

# A S Borovik

## List of Publications by Year in descending order

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90  
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93792

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92  
docs citations

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times ranked

4430  
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#	ARTICLE	IF	CITATIONS
1	Bioinspired Di-Fe Complexes: Correlating Structure and Proton Transfer over Four Oxidation States. <i>Journal of the American Chemical Society</i> , 2022, 144, 4559-4571.	6.6	7
2	Artificial Metalloproteins: At the Interface between Biology and Chemistry. <i>Jacs Au</i> , 2022, 2, 1252-1265.	3.6	10
3	Stepwise assembly of heterobimetallic complexes: synthesis, structure, and physical properties. <i>Dalton Transactions</i> , 2021, 50, 8111-8119.	1.6	3
4	Investigation of iron <sup>II</sup> ammine and amido complexes within a <i>C</i> <sub>3</sub> -symmetrical phosphinic amido tripodal ligand. <i>Dalton Transactions</i> , 2021, 50, 11197-11205.	1.6	6
5	Artificial Metalloproteins with Dinuclear Iron <sup>II</sup> Hydroxido Centers. <i>Journal of the American Chemical Society</i> , 2021, 143, 2384-2393.	6.6	10
6	Semiempirical method for examining asynchronicity in metal <sup>II</sup> oxido-mediated C-H bond activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	28
7	C-H Bond Cleavage by Bioinspired Nonheme Metal Complexes. <i>Inorganic Chemistry</i> , 2021, 60, 13759-13783.	1.9	36
8	Effects of Noncovalent Interactions on High-Spin Fe(IV) <sup>II</sup> Oxido Complexes. <i>Journal of the American Chemical Society</i> , 2020, 142, 11804-11817.	6.6	53
9	Artificial Iron Proteins: Modeling the Active Sites in Non-Heme Dioxygenases. <i>Inorganic Chemistry</i> , 2020, 59, 6000-6009.	1.9	10
10	Regulating the Basicity of Metal <sup>II</sup> Oxido Complexes with a Single Hydrogen Bond and Its Effect on C-H Bond Cleavage. <i>Journal of the American Chemical Society</i> , 2019, 141, 11142-11150.	6.6	34
11	Analysis of the Puzzling Exchange-Coupling Constants in a Series of Heterobimetallic Complexes. <i>Inorganic Chemistry</i> , 2019, 58, 9150-9160.	1.9	2
12	Stabilizing a NiII-aqua complex via intramolecular hydrogen bonds: Synthesis, structure, and redox properties. <i>Inorganica Chimica Acta</i> , 2019, 495, 118960.	1.2	3
13	Coordination chemistry within a protein host: regulation of the secondary coordination sphere. <i>Chemical Communications</i> , 2018, 54, 4413-4416.	2.2	17
14	Artificial Metalloproteins Containing Co <sub>4</sub> O <sub>4</sub> Cubane Active Sites. <i>Journal of the American Chemical Society</i> , 2018, 140, 2739-2742.	6.6	38
15	Probing Hydrogen Bonding Interactions to Iron <sup>II</sup> Oxido/Hydroxido Units by <sup>57</sup> Fe Nuclear Resonance Vibrational Spectroscopy. <i>Angewandte Chemie</i> , 2018, 130, 16242-16246.	1.6	0
16	Rücktitelbild: Probing Hydrogen Bonding Interactions to Iron <sup>II</sup> Oxido/Hydroxido Units by <sup>57</sup> Fe Nuclear Resonance Vibrational Spectroscopy (Angew. Chem. 49/2018). <i>Angewandte Chemie</i> , 2018, 130, 16470-16470.	1.6	0
17	Manganese <sup>II</sup> Hydroxido Complexes Supported by a Urea/Phosphinic Amide Tripodal Ligand. <i>Inorganic Chemistry</i> , 2018, 57, 13341-13350.	1.9	14
18	Probing Hydrogen Bonding Interactions to Iron <sup>II</sup> Oxido/Hydroxido Units by <sup>57</sup> Fe Nuclear Resonance Vibrational Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16010-16014.	7.2	11

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19	Mononuclear complexes of a tridentate redox-active ligand with sulfonamido groups: structure, properties, and reactivity. <i>Chemical Science</i> , 2018, 9, 6540-6547.	3.7	10
20	Modular bimetallic complexes with a sulfonamido-based ligand. <i>Dalton Transactions</i> , 2018, 47, 12362-12372.	1.6	4
21	Modulating the Primary and Secondary Coordination Spheres within a Series of Co <sup>II</sup> -OH Complexes. <i>Inorganic Chemistry</i> , 2017, 56, 1112-1120.	1.9	16
22	Terminal Ni <sup>II</sup> -OH <sub>2</sub> complexes in trigonal bipyramidal geometries derived from H <sub>2</sub> O. <i>Polyhedron</i> , 2017, 125, 179-185.	1.0	11
23	Peroxide Activation Regulated by Hydrogen Bonds within Artificial Cu Proteins. <i>Journal of the American Chemical Society</i> , 2017, 139, 17289-17292.	6.6	45
24	Models for Unsymmetrical Active Sites in Metalloproteins: Structural, Redox, and Magnetic Properties of Bimetallic Complexes with M <sup>II</sup> -(1/4-OH)-Fe <sup>III</sup> Cores. <i>Inorganic Chemistry</i> , 2017, 56, 14118-14128.	1.9	17
25	Modular Artificial Cupredoxins. <i>Journal of the American Chemical Society</i> , 2016, 138, 9073-9076.	6.6	22
26	Reactivity of an Fe <sup>IV</sup> -Oxo Complex with Protons and Oxidants. <i>Journal of the American Chemical Society</i> , 2016, 138, 13143-13146.	6.6	45
27	Lessons from Nature: A Bio-Inspired Approach to Molecular Design. <i>Biochemistry</i> , 2015, 54, 4167-4180.	1.2	86
28	Molecular Designs for Controlling the Local Environments around Metal Ions. <i>Accounts of Chemical Research</i> , 2015, 48, 2407-2414.	7.6	250
29	High-spin Mn <sup>IV</sup> -oxo complexes and their relevance to the oxygen-evolving complex within photosystem II. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5319-5324.	3.3	123
30	Sulfonamido tripods: Tuning redox potentials via ligand modifications. <i>Polyhedron</i> , 2015, 85, 777-782.	1.0	12
31	Synthesis, structure and reactivity of Fe <sup>II/III</sup> -NH <sub>3</sub> complexes bearing a tripodal sulfonamido ligand. <i>Chemical Communications</i> , 2014, 50, 2515-2517.	2.2	20
32	Preparation and properties of an Mn <sup>IV</sup> -hydroxide complex: proton and electron transfer at a mononuclear manganese site and its relationship to the oxygen evolving complex within photosystem II. <i>Chemical Science</i> , 2014, 5, 3064-3071.	3.7	36
33	Iron(II) Complexes Supported by Sulfonamido Tripodal Ligands: Endogenous versus Exogenous Substrate Oxidation. <i>Inorganic Chemistry</i> , 2014, 53, 11029-11035.	1.9	27
34	Metal complexes with varying intramolecular hydrogen bonding networks. <i>Polyhedron</i> , 2013, 52, 261-267.	1.0	18
35	Characterization of Monomeric Mn <sup>II/III/IV</sup> -Hydroxo Complexes from X- and Q-Band Dual Mode Electron Paramagnetic Resonance (EPR) Spectroscopy. <i>Inorganic Chemistry</i> , 2013, 52, 12568-12575.	1.9	49
36	Dichotomous Hydrogen Atom Transfer vs Proton-Coupled Electron Transfer During Activation of X-H Bonds (X = C, N, O) by Nonheme Iron <sup>IV</sup> -Oxo Complexes of Variable Basicity. <i>Journal of the American Chemical Society</i> , 2013, 135, 17090-17104.	6.6	216

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37	Unsymmetrical Bimetallic Complexes with $M^{II}(\mu_4-OH)M^{III}$ Cores ( $M^{II}M^{III} = Fe^{II}Fe^{III}, Mn^{II}Fe^{III}$ ), <i>Tj ETQq</i> 1.9 1 0.784314 rgB	1.9	31
38	Heterobimetallic complexes with $M^{III}(\mu_4-OH)M^{II}$ cores ( $M^{III} = Fe, Mn$ ), <i>Tj ETQq</i> 0 0 0 rgBT /Overlo	3.7	86
39	Preparation and structural properties of $In^{III}OH$ complexes. <i>Polyhedron</i> , 2013, 58, 65-70.	1.0	7
40	Water Oxidation Using a Cobalt Monolayer Prepared by Underpotential Deposition. <i>Langmuir</i> , 2013, 29, 14728-14732.	1.6	7
41	Preparation and structures of dinuclear complexes containing $M^{III}OH$ centers. <i>Chemical Communications</i> , 2012, 48, 2546.	2.2	17
42	Assembly and Properties of Heterobimetallic $Co^{II/III}/Ca^{II}$ Complexes with Aquo and Hydroxo Ligands. <i>Journal of the American Chemical Society</i> , 2012, 134, 17526-17535.	6.6	83
43	Electron Paramagnetic Resonance and Mössbauer Spectroscopy and Density Functional Theory Analysis of a High-Spin $Fe^{IV}Oxo$ Complex. <i>Journal of the American Chemical Society</i> , 2012, 134, 9775-9784.	6.6	67
44	Preparation and Properties of a Monomeric High-Spin $Mn^{V}Oxo$ Complex. <i>Journal of the American Chemical Society</i> , 2012, 134, 1996-1999.	6.6	115
45	Preparation of monolithic superparamagnetic nanoparticle-polymer composites using a polymerizable acetylacetonate and magnetite nanoparticles. <i>Polymer Chemistry</i> , 2012, 3, 2852.	1.9	7
46	The Effects of Redox-Inactive Metal Ions on the Activation of Dioxygen: Isolation and Characterization of a Heterobimetallic Complex Containing a $Mn^{III}(\mu_4-OH)Ca^{II}$ Core. <i>Journal of the American Chemical Society</i> , 2011, 133, 9258-9261.	6.6	164
47	Structural Diversity in Metal Complexes with a Dinucleating Ligand Containing Carboxyamidopyridyl Groups. <i>Inorganic Chemistry</i> , 2011, 50, 7922-7924.	1.9	20
48	Catalytic Reduction of Dioxygen to Water with a Monomeric Manganese Complex at Room Temperature. <i>Journal of the American Chemical Society</i> , 2011, 133, 5810-5817.	6.6	138
49	Role of metal-oxo complexes in the cleavage of C-H bonds. <i>Chemical Society Reviews</i> , 2011, 40, 1870.	18.7	274
50	Nickel(II) complexes stabilized by bis[N-(6-pivalamido-2-pyridylmethyl)]benzylamine: Synthesis and characterization of complexes stabilized by a hydrogen bonding network. <i>Inorganica Chimica Acta</i> , 2010, 363, 2728-2733.	1.2	5
51	Formation, Structure, and EPR Detection of a High Spin $Fe^{IV}Oxo$ Species Derived from Either an $Fe^{III}Oxo$ or $Fe^{III}OH$ Complex. <i>Journal of the American Chemical Society</i> , 2010, 132, 12188-12190.	6.6	218
52	Role of the Secondary Coordination Sphere in Metal-Mediated Dioxygen Activation. <i>Inorganic Chemistry</i> , 2010, 49, 3646-3660.	1.9	261
53	Green Methods for Processing and Utilizing Metal Complexes. <i>ACS Symposium Series</i> , 2009, , 274-289.	0.5	1
54	Near-stoichiometric $O_2$ binding on metal centers in Co(salen) nanoparticles. <i>AICHE Journal</i> , 2009, 55, 1040-1045.	1.8	7

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55	Lessons from nature: unraveling biological CH bond activation. <i>Current Opinion in Chemical Biology</i> , 2009, 13, 114-118.	2.8	50
56	Câ~H Bond Cleavage with Reductants: Re-Investigating the Reactivity of Monomeric Mn<sup>III</sup>/IV</sup>â~Oxo Complexes and the Role of Oxo Ligand Basicity. <i>Journal of the American Chemical Society</i> , 2009, 131, 2762-2763.	6.6	171
57	Synthesis, Structure, and Physical Properties for a Series of Monomeric Iron(III) Hydroxo Complexes with Varying Hydrogen-Bond Networks. <i>Inorganic Chemistry</i> , 2008, 47, 5780-5786.	1.9	68
58	The effects of hydrogen bonds on metal-mediated O2 activation and related processes. <i>Chemical Communications</i> , 2008, , 6095.	2.2	83
59	A Monomeric Mn<sup>III</sup>â~Peroxo Complex Derived Directly from Dioxygen. <i>Journal of the American Chemical Society</i> , 2008, 130, 8888-8889.	6.6	100
60	Correlation between Active Center Structure and Enhanced Dioxygen Binding in Co(salen) Nanoparticles: Characterization by In Situ Infrared, Raman, and X-ray Absorption Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2008, 112, 12272-12281.	1.5	17
61	Acetonitrile Hydration and Ethyl Acetate Hydrolysis by Pyrazolate-Bridged Cobalt(II) Dimers Containing Hydrogen-Bond Donors. <i>Inorganic Chemistry</i> , 2007, 46, 10120-10132.	1.9	35
62	A Modular Approach toward Regulating the Secondary Coordination Sphere of Metal Ions:â Differential Dioxygen Activation Assisted by Intramolecular Hydrogen Bonds. <i>Journal of the American Chemical Society</i> , 2006, 128, 15476-15489.	6.6	78
63	Preparation and Properties of a Monomeric MnIVâ~Oxo Complex. <i>Journal of the American Chemical Society</i> , 2006, 128, 8728-8729.	6.6	138
64	Modification of immobilized metal complexes toward the design and synthesis of functional materials for nitric oxide delivery. <i>Journal of Polymer Science Part A</i> , 2006, 44, 2282-2292.	2.5	10
65	Preparation of Iron Amido Complexes via Putative Fe(IV) Imido Intermediates. <i>Journal of the American Chemical Society</i> , 2005, 127, 11596-11597.	6.6	88
66	Bioinspired Hydrogen Bond Motifs in Ligand Design:â€‰ The Role of Noncovalent Interactions in Metal Ion Mediated Activation of Dioxygen. <i>Accounts of Chemical Research</i> , 2005, 38, 54-61.	7.6	377
67	Chalcogens as Terminal Ligands to Iron:â Synthesis and Structure of Complexes with FeIIâ~S and FeIIâ~Se Motifs. <i>Journal of the American Chemical Society</i> , 2004, 126, 6522-6523.	6.6	24
68	Utilization of Hydrogen Bonds To Stabilize Mâ~O(H) Units:â€‰ Synthesis and Properties of Monomeric Iron and Manganese Complexes with Terminal Oxo and Hydroxo Ligands. <i>Journal of the American Chemical Society</i> , 2004, 126, 2556-2567.	6.6	173
69	Monomeric MnIII/IIand FeIII/IIComplexes with Terminal Hydroxo and Oxo Ligands:â Probing Reactivity via Oâ~H Bond Dissociation Energies. <i>Journal of the American Chemical Society</i> , 2003, 125, 13234-13242.	6.6	159
70	Immobilization of a Europium Salen Complex within Porous Organic Hosts:â€‰ Modulation of Luminescence Properties in Different Chemical Environments. <i>Chemistry of Materials</i> , 2003, 15, 3490-3495.	3.2	23
71	Development of bio-inspired chelates with hydrogen bond donors: synthesis and structure of monomeric metal acetate complexes with intramolecular hydrogen bonds. <i>Dalton Transactions</i> , 2003, , 1986-1992.	1.6	16
72	Isolation of Monomeric MnIII/IIâ~OH and MnIIIâ~O Complexes from Water:â Evaluation of Oâ~H Bond Dissociation Energies. <i>Journal of the American Chemical Society</i> , 2002, 124, 1136-1137.	6.6	81

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73	The Use of Non-Covalent Interactions in the Assembly of Metal/Organic Supramolecular Arrays. Comments on Inorganic Chemistry, 2002, 23, 45-78.	3.0	13
74	C2-Symmetric ligands containing hydrogen bond donors: synthesis and properties of Cu(II) complexes of 2,6-bis[N,N <sup>+</sup> -(2-carboxamidophenyl)carbamoyl]pyridine. Dalton Transactions RSC, 2002, , 1714-1720.	2.3	28
75	Hydrogen-Bonding Cavities about Metal Ions: Synthesis, Structure, and Physical Properties for a Series of Monomeric M <sup>n+</sup> -OH Complexes Derived from Water. Inorganic Chemistry, 2001, 40, 4733-4741.	1.9	88
76	Surface grafting of cobalt complexes on polymeric supports: Evidence for site isolation and applications to reversible dioxygen binding. Journal of Polymer Science Part A, 2001, 39, 888-897.	2.5	6
77	Hydrogen-bonding cavities about metal ions: synthesis, structure, and physical properties for a series of monomeric M-OH complexes derived from water. Inorganic Chemistry, 2001, 40, 4733-41.	1.9	25
78	O <sub>2</sub> Activation by Nonheme Iron Complexes: A Monomeric Fe(III)-Oxo Complex Derived From O <sub>2</sub> . Science, 2000, 289, 938-941.	6.0	423
79	Design, Synthesis, and Characterization of Templated Metal Sites in Porous Organic Hosts: Application to Reversible Dioxygen Binding. Journal of the American Chemical Society, 2000, 122, 8946-8955.	6.6	77
80	Hydrogen Bonding in Metal Oxo Complexes: Synthesis and Structure of a Monomeric Manganese(III)-Oxo Complex and Its Hydroxo Analogue. Journal of the American Chemical Society, 2000, 122, 1836-1837.	6.6	95
81	Structure and Magnetic Properties of Trigonal Bipyramidal Iron Nitrosyl Complexes. Inorganic Chemistry, 1999, 38, 3110-3115.	1.9	75
82	Designing Metal Complexes in Porous Organic Hosts. ACS Symposium Series, 1998, , 159-169.	0.5	5
83	Structure and Physical Properties of Trigonal Monopyramidal Iron(II), Cobalt(II), Nickel(II), and Zinc(II) Complexes. Inorganic Chemistry, 1998, 37, 1527-1532.	1.9	56
84	Synthesis and structure of a Mn(III)(OH) complex generated from dioxygen. Chemical Communications, 1997, , 1967.	2.2	41
85	C3-Symmetric Chiral Amidate Complexes: Effects of Ligand Binding on Cavity Structure. Inorganic Chemistry, 1997, 36, 3210-3211.	1.9	54
86	Synthesis and Structure of a Trigonal Monopyramidal Fe(II) Complex and Its Paramagnetic Carbon Monoxide Derivative. Journal of the American Chemical Society, 1996, 118, 6084-6085.	6.6	47
87	Rezeptoren für Oxometallkationen: Koordination an das Dioxoosmium(VI)-Kation über verschiedenartige bindende Wechselwirkungen. Angewandte Chemie, 1995, 107, 1473-1476.	1.6	3
88	Metal Oxo Cation Receptors: Multimode Coordination to the Dioxoosmium(VI) Cation. Angewandte Chemie International Edition in English, 1995, 34, 1359-1362.	4.4	21
89	Models for iron-oxo proteins. Structures and properties of Fe <sup>I</sup> Fe <sup>III</sup> , Zn <sup>II</sup> Fe <sup>III</sup> , and Fe <sup>I</sup> Ga <sup>III</sup> complexes with (μ <sub>2</sub> -phenoxo)bis(μ <sub>2</sub> -carboxylato)dimetal cores. Journal of the American Chemical Society, 1989, 111, 6183-6195.	6.6	167
90	Heterobimetallic complexes with (μ <sub>2</sub> -phenoxo)bis(μ <sub>2</sub> -carboxylato) cores. Journal of the American Chemical Society, 1988, 110, 1986-1988.	6.6	38