>2016</b> , 28, 2303-2310	8
292	Unexpected Reaction Promoted by NH <sub>3</sub> ···O=Mo Hydrogen Bonds in Nonpolar Solvents. <b>2016</b> , 2016, 2952-29616	
291	Selective Capture of Ni <sup>2+</sup> Ions by Naphthalene- and Coumarin-Substituted Dithiolenes. <b>2016</b> , 2016, 208-218	10

290	Palladium(II) Complexes of the Hemilabile Pincer Ligand PPh(o-C <sub>6</sub> H <sub>4</sub> Me) <sub>2</sub> as Highly Active and Recyclable Mizoroki-Heck Catalysts. <b>2016</b> , 2016, 789-798		5
289	Flavonoids: an overview. <b>2016</b> , 5, e47		1644
288	Nitrate assimilation by marine heterotrophic bacteria. <b>2016</b> , 59, 477-483		7
287	Synthesis, characterization, and crystal structures of molybdenum complexes of unsymmetrical electron-poor dithiolene ligands. <b>2016</b> , 116, 88-95		21
286	The Molybdenum Active Site of Formate Dehydrogenase Is Capable of Catalyzing C-H Bond Cleavage and Oxygen Atom Transfer Reactions. <b>2016</b> , 55, 2381-9		32
285	Examination of oxygen atom transfer reactivity of heteroscorpionate dioxo-Mo(VI) complexes: Geometric isomers, solvent effect, intermediates, and catalytic oxidation. <b>2016</b> , 447, 45-51		4
284	Isolation of a bis(imino)pyridine molybdenum(i) iodide complex through controlled reduction and interconversion of its reaction products. <b>2016</b> , 45, 10024-33		5
283	Molybdenum cofactor and human disease. <b>2016</b> , 31, 179-87		65
282	Label-Free Surface Enhanced Raman Scattering Approach for High-Throughput Screening of Biocatalysts. <b>2016</b> , 88, 5898-903		24
281	Biophysical analysis of novel oxy-diester hybrid cationic gemini surfactants (C <sub>m</sub> -E2O-C <sub>m</sub> ) with xanthine oxidase (XO). <b>2016</b> , 51, 1212-1221		15
280	Investigation of the pH-Dependent Impact of Sulfonated Polyaniline on Bioelectrocatalytic Activity of Xanthine Dehydrogenase. <i>ACS Catalysis</i> , <b>2016</b> , 6, 7152-7159	13.1	5
279	Dioxidomolybdenum(VI) Complexes of Tripodal Tetradentate Ligands for Catalytic Oxygen Atom Transfer between Benzoin and Dimethyl Sulfoxide and for Oxidation of Pyrogallol. <b>2016</b> , 2016, 4802-4813		11
278	Membrane transporters studied by EPR spectroscopy: structure determination and elucidation of functional dynamics. <b>2016</b> , 44, 905-15		9
277	Magnesium hydridotriphenylborate [Mg(thf)][HBPh]: a versatile hydroboration catalyst. <i>Chemical Communications</i> , <b>2016</b> , 52, 13155-13158	5.8	158
276	Light-Induced Activation of a Molybdenum Oxotransferase Model within a Ru(II)-Mo(VI) Dyad. <i>Inorganic Chemistry</i> , <b>2016</b> , 55, 12583-12594	5.1	8
275	Actions of water extract from <i>Cordyceps militaris</i> in hyperuricemic mice induced by potassium oxonate combined with hypoxanthine. <b>2016</b> , 194, 403-411		35
274	Xanthine dehydrogenase: An old enzyme with new knowledge and prospects. <b>2016</b> , 7, 395-405		26
273	The <i>Escherichia coli</i> Periplasmic Aldehyde Oxidoreductase Is an Exceptional Member of the Xanthine Oxidase Family of Molybdoenzymes. <b>2016</b> , 11, 2923-2935		17

272	Scorpionate Complexes as Models for Molybdenum Enzymes. <b>2016</b> , 2016, 2357-2376		24
271	A Family of Homo- and Heteroscorpionate Ligands: Applications to Bioinorganic Chemistry. <b>2016</b> , 2016, 2377-2390		14
270	Oxygen Atom Transfer Catalysis with Homogenous and Polymer-Supported N,N- and N,N,O-Heteroscorpionate Dioxidomolybdenum(VI) Complexes. <b>2016</b> , 2016, 2595-2602		11
269	Chemical systems modeling the d Mo(V) states of molybdenum enzymes. <i>Journal of Inorganic Biochemistry</i> , <b>2016</b> , 162, 238-252	4.2	6
268	An internal electron reservoir enhances catalytic CO <sub>2</sub> reduction by a semisynthetic enzyme. <i>Chemical Communications</i> , <b>2016</b> , 52, 9889-92	5.8	31
267	Transfer Hydrogenation in Water. <b>2016</b> , 16, 2768-2782		23
266	DFT Study on the Interaction of Tris(benzene-1,2-dithiolato)molybdenum Complex with Water. A Hydrolysis Mechanism Involving a Feasible Seven-Coordinate Aquomolybdenum Intermediate. <b>2016</b> , 120, 9636-9646		5
265	New Strategy That Delays Progression of Amyotrophic Lateral Sclerosis in G1H-G93A Transgenic Mice: Oral Administration of Xanthine Oxidoreductase Inhibitors That Are Not Substrates for the Purine Salvage Pathway. <b>2016</b> , 75, 1124-1144		7
264	A computational investigation into the catalytic activity of a diselenolene sulfite oxidase biomimetic complex. <b>2016</b> , 94, 1127-1132		5
263	Modeling the transition state structure to probe a reaction mechanism on the oxidation of quinoline by quinoline 2-oxidoreductase. <b>2016</b> , 10, 70		1
262	Acetylene hydratase: a non-redox enzyme with tungsten and iron-sulfur centers at the active site. <b>2016</b> , 21, 29-38		15
261	The H-bond network surrounding the pyranopterins modulates redox cooperativity in the molybdenum-bisPGD cofactor in arsenite oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2016</b> , 1857, 1353-1362	4.6	15
260	EPR as a Tool for Study of Isolated and Coupled Paramagnetic Centers in Coordination Compounds and Macromolecules of Biological Interest. <b>2016</b> , 2016, 192-207		24
259	Reduction of Carbon Dioxide by a Molybdenum-Containing Formate Dehydrogenase: A Kinetic and Mechanistic Study. <b>2016</b> , 138, 8834-46		78
258	Hydrodeoxygenation of sulfoxides to sulfides by a Pt and MoO <sub>x</sub> co-loaded TiO <sub>2</sub> catalyst. <b>2016</b> , 18, 2554-2560		28
257	Single-Cell-Genomics-Facilitated Read Binning of Candidate Phylum EM19 Genomes from Geothermal Spring Metagenomes. <b>2016</b> , 82, 992-1003		16
256	Selective oxidation of organic sulfides to sulfoxides using sugar derived cis-dioxo molybdenum(VI) complexes: kinetic and mechanistic studies. <b>2016</b> , 6, 28015-28022		32
255	Characterization of a novel <i>Acinetobacter baumannii</i> xanthine dehydrogenase expressed in <i>Escherichia coli</i> . <b>2016</b> , 38, 337-44		10

254	Synthesis, crystal structure and characterization a new ionic complex $\text{MoO}_2\text{Cl}_3(\text{MeOH})[\text{H}_3\text{tptz}]\text{Cl}_2$ (tptz = 2,4,6-tris(2-pyridyl)-1,3,5-triazine) as epoxidation catalyst. <b>2016</b> , 445, 28-36		3
253	Ligand effect on the reactivity difference of Mo Tris(dithiolene) complexes towards Ethylene: A computational study. <b>2016</b> , 806, 60-67		3
252	Sulfite Oxidase Activity of Cytochrome c: Role of Hydrogen Peroxide. <b>2016</b> , 5, 96-104		20
251	A New Mo(VI) Complex of (E)-2-(((5-hydroxypentyl)imino)methyl)-6-methoxyphenol: Synthesis, Characterization, and X-Ray Crystal Structure. <b>2016</b> , 46, 917-921		1
250	Structure and function of mammalian aldehyde oxidases. <b>2016</b> , 90, 753-80		74
249	Spectroscopic and Kinetic Properties of the Molybdenum-containing, $\text{NAD}^{+}$ -dependent Formate Dehydrogenase from <i>Ralstonia eutropha</i> . <b>2016</b> , 291, 1162-74		50
248	Selective Synthesis of Bis(indolyl)methanes Under Solvent Free Condition Using Glucopyranosylamine Derived cis-Dioxo Mo(VI) Complex as an Efficient Catalyst. <b>2016</b> , 146, 333-337		15
247	Binding of a novel 12-E2-12 gemini surfactant to xanthine oxidase: Analysis involving tensiometric, spectroscopic, microscopic and molecular docking approach. <b>2016</b> , 170, 56-63		12
246	Enhanced catalytic properties of novel (B) <sub>2</sub> heterohexameric <i>Rhodobacter capsulatus</i> xanthine dehydrogenase by separate expression of the redox domains in <i>Escherichia coli</i> . <b>2017</b> , 119, 1-8		1
245	Protonation and Sulfido versus Oxo Ligation Changes at the Molybdenum Cofactor in Xanthine Dehydrogenase (XDH) Variants Studied by X-ray Absorption Spectroscopy. <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 2165-2176	5.1	7
244	Synthesis, characterization, density functional theory studies and antibacterial activity of a new Schiff base dioxomolybdenum(VI) complex with tryptophan as epoxidation catalyst. <b>2017</b> , 31, e3782		5
243	Effect of the protein ligand in DMSO reductase studied by computational methods. <i>Journal of Inorganic Biochemistry</i> , <b>2017</b> , 171, 45-51	4.2	6
242	Synthesis, structure and cytotoxicity of a series of Dioxidomolybdenum(VI) complexes featuring Salan ligands. <i>Journal of Inorganic Biochemistry</i> , <b>2017</b> , 172, 110-121	4.2	21
241	The molybdenum cofactor enzyme mARC: Moonlighting or promiscuous enzyme?. <b>2017</b> , 43, 486-494		25
240	Molybdenum in natural waters: A review of occurrence, distributions and controls. <i>Applied Geochemistry</i> , <b>2017</b> , 84, 387-432	3.5	136
239	Effect of molybdenum and tungsten on the reduction of nitrate in nitrate reductase, a DFT study. <b>2017</b> , 11, 35		3
238	Pterin function in bacteria. <b>2017</b> , 28, 23-36		12
237	New polymeric, dimeric and mononuclear dioxidomolybdenum(VI) complexes with an ONO donor ligand: crystal structures, DFT calculations, catalytic performance and protein binding study of the ligand. <b>2017</b> , 41, 4116-4137		16

236	Syntheses and catalytic oxotransfer activities of oxo molybdenum(vi) complexes of a new aminoalcohol phenolate ligand. <b>2017</b> , 46, 7051-7060		13
235	Vibrational Probes of Molybdenum Cofactor-Protein Interactions in Xanthine Dehydrogenase. <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 6830-6837	5.1	8
234	Synthesis, characterization and oxygen atom transfer reactivity of a pair of Mo(IV)O- and Mo(VI)O-enedithiolate complexes - a look at both ends of the catalytic transformation. <b>2017</b> , 46, 7523-7533		12
233	Optimization of overexpression of a chaperone protein of steroid C25 dehydrogenase for biochemical and biophysical characterization. <b>2017</b> , 134, 47-62		4
232	Real-Time Monitoring of Enzyme-Catalysed Reactions using Deep UV Resonance Raman Spectroscopy. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 6983-6987	4.8	8
231	Shared function and moonlighting proteins in molybdenum cofactor biosynthesis. <b>2017</b> , 398, 1009-1026		21
230	Metal Ion Modeling Using Classical Mechanics. <i>Chemical Reviews</i> , <b>2017</b> , 117, 1564-1686	68.1	189
229	Evidence of molybdenum association with particulate organic matter under sulfidic conditions. <b>2017</b> , 15, 311-323		51
228	Human mitochondrial amidoxime reducing component (mARC): An electrochemical method for identifying new substrates and inhibitors. <b>2017</b> , 84, 90-93		6
227	Xanthine oxidase-product complexes probe the importance of substrate/product orientation along the reaction coordinate. <b>2017</b> , 46, 13242-13250		5
226	Bimetallic cis-dioxomolybdenum(VI) complex containing hydrazone ligand: Syntheses, crystal structure and catalytic studies. <b>2017</b> , 86, 39-43		14
225	EPR Spectroscopy on Mononuclear Molybdenum-Containing Enzymes. <b>2017</b> , 55-101		1
224	Monomeric and Dimeric Oxidomolybdenum(V and VI) Complexes, Cytotoxicity, and DNA Interaction Studies: Molybdenum Assisted C-N Bond Cleavage of Salophen Ligands. <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 11190-11210	5.1	37
223	MoCu CO Dehydrogenase Assembly. <b>2017</b> , 1-16		
222	Assembly of Moco in Mo/W Enzymes. <b>2017</b> , 1-23		
221	Mononuclear bis(dithiolene) Mo(IV) and W(IV) complexes with P,P; S,S; O,S and O,O donor ligands: a comparative reactivity study. <b>2017</b> , 41, 9769-9783		2
220	12 Connecting the biosynthesis of the molybdenum cofactor, Fe-S clusters, and tRNA thiolation in humans. <b>2017</b> ,		
219	Four-Component Relativistic Density Functional Calculations of EPR Parameters for Model Complexes of Tungstoenzymes. <b>2017</b> , 121, 9106-9117		4

218	Rubredoxins derivatives: Simple sulphur-rich coordination metal sites and its relevance for biology and chemistry. <b>2017</b> , 352, 379-397	12
217	Molybdenum and tungsten-containing formate dehydrogenases: Aiming to inspire a catalyst for carbon dioxide utilization. <b>2017</b> , 455, 350-363	62
216	Complexes of cis-dioxomolybdenum(VI) with a chiral tetradentate tripodal-like ligand system: Syntheses, structures and catalytic activities. <b>2017</b> , 125, 26-33	7
215	6. N-oxides in multi-component crystals and in bottom-up synthesis and applications. <b>2017</b> , 145-163	
214	16 Good Golly, Why Moly? THE STABLE ISOTOPE GEOCHEMISTRY OF MOLYBDENUM. <b>2017</b> ,	3
213	10. Molybdenum-containing iron-sulfur enzymes. <b>2017</b> ,	
212	On the Role of Additional [4Fe-4S] Clusters with a Free Coordination Site in Radical-SAM Enzymes. <b>2017</b> , 5, 17	26
211	Reactive Species in Biological Systems. <b>2017</b> , 65-86	0
210	A Portable Nitrate Biosensing Device Using Electrochemistry and Spectroscopy. <b>2018</b> , 18, 3080-3089	24
209	Oxygen atom transfer between DMSO and benzoin catalyzed by cis-dioxidomolybdenum(VI) complexes of tetradentate Mannich bases. <b>2018</b> , 42, 6225-6235	7
208	Functional Studies on Oligotropha carboxidovorans Molybdenum-Copper CO Dehydrogenase Produced in Escherichia coli. <b>2018</b> , 57, 2889-2901	9
207	Design of mononuclear, binuclear and polynuclear molybdenum(VI) complexes based on ONO benzoylacetone derived enamines and their in vitro biological activity. <b>2018</b> , 145, 70-79	11
206	Lewis Acid Assisted Nitrate Reduction with Biomimetic Molybdenum Oxotransferase Complex. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 2594-2602	5.1 21
205	Preparation, crystal structure, spectroscopic studies, DFT calculations, antibacterial activities and molecular docking of a tridentate Schiff base ligand and its cis-MoO <sub>2</sub> complex. <b>2018</b> , 32, e4233	11
204	Computational exploration of reactive fragment for mechanism-based inhibition of xanthine oxidase. <b>2018</b> , 864, 58-67	4
203	Hypouricemic effect of Grifola frondosa on hyperuricemic mice and virtual screening of bioactives by 3D QSAR pharmacophore modeling. <b>2018</b> , 40, 582-588	6
202	Modulating the Molybdenum Coordination Sphere of Escherichia coli Trimethylamine N-Oxide Reductase. <b>2018</b> , 57, 1130-1143	18
201	Formation of Mono Oxo Molybdenum(IV) PNP Pincer Complexes: Interplay between Water and Molecular Oxygen. <b>2018</b> , 2018, 876-884	4



200	Characterization of vegetable nitrogen uptake and soil nitrogen transformation in response to continuous molybdenum application. <b>2018</b> , 181, 516-527		8
199	Critical overview on the structure and metabolism of human aldehyde oxidase and its role in pharmacokinetics. <b>2018</b> , 368, 35-59		16
198	Xanthine Oxidoreductase: A Novel Therapeutic Target for the Treatment of Chronic Wounds?. <b>2018</b> , 7, 95-104		16
197	Toward an Understanding of Structural Insights of Xanthine and Aldehyde Oxidases: An Overview of their Inhibitors and Role in Various Diseases. <b>2018</b> , 38, 1073-1125		53
196	Dioxidomolybdenum(VI) complexes bearing sterically constrained aroylazine ligands: Synthesis, structural investigation and catalytic evaluation. <b>2018</b> , 469, 366-378		16
195	Effect of cetyltrimethylammonium bromide and its gemini homologue bis(cetyldimethylammonium)butane dibromide on activity of xanthine oxidase. <b>2018</b> , 39, 1121-1125		2
194	Acid-facilitated product release from a Mo(IV) center: relevance to oxygen atom transfer reactivity of molybdenum oxotransferases. <b>2018</b> , 23, 193-207		2
193	Molybdenum isotope fractionation in plants measured by MC-ICPMS. <b>2018</b> , 10, 131-137		6
192	Supported molybdenum complex on the surface of magnetite-mesoporous silica nanocomposite: new catalyst for the epoxidation of olefins. <b>2018</b> , 25, 1195-1201		3
191	Mononuclear Molybdenum-Containing Enzymes. <b>2018</b> ,		1
190	The Catalytic Mechanisms of the Molybdenum and Tungsten Enzymes. <b>2018</b> , 63-100		0
189	Nitric oxide functionalized molybdenum(0) pyrazolone Schiff base complexes: thermal and biochemical study.. <b>2018</b> , 8, 35102-35130		17
188	Same but different: Comparison of two system-specific molecular chaperones for the maturation of formate dehydrogenases. <i>PLoS ONE</i> , <b>2018</b> , 13, e0201935	3-7	5
187	Characterization of the ModABC Molybdate Transport System of in Nicotine Degradation. <b>2018</b> , 9, 3030		9
186	From the Eukaryotic Molybdenum Cofactor Biosynthesis to the Moonlighting Enzyme mARC. <i>Molecules</i> , <b>2018</b> , 23,	4.8	10
185	Xanthine Oxidoreductase and Aldehyde Oxidases. <b>2018</b> , 208-232		1
184	Foliar application of molybdenum reduces yield loss and preharvest sprouting in Japonica rice seeds subjected to simulated flooding during seed development and maturation. <b>2018</b> , 46, 175-189		
183	Redox Proteins for Electrochemical Sensors. <b>2018</b> , 470-486		0

182	Formate dehydrogenase for CO <sub>2</sub> utilization and its application. <b>2018</b> , 26, 623-641	42
181	DFT analysis of the active site in catalytic metabolic redox reactions of mononuclear molybdenum enzymes. <b>2018</b> , 71, 2267-2280	
180	Iron Sulfur and Molybdenum Cofactor Enzymes Regulate the Life Cycle by Controlling Cell Metabolism. <b>2018</b> , 9, 50	26
179	Cordycepin, a Characteristic Bioactive Constituent in , Ameliorates Hyperuricemia through URAT1 in Hyperuricemic Mice. <b>2018</b> , 9, 58	18
178	Synthesis and Biological Evaluation of S-Substituted Perhalo-2-nitrobuta-1,3-dienes as Novel Xanthine Oxidase, Tyrosinase, Elastase, and Neuraminidase Inhibitors. <b>2018</b> , 2018, 1-11	6
177	Redox-Controlled Stabilization of an Open-Shell Intermediate in a Bioinspired Enzyme Model. <b>2018</b> , 2018, 3537-3547	6
176	The oxygen-atom transfer reactions of Mo-diselenolene biomimetic complexes: A computational investigation. <b>2018</b> , 1139, 38-43	2
175	Potential of metabolic engineering in bacterial nanosilver synthesis. <b>2018</b> , 34, 138	5
174	Structural and Electronic Investigation of Tetrachalcogenidomolybdate Dianions. <b>2018</b> , 3, 5808-5813	
173	Role of Plant Nutrients in Plant Growth and Physiology. <b>2018</b> , 51-93	7
172	Biomolecular Functions of Micronutrients Toward Abiotic Stress Tolerance in Plants. <b>2018</b> , 153-170	2
171	Rotationally resolved spectrum of the B1A? IX1A? 000 band of CuSH. <b>2018</b> , 350, 27-29	3
170	Synthetic studies on the molybdenum cofactor: Total synthesis of pterindithiolenes by direct dithiolene formation from suitable pterin alkynes. <b>2018</b> , 48, 1629-1639	
169	Differential influence of molybdenum and tungsten on the growth of barley seedlings and the activity of aldehyde oxidase under salinity. <b>2018</b> , 228, 189-196	6
168	Molybdenum, Tungsten, Vanadium and Chromium. <b>2019</b> , 475-498	2
167	Molybdenum- and tungsten-containing formate dehydrogenases and formylmethanofuran dehydrogenases: Structure, mechanism, and cofactor insertion. <b>2019</b> , 28, 111-122	44
166	Dioxidomolybdenum(VI) complexes chelated with N4-(3-methoxyphenyl)thiosemicarbazone as molybdenum(IV) precursors in oxygen atom transfer process and oxidation of styrene. <b>2019</b> , 171, 530-541	7
165	Phosphonate Decomposition-Induced Polyoxomolybdate Dumbbell-Type Cluster Formation: Structural Analysis, Proton Conduction, and Catalytic Sulfoxide Reduction. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 11522-11533	5.1 4

164	Deoxydehydration of vicinal diols by homogeneous catalysts: a mechanistic overview. <b>2019</b> , 6, 191165	7
163	Targeted knock-in mice expressing the oxidase-fixed form of xanthine oxidoreductase favor tumor growth. <b>2019</b> , 10, 4904	10
162	The regulation of Moco biosynthesis and molybdoenzyme gene expression by molybdenum and iron in bacteria. <b>2019</b> , 11, 1602-1624	8
161	Metallocofactors that Activate Small Molecules. <b>2019</b> ,	
160	Comparison of molybdenum and rhenium oxo bis-pyrazine-dithiolene complexes - in search of an alternative metal centre for molybdenum cofactor models. <b>2019</b> , 48, 2701-2714	5
159	Reduced Activity of Nitrate Reductase Under Heavy Metal Cadmium Stress in Rice: An Answer. <b>2018</b> , 9, 1948	19
158	Molybdenum and tungsten enzymes redox properties   A brief overview. <b>2019</b> , 394, 53-64	13
157	The Role of the Pyranopterin Dithiolene Component of Moco in Molybdoenzyme Catalysis. <b>2019</b> , 101-151	1
156	Three-Dimensional Sulfite Oxidase Bioanodes Based on Graphene Functionalized Carbon Paper for Sulfite/O <sub>2</sub> Biofuel Cells. <i>ACS Catalysis</i> , <b>2019</b> , 9, 6543-6554	13.1 26
155	Photoelectron imaging spectroscopic study and chemical-bonding analysis of AgOH and AgSH anions. <b>2019</b> , 233, 52-56	
154	DMSO coordinated dioxidomolybdenum(VI) complexes chelated with 3-methoxybenzhydrazone related ligands: Synthesis, structural studies and in vitro cytotoxicity. <b>2019</b> , 169, 151-161	14
153	Structurally characterized one oxo-desoxo bridged Mo <sub>2</sub> Bis(dithiolene) complex and its interconversion to a discrete oxo or desoxo DMSOR model. <b>2019</b> , 43, 8332-8340	1
152	The essential metals for humans: a brief overview. <i>Journal of Inorganic Biochemistry</i> , <b>2019</b> , 195, 120-129	4.2 235
151	Anisotropic Magnetic Spin Interactions of Transition Metal Complexes and Metalloenzymes from Spectroscopy and Quantum Chemistry. <b>2019</b> , 35-64	
150	A complete series of uranium(IV) complexes with terminal hydrochalcogenido (EH) and chalcogenido (E) ligands E = O, S, Se, Te. <b>2019</b> , 48, 10853-10864	11
149	Recent developments in penta-, hexa- and heptadentate Schiff base ligands and their metal complexes. <b>2019</b> , 389, 94-118	175
148	Identification of YdhV as the First Molybdoenzyme Binding a Bis-Mo-MPT Cofactor in <i>Escherichia coli</i> . <b>2019</b> , 58, 2228-2242	6
147	Metalloproteins. <b>2019</b> ,	2

146	Reconstitution of Molybdoenzymes with Bis-Molybdopterin Guanine Dinucleotide Cofactors. <b>2019</b> , 1876, 141-152		1
145	Molybdenum-Containing Enzymes. <b>2019</b> , 1876, 55-63		1
144	Synthesis, Spectral Characterization and Crystal Structures of Dioxidomolybdenum(VI) Complexes Derived from Nicotinoylhydrazones. <b>2019</b> , 49, 219-231		13
143	Catalytic epoxidation using dioxidomolybdenum(VI) complexes with tridentate aminoalcohol phenol ligands. <b>2019</b> , 486, 17-25		8
142	The First Anticancer Tris(pyrazolyl)borate Molybdenum(IV) Complexes: Tested in Vitro and in Vivo-A Comparison of O,O-, S,O-, and N,N-Chelate Effects. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 2211-2221 <sup>3</sup>	4.8	3
141	Efficient hydrodeoxygenation of sulfoxides into sulfides under mild conditions using heterogeneous cobalt-molybdenum catalysts. <b>2020</b> , 22, 39-43		7
140	Cis- and trans molybdenum oxo complexes of a prochiral tetradentate aminophenolate ligand: Synthesis, characterization and oxotransfer activity. <b>2020</b> , 178, 114312		2
139	Anion Binding and Oxidative Modification at the Molybdenum Cofactor of Formate Dehydrogenase from Studied by X-ray Absorption Spectroscopy. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 214-225	5.1	6
138	Conversion of NO (x = 2, 3) to NO using an oxygen-deficient polyoxovanadate-alkoxide cluster. <i>Chemical Communications</i> , <b>2020</b> , 56, 555-558	5.8	12
137	The oxidation-reduction and electrocatalytic properties of CO dehydrogenase from <i>Oligotropha carboxidovorans</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2020</b> , 1861, 148118	4.6	4
136	A biradical oxo-molybdenum complex containing semiquinone and -aminophenol benzoxazole-based ligands.. <b>2020</b> , 10, 40853-40866		0
135	The Requirement of Inorganic Fe-S Clusters for the Biosynthesis of the Organometallic Molybdenum Cofactor. <b>2020</b> , 8, 43		1
134	Cp and indenyl ruthenium complexes containing dithione derivatives: Synthesis, antibacterial and antifungal study. <b>2020</b> , 923, 121418		2
133	Reducing CO to HCO at Mild Potentials: Lessons from Formate Dehydrogenase. <b>2020</b> , 142, 19438-19445		24
132	The biosynthesis of the molybdenum cofactors in <i>Escherichia coli</i> . <b>2020</b> , 22, 2007-2026		16
131	Molybdenum and Tungsten Cofactors and the Reactions They Catalyze. <b>2020</b> , 20,		3
130	Engineering the coordination environment enables molybdenum single-atom catalyst for efficient oxygen reduction reaction. <b>2020</b> , 389, 150-156		32
129	Sulfite Oxidase Activity Level Determines the Sulfite Toxicity Effect in Leaves and Fruits of Tomato Plants. <b>2020</b> , 10, 694		1

128	A W/Cu Synthetic Model for the Mo/Cu Cofactor of Aerobic CODH Indicates That Biochemical CO Oxidation Requires a Frustrated Lewis Acid/Base Pair. <b>2020</b> , 142, 12635-12642	14
127	Hydrogenation reactions in water. <b>2020</b> , 115-151	
126	Hydrogen Sulfide Signaling and Enzymology. <b>2020</b> , 430-473	2
125	Predicting the effects of integrating mineral wastes in anaerobic digestion of OFMSW using first-order and Gompertz models from biomethane potential assays. <b>2020</b> , 152, 308-319	17
124	Bioinspired Mo, W and V complexes bearing a highly hydroxyl-functionalized Schiff base ligand. <b>2020</b> , 503, 119414	7
123	Dithione, the antipodal redox partner of ene-1,2-dithiol ligands and their metal complexes. <b>2020</b> , 409, 213211	11
122	Mechanism of Rate Acceleration of Radical C-C Bond Formation Reaction by a Radical SAM GTP 3',8-Cyclase. <b>2020</b> , 142, 9314-9326	12
121	Adaptations of Escherichia coli strains to oxidative stress are reflected in properties of their structural proteomes. <b>2020</b> , 21, 162	1
120	Crystallographic and kinetic analyses of the FdsBG subcomplex of the cytosolic formate dehydrogenase FdsABG from. <b>2020</b> , 295, 6570-6585	8
119	Diverse biological roles of the tetrathiomolybdate anion. <b>2021</b> , 429, 213635	8
118	The complete catalytic mechanism of xanthine oxidase: a computational study. <b>2021</b> , 8, 405-416	4
117	Molybdenum cofactor biology, evolution and deficiency. <b>2021</b> , 1868, 118883	13
116	Predicting nitrogen and oxygen kinetic isotope effects of nitrate reduction by periplasmic dissimilatory nitrate reductase. <b>2021</b> , 293, 224-239	2
115	Towards operando IR- and UV-vis-Spectro-Electrochemistry: A Comprehensive Matrix Factorisation Study on Sensitive and Transient Molybdenum and Tungsten Mono-Dithiolene Complexes**. <b>2021</b> , 1, 22-35	3
114	Nitrile-containing pharmaceuticals: target, mechanism of action, and their SAR studies. <b>2021</b> , 12, 1650-1671	10
113	Biomimetic Studies of the Mo/Cu Active Site of CO Dehydrogenase. <b>2021</b> , 772-789	0
112	The Impact of Ligand Oxidation State and Fold Angle on the Charge Transfer Processes of MoIVO-Dithione Complexes. <b>2021</b> , 2021, 914-922	3
111	Dioxomolybdenum(VI) complexes of hydrazone phenolate ligands - syntheses and activities in catalytic oxidation reactions. <b>2021</b> , 98, 100006	4

110	Structural elucidation, DFT calculations and catalytic activity of dioxomolybdenum(VI) complexes with NN donor ligand: Role of halogen atom coordinated to the molybdenum centre. <b>2021</b> , 200, 115144		1
109	Synthesis of a Series of a Few Hydrosulfide Complexes of Cu(I). A $\mu$ -S-Bridged Rare Cubane-like Tetramer Showing Efficient Catalytic Activity toward Azide-Alkyne Cycloaddition. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 8075-8084	5-1	5
108	Photo-epoxidation of $\alpha$ -pinene with molecular O <sub>2</sub> catalyzed by a dioxo-molybdenum (VI)-based Metal-Organic Framework. <b>2021</b> , 47, 4227-4244		1
107	Structural and activity changes of xanthine oxidase induced by cetyltrimethylammonium bromide and its Gemini homologue bis(cetyldimethylammonium)hexane dibromide: a comparative study. 1-8		
106	Mechanistic Insights into Promoted Hydrolysis of Phosphoester Bonds by MoOCl(DMF). <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 11177-11191	5-1	3
105	Oxygen atom transfer catalysis by dioxidomolybdenum(VI) complexes of pyridyl aminophenolate ligands. <b>2021</b> , 205, 115234		1
104	Complete genome sequence of a nitrate reducing bacteria, <i>Algoriphagus</i> sp. Y33 isolated from the water of the Indian Ocean. <b>2021</b> , 59, 100861		1
103	Dioxomolybdenum(VI) complexes with 4-benzyloxysalicylidene-N/S-alkyl thiosemicarbazones: Synthesis, structural analysis, antioxidant activity and xanthine oxidase inhibition. <b>2021</b> , 209, 115467		0
102	Experimental and theoretical studies of new dioxomolybdenum complex: Synthesis, characterization and application as an efficient homogeneous catalyst for the selective sulfoxidation. <b>2021</b> , 527, 120568		9
101	Enzymes Indigenous to Milk: Xanthine Oxidoreductase. <b>2022</b> , 701-705		
100	Structure, Function, and Mechanism of Pyranopterin Molybdenum and Tungsten Enzymes. <b>2021</b> , 790-811		1
99	Molybdenum. <b>2021</b> , 567-745		
98	Metabolism of Inorganic Sulfur Compounds in Purple Bacteria. <b>2009</b> , 595-622		13
97	HIGH-RESOLUTION EPR SPECTROSCOPY OF MO ENZYMES. SULFITE OXIDASES: STRUCTURAL AND FUNCTIONAL IMPLICATIONS. <b>2010</b> , 29, 121-168		6
96	Dimethylsulfoxide (DMSO) Reductase, a Member of the DMSO Reductase Family of Molybdenum Enzymes. <b>2010</b> , 169-199		3
95	Bacterial selenoenzymes and mechanisms of action. <b>2001</b> , 115-122		2
94	Xanthine oxidoreductase. <b>2000</b> , 65-81		1
93	Molybdenum Cofactor Disorders. <b>2014</b> , 191-203		2

92	Potential Energy Surfaces for Reaction Catalyzed by Metalloenzymes from Quantum Chemical Computations. <b>2009</b> , 275-313	1
91	Enzymes Indigenous to Milk   Xanthine Oxidoreductase. <b>2011</b> , 324-326	3
90	Synthesis and solution structure of desoxotungsten(IV) and monooxotungsten(VI) benzenedithiolate complexes containing two intramolecular NH <sub>2</sub> S hydrogen bonds. <b>2017</b> , 467, 379-384	2
89	11:The Reaction Mechanism of the Molybdenum Hydroxylase Xanthine Oxidoreductase: Evidence Against the Formation of Intermediates Having Metal-Carbon Bonds. <b>2009</b> , 395-416	6
88	CHAPTER 8:Molybdenum and Tungsten. <b>2014</b> , 223-259	1
87	Expression of <i>Drosophila melanogaster</i> xanthine dehydrogenase in <i>Aspergillus nidulans</i> and some properties of the recombinant enzyme. <b>2002</b> , 362, 223-9	5
86	Specificity of respiratory pathways involved in the reduction of sulfur compounds by <i>Salmonella enterica</i> . <b>2002</b> , 148, 3631-3638	60
85	Involvement of a putative molybdenum enzyme in the reduction of selenate by <i>Escherichia coli</i> . <b>2002</b> , 148, 3865-3872	57
84	Dioxidobis(2-oxo-1,2-dihydropyridin-3-olato)-molybdenum(VI). <b>2008</b> , 64, m595-6	1
83	Phylogeny and Functionality: Taxonomy as a Roadmap to Genes. 288-313	15
82	Purification and molecular characterization of the tungsten-containing formaldehyde ferredoxin oxidoreductase from the hyperthermophilic archaeon <i>Pyrococcus furiosus</i> : the third of a putative five-member tungstoenzyme family. <b>1999</b> , 181, 1171-80	53
81	Role of XDHC in Molybdenum cofactor insertion into xanthine dehydrogenase of <i>Rhodobacter capsulatus</i> . <b>1999</b> , 181, 2745-51	61
80	The periplasmic nitrate reductase in <i>Pseudomonas</i> sp. strain G-179 catalyzes the first step of denitrification. <b>1999</b> , 181, 2802-6	93
79	Cell biology and molecular basis of denitrification. <b>1997</b> , 61, 533-616	951
78	Molybdenum and Tungsten Enzymes. <b>1999</b> , 81-152	16
77	Non-P450 Mediated Oxidative Metabolism of Xenobiotics. <b>2003</b> , 483-539	7
76	Oxidation Pathways and the Enzymes That Mediate Them. <b>2007</b> , 33-108	1
75	Kinetic and structural studies of aldehyde oxidoreductase from <i>Desulfovibrio gigas</i> reveal a dithiolene-based chemistry for enzyme activation and inhibition by H <sub>2</sub> O <sub>2</sub> . <i>PLoS ONE</i> , <b>2013</b> , 8, e83234 <sup>3.7</sup>	6

74	Biochemical, stabilization and crystallization studies on a molecular chaperone (PaoD) involved in the maturation of molybdoenzymes. <i>PLoS ONE</i> , <b>2014</b> , 9, e87295	3.7	8
73	Structural and functional insights into the catalytic inactivity of the major fraction of buffalo milk xanthine oxidoreductase. <i>PLoS ONE</i> , <b>2014</b> , 9, e87618	3.7	5
72	Archaeal Mo-Containing Glyceraldehyde Oxidoreductase Isozymes Exhibit Diverse Substrate Specificities through Unique Subunit Assemblies. <i>PLoS ONE</i> , <b>2016</b> , 11, e0147333	3.7	3
71	Photoreactivation of alloxanthine-inhibited xanthine oxidase. <i>Photochemistry and Photobiology</i> , <b>2001</b> , 73, 439-46	3.6	4
70	Expression, purification and DNA-binding activities of two putative ModE proteins of <i>Herbaspirillum seropedicae</i> (Burkholderiales, Oxalobacteraceae). <i>Genetics and Molecular Biology</i> , <b>2008</b> , 31, 743-750	2	1
69	In Silico and 3D QSAR Studies of Natural Based Derivatives as Xanthine Oxidase Inhibitors. <i>Current Topics in Medicinal Chemistry</i> , <b>2019</b> , 19, 123-138	3	8
68	Oxidation of Tricarbonylmolybdacarborane.3.?A New Entry to the First Examples of Sulfido-Bridged Dinuclear molybda(V)carboranes. <i>Bulletin of the Korean Chemical Society</i> , <b>2002</b> , 23, 1257-1262	1.2	6
67	Lewis Acid Behavior of MoF and MoOF: Syntheses and Characterization of MoF(NCCH), MoF(NCH), and MoOF(NCH) (= 1, 2). <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 15695-15711	5.1	
66	Structural and Biochemical Studies of <i>Bacillus subtilis</i> MobB. <i>Crystals</i> , <b>2021</b> , 11, 1262	2.3	0
65	Non-cytochrome P450 enzymes involved in the oxidative metabolism of xenobiotics: Focus on the regulation of gene expression and enzyme activity. <i>Pharmacology &amp; Therapeutics</i> , <b>2021</b> , 108020	13.9	3
64	Transition Metals in Catalysis and Electron Transport. <b>2001</b> , 837-903		
63	A Novel Nitrogenase: Superoxide-Dependent Nitrogen Fixation. <b>2002</b> , 263-297		
62	Molybdenum Enzymes Containing the Pyranopterin Cofactor: An Overview. <b>2002</b> , 163-191		
61	Enzymes of the Xanthine Oxidase Family: The Role of Molybdenum. <b>2002</b> , 363-380		
60	Inhibition Mechanisms of Xanthine Oxidoreductase Inhibitors. <i>Nihon Ika Daigaku Igakkai Zasshi</i> , <b>2007</b> , 3, 83-88	0	
59	Xanthine Oxidoreductase. <b>2007</b> , 1-10		0
58	Multifrequency EPR Spectroscopy: A Toolkit for the Characterization of Mono- and Di-nuclear Metal Ion Centers in Complex Biological Systems. <b>2010</b> , 133-175		
57	The Role of Metals. <b>2010</b> , 1025-1044		



56	Correlation of docking energies with spectroscopic kinetic assays of potential xanthine oxidase substrates. <i>Journal of Biophysical Chemistry</i> , <b>2013</b> , 04, 22-27	0.1	
55	Molybdē. 325-374		
54	Congestive Heart Failure. <b>2014</b> , 282-313		
53	Relationships Between Enzymatic and Heterogeneous Catalysis. <b>1999</b> , 23-31		
52	The Biosynthesis of the Molybdenum Cofactor and Its Incorporation into Molybdoenzymes. 260-275		
51	Fabaceous Plants Under Abiotic Stresses and Biochemical Functions of Micronutrients. <b>2020</b> , 417-433		
50	Flavonoids, an Overview: Chemical Structures, Dietary Sources, and Biological Properties. <i>Food Engineering Progress</i> , <b>2020</b> , 24, 151-163	0.2	0
49	Carbon Dioxide Utilisation via the Formate Route. <b>2021</b> , 29-81		1
48	Reduction induced S-nucleophilicity in mono-dithiolene molybdenum complexes - generation of sulfonium ligands. <i>Chemical Communications</i> , <b>2021</b> , 57, 12615-12618	5.8	0
47	Accumulation of an unprecedented 5'-deoxyadenos-4'-yl radical unmasks the kinetics of the radical-mediated C-C bond formation step in MoaA catalysis.		
46	xanthine oxidase.		
45	Oxidation in Living Cells and its Chemical Models. <b>2002</b> , 466-522		
44	Gating of Substrate Access and Long-Range Proton Transfer in Escherichia coli Nitrate Reductase A: The Essential Role of a Remote Glutamate Residue. <i>ACS Catalysis</i> , <b>2021</b> , 11, 14303-14318	13.1	0
43	Dioxomolybdenum(VI) complexes of ONN chelating thiosemicarbazones: Crystallographic and spectroscopic (UV, IR and NMR) studies. <i>Journal of the Turkish Chemical Society, Section A: Chemistry</i> , 1275-1300	0.5	
42	Association of Mutations Identified in Xanthinuria with the Function and Inhibition Mechanism of Xanthine Oxidoreductase. <i>Biomedicines</i> , <b>2021</b> , 9,	4.8	0
41	Sulfide and transition metals - A partnership for life.. <i>Journal of Inorganic Biochemistry</i> , <b>2021</b> , 227, 111687.2	7.2	1
40	Electrochemically driven catalysis of the bacterial molybdenum enzyme YiiM.. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2021</b> , 1863, 148523	4.6	1
39	Cross-talk Between (Hydrogen)Sulfite and Metalloproteins: Impact on Human Health.. <i>Chemistry - A European Journal</i> , <b>2022</b> ,	4.8	1

38	Crystal structures of two dioxomolybdenum complexes stabilized by salan ligands featuring phenyl and cyclo-hexyl backbones.. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , <b>2022</b> , 78, 244-250	0.7	0
37	Host-adaptation in Legionellales is 1.9 Ga, coincident with eukaryogenesis.. <i>Molecular Biology and Evolution</i> , <b>2022</b> ,	8.3	1
36	Application of EPR and related methods to molybdenum-containing enzymes.. <i>Methods in Enzymology</i> , <b>2022</b> , 666, 373-412	1.7	
35	Structural and thermochemical consequences of prototropy and ionization for the biomolecule xanthine in vacuo. <i>Journal of Chemical Thermodynamics</i> , <b>2022</b> , 106788	2.9	
34	Density functional theory calculations of nitrogen and oxygen equilibrium isotope fractionations in NO <sub>3</sub> /NO <sub>2</sub> /H <sub>2</sub> O aqueous system reveal inverse kinetic isotope effects during nitrite oxidation. <i>Applied Geochemistry</i> , <b>2022</b> , 139, 105265	3.5	0
33	{Moco}, (n=1-8): A general formalism for describing the highly covalent molybdenum cofactor of sulfite oxidase and related Mo enzymes.. <i>Journal of Inorganic Biochemistry</i> , <b>2022</b> , 231, 111801	4.2	
32	Resolving the Multidecade-Long Mystery in MoaA Radical SAM Enzyme Reveals New Opportunities to Tackle Human Health Problems.. <i>ACS Bio &amp; Med Chem Au</i> , <b>2022</b> , 2, 94-108		0
31	Large-Scale Screening Reveals That Geometric Structure Matters More Than Electronic Structure in the Bioinspired Catalyst Design of Formate Dehydrogenase Mimics. <i>ACS Catalysis</i> , <b>2022</b> , 12, 383-396	13.1	0
30	Image_1.TIFF. <b>2018</b> ,		
29	Image_2.TIF. <b>2018</b> ,		
28	Pterin-Containing Microbial Molybdenum Enzymes. <i>Advances in Environmental Microbiology</i> , <b>2022</b> , 359-415		
27	Metal Munching Microbes. <i>Advances in Environmental Microbiology</i> , <b>2022</b> , 3-20	1.3	
26	Molybdenum cofactor catabolism unravels the physiological role of the drug metabolizing enzyme thiopurine S-methyltransferase.. <i>Clinical Pharmacology and Therapeutics</i> , <b>2022</b> ,	6.1	1
25	The Role of the Nucleotides in the Insertion of the bis-Molybdopterin Guanine Dinucleotide Cofactor into apo-Molybdoenzymes.. <i>Molecules</i> , <b>2022</b> , 27,	4.8	0
24	Catalytic electrochemistry of the bacterial Molybdoenzyme YcbX. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2022</b> , 148579	4.6	1
23	Inspired by Nature—Functional Analogues of Molybdenum and Tungsten-Dependent Oxidoreductases. <i>Molecules</i> , <b>2022</b> , 27, 3695	4.8	1
22	Development of bacterial enzyme-based biosensor for the detection and quantification of selenate. <i>Chemistry - A European Journal</i> ,	4.8	
21	Bio-inspired CO <sub>2</sub> reduction reaction catalysis using soft-oxometalates. <i>Journal of Inorganic Biochemistry</i> , <b>2022</b> , 111903	4.2	

20	Second and Outer Coordination Sphere Effects in Nitrogenase, Hydrogenase, Formate Dehydrogenase, and CO Dehydrogenase. <i>Chemical Reviews</i> ,	68.1	5
19	Polyoxometalate Nanoparticles as a Potential Glioblastoma Therapeutic via Lipid-Mediated Cell Death. <i>International Journal of Molecular Sciences</i> , <b>2022</b> , 23, 8263	6.3	
18	Iron and zinc porphyrin linked MoO(dithiolene) complexes in relevance to electron transfer between Mo-cofactor and cytochrome b5 in sulfite oxidase. <b>2022</b> , 51, 12447-12452		
17	Soybean Oil Epoxidation Catalyzed by a Functionalized Metal-Organic Framework with Active Dioxo-Molybdenum (VI) Centers.		
16	Structural Exploration and Protein Binding Efficiencies of Binuclear Dioxidomolybdenum(VI) Complexes Constructed from ONO Chelator and Linear N,N'-Ditopic Spacer. <b>2022</b> , 7,		
15	Human gut Actinobacteria boost drug absorption by secreting P-glycoprotein ATPase inhibitors.		o
14	Medicinal fungus <i>Phellinus igniarius</i> alleviates gout in vitro by modulating TLR4/NF-κB/NLRP3 signaling. 13,		o
13	Highly sensitive and selective detection of selenate in water samples using an enzymatic gold nanodendrite biosensor.		o
12	Combinatorial co-expression of xanthine dehydrogenase and chaperone XdhC from <i>Acinetobacter baumannii</i> and <i>Rhodobacter capsulatus</i> and their applications in decreasing purine content in food. <b>2023</b> , 12, 1343-1350		o
11	Molybdenum Enzymes and Models.		o
10	Tungsten Enzymes and Models.		o
9	Protonation and Sulfidation of $[(Me_3tacn)MO_3]$ (M=Mo, W). <b>2022</b> , 7,		o
8	Identification and Anti-Hyperuricemic Activity of Xanthine Oxidase Inhibitory Peptides from Pacific White Shrimp and Swimming Crab Based on Molecular Docking Screening.		o
7	Biological properties of a new class of $[Mo_2O_2S_2]$ -based thiosemicarbazone coordination complexes. <b>2023</b> , 548, 121372		o
6	Isolation and genomic and physiological characterization of <i>Parageobacillus</i> sp. G301, the isolate capable of both hydrogenogenic and aerobic carbon monoxide oxidation.		o
5	Enzymatic carbon dioxide to formate: Mechanisms, challenges and opportunities. <b>2023</b> , 178, 113271		o
4	Bioprospecting of the Antarctic <i>Bacillus subtilis</i> strain for potential application in leaching hydrocarbons and trace elements from contaminated environments based on functional and genomic analysis. <b>2023</b> , 227, 115785		o
3	The Mechanism of Metal-Containing Formate Dehydrogenases Revisited: The Formation of Bicarbonate as Product Intermediate Provides Evidence for an Oxygen Atom Transfer Mechanism. <b>2023</b> , 28, 1537		o

- 2 Diversity and roles of cysteine desulfurases in photosynthetic organisms. ○
- 1 Computational Characterization of the Inhibition Mechanism of Xanthine Oxidoreductase by Topiroxostat. 6023-6043 ○