

# Yurii V Geletii

## List of Publications by Year in descending order

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104  
papers

7,038  
citations

109321

35  
h-index

56724

83  
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119  
all docs

119  
docs citations

119  
times ranked

5178  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Fast Soluble Carbon-Free Molecular Water Oxidation Catalyst Based on Abundant Metals. <i>Science</i> , 2010, 328, 342-345.	12.6	1,354
2	Polyoxometalate water oxidation catalysts and the production of green fuel. <i>Chemical Society Reviews</i> , 2012, 41, 7572.	38.1	678
3	An All-Inorganic, Stable, and Highly Active Tetra-ruthenium Homogeneous Catalyst for Water Oxidation. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 3896-3899.	13.8	559
4	Efficient Light-Driven Carbon-Free Cobalt-Based Molecular Catalyst for Water Oxidation. <i>Journal of the American Chemical Society</i> , 2011, 133, 2068-2071.	13.7	336
5	Homogeneous Light-Driven Water Oxidation Catalyzed by a Tetra-ruthenium Complex with All Inorganic Ligands. <i>Journal of the American Chemical Society</i> , 2009, 131, 7522-7523.	13.7	330
6	An Exceptionally Fast Homogeneous Carbon-Free Cobalt-Based Water Oxidation Catalyst. <i>Journal of the American Chemical Society</i> , 2014, 136, 9268-9271.	13.7	260
7	A Noble-Metal-Free, Tetra-nickel Polyoxotungstate Catalyst for Efficient Photocatalytic Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2014, 136, 14015-14018.	13.7	213
8	Differentiating Homogeneous and Heterogeneous Water Oxidation Catalysis: Confirmation that $[\text{Co}_4(\text{H}_2\text{O})_2(\text{PW}_9\text{O}_{34})_2]^{10-}$ is a Molecular Water Oxidation Catalyst. <i>Journal of the American Chemical Society</i> , 2013, 135, 14110-14118.	13.7	196
9	Structural, Physicochemical, and Reactivity Properties of an All-Inorganic, Highly Active Tetra-ruthenium Homogeneous Catalyst for Water Oxidation. <i>Journal of the American Chemical Society</i> , 2009, 131, 17360-17370.	13.7	162
10	$\text{Cs}_9[(\text{PW}_{10}\text{O}_{36})_2\text{Ru}_4\text{O}_5(\text{OH})(\text{H}_2\text{O})_4]$ , a new all-inorganic, soluble catalyst for the efficient visible-light-driven oxidation of water. <i>Chemical Communications</i> , 2010, 46, 2784.	4.1	145
11	Graphene-supported $[\{\text{Ru}_4\text{O}_4(\text{OH})_2(\text{H}_2\text{O})_4\}(\text{PW}_{10}\text{O}_{36})_2]^{10-}$ for highly efficient electrocatalytic water oxidation. <i>Energy and Environmental Science</i> , 2013, 6, 2654.	30.8	124
12	Peroxynitrite Scavenging by Different Antioxidants. Part I: Convenient Assay. <i>Nitric Oxide - Biology and Chemistry</i> , 1999, 3, 40-54.	2.7	118
13	A nickel containing polyoxometalate water oxidation catalyst. <i>Dalton Transactions</i> , 2012, 41, 13043.	3.3	111
14	A Homogeneous Catalyst for Selective O <sub>2</sub> Oxidation at Ambient Temperature. Diversity-Based Discovery and Mechanistic Investigation of Thioether Oxidation by the Au(III)Cl <sub>2</sub> NO <sub>3</sub> (thioether)/O <sub>2</sub> System. <i>Journal of the American Chemical Society</i> , 2001, 123, 1625-1635.	13.7	105
15	The True Nature of the Di-iron(III) Keggin Structure in Water: Catalytic Aerobic Oxidation and Chemistry of an Unsymmetrical Trimer. <i>Journal of the American Chemical Society</i> , 2006, 128, 11268-11277.	13.7	105
16	Visible-light-driven hydrogen evolution from water using a noble-metal-free polyoxometalate catalyst. <i>Journal of Catalysis</i> , 2013, 307, 48-54.	6.2	95
17	Structurally Characterized Iridium(III)-Containing Polytungstate and Catalytic Water Oxidation Activity. <i>Inorganic Chemistry</i> , 2009, 48, 5596-5598.	4.0	88
18	Dioxygen and Water Activation Processes on Multi-Ru-Substituted Polyoxometalates: Comparison with the Blue-Dimer Water Oxidation Catalyst. <i>Journal of the American Chemical Society</i> , 2009, 131, 6844-6854.	13.7	88

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19	Wateroxidation catalyzed by a new tetracobalt-substituted polyoxometalate complex: $[\{Co_4(\frac{1}{4}OH)(H_2O)_3\}(Si_2W_{19}O_{70})]^{11-}$ . Dalton Transactions, 2012, 41, 2084-2090.	3.3	87
20	Revisiting the Polyoxometalate-Based Late-Transition-Metal-Oxo Complexes: The "Oxo Wall" Stands. Inorganic Chemistry, 2012, 51, 7025-7031.	4.0	86
21	Polyoxometalate Multi-Electron Transfer Catalytic Systems for Water Splitting. European Journal of Inorganic Chemistry, 2014, 2014, 635-644.	2.0	85
22	Electrooxidation of Ethanol and Methanol Using the Molecular Catalyst $[\{Ru_4O_4(OH)_2(H_2O)_4\}(\beta-SiW_{10}O_{36})]^{3-}$ . Journal of the American Chemical Society, 2016, 138, 2617-2628.	13.7	72
23	Reduction of $O_2$ to Superoxide Anion ( $O_2^{\cdot-}$ ) in Water by Heteropolytungstate Cluster-Anions. Journal of the American Chemical Society, 2006, 128, 17033-17042.	13.7	72
24	Terminal Gold-Oxo Complexes. Journal of the American Chemical Society, 2007, 129, 11118-11133.	13.7	72
25	Water splitting with polyoxometalate-treated photoanodes: enhancing performance through sensitizer design. Chemical Science, 2015, 6, 5531-5543.	7.4	67
26	Computational Modeling of Di-Transition-Metal-Substituted $\beta$ -Keggin Polyoxometalate Anions. Structural Refinement of the Protonated Divacant Lacunary Silicodecatungstate. Inorganic Chemistry, 2004, 43, 7702-7708.	4.0	63
27	Voltammetric Determination of the Reversible Potentials for $[\{Ru_4O_4(OH)_2(H_2O)_4\}(\beta-SiW_{10}O_{36})]^{3-}$ over the pH Range of 2-12: Electrolyte Dependence and Implications for Water Oxidation Catalysis. Inorganic Chemistry, 2013, 52, 11986-11996.	4.0	53
28	$[\{Ni_4(OH)_3AsO_4\}_4(Bi_9PW_9O_{34})_4]^{3-}$ : A New Polyoxometalate Structural Family with Catalytic Hydrogen Evolution Activity. Chemistry - A European Journal, 2015, 21, 17363-17370.	3.3	52
29	Insights into Photoinduced Electron Transfer between $[Ru(bpy)_3]^{2+}$ and $[S_2O_8]^{2-}$ in Water: Computational and Experimental Studies. Journal of Physical Chemistry A, 2010, 114, 73-80.	2.5	51
30	Concerted Proton-Electron Transfer to Dioxygen in Water. Journal of the American Chemical Society, 2010, 132, 11678-11691.	13.7	45
31	Catalytic aerobic oxidation of 2-chloroethyl ethylsulfide, a mustard simulant, under ambient conditions. Journal of Molecular Catalysis A, 2001, 176, 49-63.	4.8	42
32	The Role of the Central Atom in Structure and Reactivity of Polyoxometalates with Adjacent d-Electron Metal Sites. Computational and Experimental Studies of $\beta$ - $[(X_n+O_4)Ru^{III}_2(OH)_2(MFM)_{10}O_{32}](8-n)$ -for MFM= Mo and W, and X = Al, Si, V, and S. Journal of Physical Chemistry B, 2006, 110, 170-173.	2.6	42
33	Electron Exchange between $\beta$ -Keggin Tungstoaluminates and a Well-Defined Cluster-Anion Probe for Studies in Electron Transfer. Inorganic Chemistry, 2005, 44, 8955-8966.	4.0	40
34	Computational Studies of the Geometry and Electronic Structure of an All-Inorganic and Homogeneous Tetra-Ru-Polyoxotungstate Catalyst for Water Oxidation and Its Four Subsequent One-Electron Oxidized Forms. Journal of Physical Chemistry A, 2010, 114, 535-542.	2.5	39
35	Stabilization of Polyoxometalate Water Oxidation Catalysts on Hematite by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2017, 9, 35048-35056.	8.0	39
36	Polyoxometalates in the Design of Effective and Tunable Water Oxidation Catalysts. Israel Journal of Chemistry, 2011, 51, 238-246.	2.3	37

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37	Spectroscopic Studies of Light-driven Water Oxidation Catalyzed by Polyoxometalates. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 11850-11859.	3.7	37
38	Catalysis of Peroxynitrite Reactions by Manganese and Iron Porphyrins. <i>Nitric Oxide - Biology and Chemistry</i> , 1997, 1, 507-521.	2.7	33
39	Vicinal Dinitridoruthenium-Substituted Polyoxometalates $[XW_{10}O_{38}\{RuN\}_2]^{6-}$ (X=Si or Ge). <i>Chemistry - A European Journal</i> , 2009, 15, 10233-10243.	3.3	33
40	Detailed Electrochemical Studies of the Tetraruthenium Polyoxometalate Water Oxidation Catalyst in Acidic Media: Identification of an Extended Oxidation Series using Fourier Transformed Alternating Current Voltammetry. <i>Inorganic Chemistry</i> , 2012, 51, 11521-11532.	4.0	33
41	Kinetics and mechanism of low-temperature ozone decomposition by Co-ions adsorbed on silica. <i>Catalysis Today</i> , 1999, 53, 715-723.	4.4	31
42	Mechanism of the Divanadium-Substituted Polyoxotungstate $[V_2-1,2-H_2SiV_2W_{10}O_{40}]^{4-}$ Catalyzed Olefin Epoxidation by $H_2O_2$ : A Computational Study. <i>Inorganic Chemistry</i> , 2009, 48, 1871-1878.	4.0	29
43	Oxidation of saturated hydrocarbons by hydrogen peroxide in pyridine solution catalysed by copper and iron perchlorates. <i>Journal of the Chemical Society Chemical Communications</i> , 1988, , 936.	2.0	27
44	Can the Ebselen Derivatives Catalyze the Isomerization of Peroxynitrite to Nitrate?. <i>Journal of the American Chemical Society</i> , 2003, 125, 3877-3888.	13.7	27
45	Asymmetric terminal ligation on substituted sites in a disorder-free Keggin anion, $[SiFe_2W_{10}O_{36}(OH)_2(H_2O)Cl]^{5-}$ . <i>Dalton Transactions</i> , 2005, , 2017.	3.3	27
46	Complex catalysts from self-repairing ensembles to highly reactive air-based oxidation systems. <i>Comptes Rendus Chimie</i> , 2007, 10, 305-312.	0.5	27
47	Insights into Photoinduced Electron Transfer Between $[Ru(mptpy)_2]^{4+}$ (mptpy) $T_j$ ETQq1 1 0.784314 rgBT Computational and Experimental Studies. <i>Journal of Physical Chemistry A</i> , 2010, 114, 6284-6297.	2.5	27
48	Insights into the Mechanism of $O_2$ Formation and Release from the $Mn_4O_4L_6$ $\alpha$ -Cubane Cluster. <i>Journal of Physical Chemistry A</i> , 2010, 114, 11417-11424.	2.5	27
49	Mediator Enhanced Water Oxidation Using $Rb_4[Ru^{II}(bpy)_3]_5[ Ru^{III}_4O_4(OH)_2]$ Film Modified Electrodes. <i>Inorganic Chemistry</i> , 2014, 53, 7561-7570.	2.5	27
50	An Inorganic Chromophore Based on a Molecular Oxide Supported Metal Carbonyl Cluster: $[P_2W_{17}O_{61}\{Re(CO)_3\}_3\{ORb(H_2O)\}_3(OH)_3]^{9-}$ . <i>Inorganic Chemistry</i> , 2013, 52, 13490-13495.	4.0	24
51	New complexes and materials for $O_2$ -based oxidations. <i>Journal of Molecular Catalysis A</i> , 2006, 251, 234-238.	4.8	22
52	Late transition metal-oxo compounds and open-framework materials that catalyze aerobic oxidations. <i>Advances in Inorganic Chemistry</i> , 2008, , 245-272.	1.0	22
53	Multi-Tasking POM Systems. <i>Frontiers in Chemistry</i> , 2018, 6, 365.	3.6	22
54	Theoretical Studies of the Reaction Mechanisms of Dimethylsulfide and Dimethylselenide with Peroxynitrite. <i>Journal of Physical Chemistry A</i> , 2003, 107, 5862-5873.	2.5	21

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55	A Hexanuclear Cobalt(II) Cluster Incorporated in a Banana-Shaped Tungstovanadate: $[(\text{Co}(\text{OH})_2)_2\text{Co}_2\text{V}_9\text{O}_{34}]_2(\text{V}_6\text{O}_{26})$ . European Journal of Inorganic Chemistry, 2013, 2013, 1720-1725.		
56	Speciation and Dynamics in the $[\text{Co}_4\text{V}_2\text{W}_{18}\text{O}_{68}]^{10-}/\text{Co}(\text{II})_{aq}/\text{Co}_2\text{O}_3$ Catalytic Water Oxidation System. ACS Catalysis, 2018, 8, 11952-11959.	10.2	19
57	Synthesis, crystal structures, Mössbauer spectra, and redox properties of binuclear and tetranuclear iron-sulfur nitrosyl clusters. Russian Chemical Bulletin, 2000, 49, 444-451.	1.5	18
58	Nitrogen-Atom Transfer from $[\text{PW}_{11}\text{O}_{39}\text{Ru}^{\text{VI}}\text{N}^{4-}]$ to $\text{PPh}_3$ . Inorganic Chemistry, 2009, 48, 9436-9443.	4.0	18
59	Bis(4-(4-pyridyl)-2,6-terpyridine)ruthenium(ii) complexes and their N-alkylated derivatives in catalytic light-driven water oxidation. RSC Advances, 2013, 3, 20647.	3.6	18
60	Highly efficient and stable catalyst for peroxyxynitrite decomposition. Canadian Journal of Chemistry, 2001, 79, 792-794.	1.1	17
61	Oxidation of Reduced Keggin Heteropolytungstates by Dioxygen in Water Catalyzed by Cu(II). ACS Catalysis, 2015, 5, 7048-7054.	11.2	17
62	Mechanistic Studies of $\text{O}_2$ -Based Sulfoxidations Catalyzed by $\text{NO}_x/\text{Br}$ Systems. ACS Catalysis, 2011, 1, 1364-1370.	11.2	16
63	A dodecanuclear Zn cluster sandwiched by polyoxometalate ligands. Dalton Transactions, 2012, 41, 9908.	3.3	16
64	Collecting meaningful early-time kinetic data in homogeneous catalytic water oxidation with a sacrificial oxidant. Physical Chemistry Chemical Physics, 2014, 16, 11942-11949.	2.8	16
65	Tafel Slope Analyses for Homogeneous Catalytic Reactions. Catalysts, 2021, 11, 87.	3.5	16
66	Density Functional Study of the Roles of Chemical Composition of Di-Transition-Metal-Substituted $\beta$ -Keggin Polyoxometalate Anions. Journal of Physical Chemistry B, 2006, 110, 5230-5237.	2.6	15
67	Di- and Tri-Cobalt Silicotungstates: Synthesis, Characterization, and Stability Studies. Inorganic Chemistry, 2013, 52, 1018-1024.	4.0	15
68	Does Peroxynitrite Partition between Aqueous and Gas Phases? Implication for Lipid Peroxidation. Chemical Research in Toxicology, 2001, 14, 1232-1238.	3.3	12
69	Peroxynitrite Reactions with Dimethylsulfide and Dimethylselenide: An Experimental Study. Journal of Physical Chemistry A, 2004, 108, 289-294.	2.5	12
70	The Efficient Oxidation of Alkanes by Hydrogen Peroxide in Pyridine Mixed Solvents Catalysed by Copper and Other Transition Metal Salts. Mendeleev Communications, 1991, 1, 115-116.	1.6	10
71	A density functional study of geometry and electronic structures of $[(\text{SiO}_4)(\text{MIII})_2(\text{OH})_2\text{W}_{10}\text{O}_{32}]_4^{8-}$ , $\text{M}=\text{Mo}, \text{Ru}$ and $\text{Rh}$ . Journal of Molecular Catalysis A, 2007, 262, 227-235.	4.8	10
72	Synergetic Catalysis of Copper and Iron in Oxidation of Reduced Keggin Heteropolytungstates by Dioxygen. Inorganic Chemistry, 2018, 57, 311-318.	4.0	10

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73	Ionic-strength dependence of electron-transfer reactions of Keggin heteropolytungstates: Mechanistic probes of O <sub>2</sub> activation in water. <i>Journal of Molecular Catalysis A</i> , 2006, 251, 255-262.	4.8	9
74	The role of the heteroatom (X=Si, PV, and SVI) on the reactivity of $\{[\text{Ru}^{\text{III}}(\text{H}_2\text{O})_4(\text{OH})_2(\text{H}_2\text{O})_2][\text{X}_n\text{W}_{10}\text{O}_{36}]\}^{(8-n)+}$ with the O <sub>2</sub> molecule. <i>Theoretical Chemistry Accounts</i> , 2011, 130, 197-207.	1.4	9
75	Electron capture and transport by heteropolyanions: Multi-functional electrolytes for biomass-based fuel cells. <i>Journal of Molecular Catalysis A</i> , 2007, 262, 59-66.	4.8	8
76	Catalysis of ascorbic acid oxidation with peroxyxynitrite by biomimetic Cu-complexes. <i>Reaction Kinetics and Catalysis Letters</i> , 2002, 77, 277-285.	0.6	7
77	Catalysts for selective aerobic oxidation under ambient conditions. <i>Catalysis By Metal Complexes</i> , 2003, , 227-264.	0.6	7
78	Catalysts for Aerobic Decontamination of Chemical Warfare Agents under Ambient Conditions. <i>ACS Symposium Series</i> , 2007, , 198-209.	0.5	7
79	Multi-Electron-Transfer Catalysts Needed for Artificial Photosynthesis. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1387, 1.	0.1	7
80	A solvent-free solid catalyst for the selective and color-indicating ambient-air removal of sulfur mustard. <i>Communications Chemistry</i> , 2021, 4, .	4.5	7
81	Cation Radicals of Heterocyclic N-Oxides and Their Reactions. <i>Heterocycles</i> , 1989, 28, 677.	0.7	7
82	Structurally Precise Two-Transition-Metal Water Oxidation Catalysts: Quantifying Adjacent 3d Metals by Synchrotron X-Radiation Anomalous Dispersion Scattering. <i>Inorganic Chemistry</i> , 2022, 61, 6252-6262.	4.0	7
83	Cation-radical of pyridine N-oxide and its reactions with C-H bonds. <i>Reaction Kinetics and Catalysis Letters</i> , 1988, 37, 307-312.	0.6	6
84	Effects of Competitive Active-Site Ligand Binding on Proton- and Electron-Transfer Properties of the $[\text{Co}_4(\text{H}_2\text{O})_2(\text{PW}_9\text{O}_{34})_2]^{10-}$ Polyoxometalate Water Oxidation Catalyst. <i>Journal of Cluster Science</i> , 2017, 28, 839-852.	3.3	6
85	Aerobic oxidation of glycerol catalyzed by M salts of PMo <sub>12</sub> O <sub>40</sub> 3-(M = K <sup>+</sup> , Zn <sup>2+</sup> , Cu <sup>2+</sup> , Al <sup>3+</sup> , Cr <sup>3+</sup> , Fe <sup>3+</sup> ). <i>Applied Catalysis A: General</i> , 2019, 579, 52-57.	4.3	6
86	Heterogenization of polyoxometalates as solid catalysts in aerobic oxidation of glycerol. <i>Catalysis Science and Technology</i> , 2020, 10, 3771-3781.	4.1	6
87	Studies on the Mechanism of Gif Reactions. , 1993, , 225-242.		6
88	Interfacial charge transfer dynamics in TiO <sub>2</sub> -sensitizer-Ru <sub>4</sub> POM photocatalytic systems for water oxidation. , 2011, , .		5
89	In Situ Recrystallization of Polyoxometalates: From 0D Architectures to 2D Inorganic-Organic Hybrids. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 1827-1834.	2.0	4
90	Phenazine di-N-oxide radical cation and its reactions with hydrocarbons. <i>Russian Chemical Bulletin</i> , 1996, 45, 1889-1895.	1.5	3

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91	Highly efficient and stable catalyst for peroxyxynitrite decomposition. Canadian Journal of Chemistry, 2001, 79, 792-794.	1.1	3
92	Mechanism and parameters of oxidation of alkylaromatic hydrocarbons in the presence of cobalt and bromine ions. Petroleum Chemistry: USSR (English Translation of Neftekhimiya), 1978, 18, 145-153.	0.0	2
93	Oxidation rate of saturated hydrocarbons by permanganate in aqueous solutions. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1982, 31, 1473-1474.	0.0	1
94	Route of autooxidation of organic compounds through a metal ion and bromide catalysis. Petroleum Chemistry: USSR (English Translation of Neftekhimiya), 1986, 26, 234-246.	0.0	1
95	Electrogenerated cation radicals of heteroaromatic N-oxides and oxidation of cyclohexane induced by them. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1990, 39, 886-890.	0.0	1
96	Oxidation of Ethylbenzene by Phenazine-Di-N-Oxide Radical Cation. Studies in Surface Science and Catalysis, 1991, 66, 641-647.	1.5	1
97	Formation and redox properties of a complex of phenazine di-N-oxide with a proton. Bulletin of the Russian Academy of Sciences Division of Chemical Science, 1992, 41, 655-659.	0.0	1
98	Phenazine Di-N-toxide Radical Cation Reactions with Secondary Amines. Evidence for Oxygen Cation Transfer. Mendeleev Communications, 1993, 3, 142-143.	1.6	1
99	Evaluation of antioxidant activity using peroxyxynitrite as a source of radicals. Methods in Enzymology, 2002, 359, 366-379.	1.0	1
100	Structural and mechanistic studies of tunable, stable, fast multi-cobalt water oxidation catalysts. Proceedings of SPIE, 2011, , .	0.8	1
101	Computational Modeling of Di-Transition-Metal-Substituted $\gamma$ -Keggin Polyoxometalate Anions. Structural Refinement of the Protonated Divacant Lacunary Silicododecatungstate.. ChemInform, 2005, 36, no.	0.0	0
102	Multi-electron Transfer Catalysts for Air-Based Organic Oxidations and Water Oxidation. NATO Science for Peace and Security Series B: Physics and Biophysics, 2012, , 229-242.	0.3	0
103	Polyoxometalate systems to probe catalyst environment and structure in water oxidation catalysis. Advances in Inorganic Chemistry, 2022, , 351-372.	1.0	0
104	Insights into the Mechanism of H <sub>2</sub> O <sub>2</sub> -based Olefin Epoxidation Catalyzed by the Lacunary $[\text{V}^3\text{-(SiO}_4\text{)}_4\text{W}_{10}\text{O}_{32}\text{H}_4]^{4-}$ and di-V-substituted- $\gamma$ -Keggin $[\text{V}^3\text{-1,2-H}_2\text{Si}_2\text{W}_{10}\text{O}_{40}]^{4-}$ Polyoxometalates. A Computational Study. , 0, , 215-230.		0