Mihail Atanasov

List of Publications by Year
in descending order

34	3,571	304743	414414
papers	citations	22 h-index	32 g-index

36	36	36	3037
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Magnetic blocking in a linear iron(I) complex. Nature Chemistry, 2013, 5, 577-581.	13.6	562
2	Slow magnetization dynamics in a series of two-coordinate iron(<scp>ii</scp>) complexes. Chemical Science, 2013, 4, 125-138.	7.4	518
3	A four-coordinate cobalt(II) single-ion magnet with coercivity and a very high energy barrier. Nature Communications, 2016, 7, 10467.	12.8	374
4	First principles approach to the electronic structure, magnetic anisotropy and spin relaxation in mononuclear 3d-transition metal single molecule magnets. Coordination Chemistry Reviews, 2015, 289-290, 177-214.	18.8	267
5	A linear cobalt(II) complex with maximal orbital angular momentum from a non-Aufbau ground state. Science, 2018, 362, .	12.6	254
6	A theoretical analysis of chemical bonding, vibronic coupling, and magnetic anisotropy in linear iron(<scp>ii</scp>) complexes with single-molecule magnet behavior. Chemical Science, 2013, 4, 139-156.	7.4	243
7	Covalency and chemical bonding in transition metal complexes: An ab initio based ligand field perspective. Coordination Chemistry Reviews, 2017, 344, 2-25.	18.8	178
8	Ab Initio Ligand-Field Theory Analysis and Covalency Trends in Actinide and Lanthanide Free Ions and Octahedral Complexes. Inorganic Chemistry, 2017, 56, 8802-8816.	4.0	106
9	MÃ¶ssbauer Spectroscopy as a Probe of Magnetization Dynamics in the Linear Iron(I) and Iron(II) Complexes [Fe(C(SiMe₃)₃)₂]^{1â€“/0}. Inorganic Chemistry, 2013, 52, 13123-13131.	4.0	99
10	Periodic Trends in Lanthanide Compounds through the Eyes of Multireference ab Initio Theory. Inorganic Chemistry, 2016, 55, 4457-4469.	4.0	98
11	A Modern First-Principles View on Ligand Field Theory Through the Eyes of Correlated Multireference Wavefunctions. Structure and Bonding, 2011, , 149-220.	1.0	94
12	Spinâ€“phonon couplings in transition metal complexes with slow magnetic relaxation. Nature Communications, 2018, 9, 2572.	12.8	93
13	Chemistry and Quantum Mechanics in 2019: Give Us Insight and Numbers. Journal of the American Chemical Society, 2019, 141, 2814-2824.	13.7	93
14	Combined Ligand Field and Density Functional Theory Analysis of the Magnetic Anisotropy in Oligonuclear Complexes Based on Fe^{III}â^'CNâ^'M^{II} Exchange-Coupled Pairs. Inorganic Chemistry, 2008, 47, 2449-2463.	4.0	78
15	Magneto-Structural Correlations in Pseudotetrahedral Forms of the [Co(SPh)₄]^{2â€“} Complex Probed by Magnetometry, MCD Spectroscopy, Advanced EPR Techniques, and ab Initio Electronic Structure Calculations. Inorganic Chemistry, 2017, 56, 3102-3118.	4.0	74
16	Trinuclear {M¹}CN{M²}₂Complexes (M¹=) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1	4.0	60
17	DFT Studies on the Magnetic Exchange Across the Cyanide Bridge. Journal of Physical Chemistry A, 2006, 110, 13332-13340.	2.5	55
18	Challenges in Multireference Perturbation Theory for the Calculations of the g-Tensor of First-Row Transition-Metal Complexes. Journal of Chemical Theory and Computation, 2018, 14, 4662-4677.	5.3	55

#	Article	IF	Citations
19	Magnetic Transitions in Iron Porphyrin Halides by Inelastic Neutron Scattering and Ab Initio Studies of Zero-Field Splittings. Inorganic Chemistry, 2015, 54, 9790-9801.	4.0	49
20	Calculation of spin-orbit coupling within the LFDFT: Applications to [NiX4]2? (X?F?, Cl?, Br?, I?). International Journal of Quantum Chemistry, 2005, 102, 119-131.	2.0	48
21	Improvement of Ab Initio Ligand Field Theory by Means of Multistate Perturbation Theory. Journal of Physical Chemistry A, 2020, 124, 1025-1037.	2.5	28
22	Dispersion Forces Drive the Formation of Uraniumâ€“Alkane Adducts. Journal of the American Chemical Society, 2020, 142, 1864-1870.	13.7	17
23	Measurement of the Ligand Field Spectra of Ferrous and Ferric Iron Chlorides Using 2p3d RIXS. Inorganic Chemistry, 2017, 56, 8203-8211.	4.0	15
24	Effect of Spinâ€“Orbit Coupling on Phonon-Mediated Magnetic Relaxation in a Series of Zero-Valent Vanadium, Niobium, and Tantalum Isocyanide Complexes. Inorganic Chemistry, 2021, 60, 18553-18560.	4.0	15
25	Probing Magnetic Excitations in Co^{II} Singleâ€Molecule Magnets by Inelastic Neutron Scattering. European Journal of Inorganic Chemistry, 2019, 2019, 1119-1127.	2.0	14
26	Chemical Bonding in Molecules and Complexes Containing d-Elements Based on DFT. Monatshefte FÃ¼r Chemie, 2005, 136, 925-963.	1.8	11
27	The [U₂F₁₂]^{2â^'} Anion of Sr[U₂F₁₂]. Angewandte Chemie - International Edition, 2018, 57, 2914-2918.	13.8	11
28	Coexistence of Two Different Distorted Octahedral [MnF₆]^{3â^'} Sites in K₃[MnF₆]: Manifestation in Spectroscopy and Magnetism. Chemistry - A European Journal, 2021, 27, 9801-9813.	3.3	11
29	First-Principles Study of Optical Absorption Energies, Ligand Field and Spin-Hamiltonian Parameters of Cr³⁺ Ions in Emeralds. Inorganic Chemistry, 2022, 61, 178-192.	4.0	10
30	Robust magnetic anisotropy of a monolayer of hexacoordinate Fe(<scp>ii</scp>) complexes assembled on Cu(111). Inorganic Chemistry Frontiers, 2021, 8, 2395-2404.	6.0	9
31	Computational Studies on Vibronic Coupling in Single Molecule Magnets: Impact on the Mechanism of Magnetic Relaxation. Journal of Physics: Conference Series, 2018, 1148, 012006.	0.4	8
32	On the Mechanism of Indeno[1,2,3-c,d]-pyrene Ozonation. Monatshefte FÃ¼r Chemie, 1998, 129, 999-1005.	1.8	0
33	Probing Magnetic Excitations in CoII Single-Molecule Magnets by Inelastic Neutron Scattering. European Journal of Inorganic Chemistry, 2019, 2019, 1055-1055.	2.0	0
34	Spin-chemical effects on intramolecular photoinduced charge transfer reactions in bisphenanthroline copper(<scp>i</scp>)-viologen dyad assemblies. Chemical Science, 2020, 11, 5511-5525.	7.4	0