Zoltan Varga

List of Publications by Year in descending order

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68	1,654	361045	301761
papers	citations	20 h-index	39 g-index

72	72	72	1252
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An improved potential energy surface and multi-temperature quasiclassical trajectory calculations of N2 + N2 dissociation reactions. Journal of Chemical Physics, 2015, 143, 054304.	1.2	178
2	Global ab initio ground-state potential energy surface of N4. Journal of Chemical Physics, 2013, 139, 044309.	1.2	175
3	Halogen acceptors in hydrogen bonding. Coordination Chemistry Reviews, 2006, 250, 710-727.	9.5	171
4	Assessment of electronic structure methods for the determination of the ground spin states of Fe(<scp>ii</scp>), Fe(<scp>iii</scp>) and Fe(<scp>iv</scp>) complexes. Physical Chemistry Chemical Physics, 2017, 19, 13049-13069.	1.3	100
5	Potential energy surfaces for O + O2 collisions. Journal of Chemical Physics, 2017, 147, 154312.	1.2	73
6	Potential energy surfaces of quintet and singlet O₄. Journal of Chemical Physics, 2017, 147, 034301.	1.2	65
7	Potential energy surface of triplet N2O2. Journal of Chemical Physics, 2016, 144, 024310.	1.2	63
8	Potential energy surface of triplet O4. Journal of Chemical Physics, 2018, 148, 124314.	1.2	53
9	Vibrational Energy Transfer and Collision-Induced Dissociation in O+O2 Collisions. Journal of Thermophysics and Heat Transfer, 2019, 33, 797-807.	0.9	49
10	Global triplet potential energy surfaces for the N2(X1Î£) + O(3P) â†' NO(X2Î) + N(4S) reaction. Journal of Chemical Physics, 2016, 144, 024309.	1.2	41
11	Many-Body Permutationally Invariant Polynomial Neural Network Potential Energy Surface for N₄. Journal of Chemical Theory and Computation, 2020, 16, 4822-4832.	2.3	40
12	Diabatic States of Molecules. Journal of Physical Chemistry A, 2022, 126, 992-1018.	1.1	29
13	Theoretical Study of the Structure and Bonding in ThC₂ and UC₂. Journal of Physical Chemistry A, 2012, 116, 747-755.	1.1	28
14	Multi-state pair-density functional theory. Faraday Discussions, 2020, 224, 348-372.	1.6	28
15	Quasilinear Molecule par Excellence, SrCl2: Structure from High-Temperature Gas-Phase Electron Diffraction and Quantum-Chemical Calculationsâ€"Computed Structures of SrCl2â‹…Argon Complexes. Chemistry - A European Journal, 2006, 12, 8345-8357.	1.7	27
16	On the effect of 4f electrons on the structural characteristics of lanthanide trihalides: Computational and electron diffraction study of dysprosium trichloride. Journal of Chemical Physics, 2008, 128, 074301.	1.2	24
17	Long-Range Effects in Oligopeptides. A Theoretical Study of the Î²-Sheet Structure of Glyn (n = 2â^'10). Journal of Physical Chemistry A, 2004, 108, 6869-6873.	1.1	23
18	A quasiclassical trajectory study of the N2(X1Î£) + O(3P) â†' NO(X2Î) + N(4S) reaction. Journal of Chemical Physics, 2016, 144, 234314.	1.2	23

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19	Potential energy surfaces for high-energy N + O2 collisions. Journal of Chemical Physics, 2021, 154, 084304.	1.2	23
20	Prompt D0, D+, and D*+ production in Pbâ€“Pb collisions at $$ sqrt{s_{mathrm{NN}}} $$ = 5.02 TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	23
21	The Elusive Structure of CrCl₂â€”A Combined Computational and Gasâ€Phase Electronâ€Diffraction Study. Chemistry - A European Journal, 2008, 14, 5130-5143.	1.7	20
22	Conservation of Angular Momentum in Direct Nonadiabatic Dynamics. Journal of Physical Chemistry Letters, 2020, 11, 1135-1140.	2.1	20
23	Permutationally Restrained Diabatization by Machine Intelligence. Journal of Chemical Theory and Computation, 2021, 17, 1106-1116.	2.3	20
24	Structure and Other Molecular Properties of Actinide Trichlorides AnCl₃ (An = Thâ€“Cm). Journal of Physical Chemistry A, 2013, 117, 11357-11363.	1.1	17
25	Does the 4f Electron Configuration Affect Molecular Geometries? A Joint Computational, Vibrational Spectroscopic, and Electron Diffraction Study of Dysprosium Tribromide. Inorganic Chemistry, 2009, 48, 4143-4153.	1.9	16
26	Substituent effects on long-range interactions in the Î²-sheet structure of oligopeptides. Computational and Theoretical Chemistry, 2005, 755, 247-251.	1.5	15
27	Gas-Phase Structures of Iron Trihalides: A Computational Study of all Iron Trihalides and an Electron Diffraction Study of Iron Trichloride. Inorganic Chemistry, 2010, 49, 1039-1045.	1.9	15
28	Molecular Constants of Aluminum Monohalides:Â Caveats for Computations of Simple Inorganic Molecules. Journal of Physical Chemistry A, 2007, 111, 6-8.	1.1	13
29	Water Catalysis of the Reaction of Methanol with OH Radical in the Atmosphere is Negligible. Angewandte Chemie - International Edition, 2020, 59, 10826-10830.	7.2	13
30	Comprehensive study of the structure of aluminum trihalides from electron diffraction and computation. Structural Chemistry, 2012, 23, 879-893.	1.0	12
31	Hyper Open-Shell Excited Spin States of Transition-Metal Compounds: FeF2, FeF2Â·Â·Â·Ethane, and FeF2Â·Â·Â·Ethylene. Journal of Physical Chemistry A, 2018, 122, 2563-2579.	1.1	12
32	Direct diabatization based on nonadiabatic couplings: the N/D method. Physical Chemistry Chemical Physics, 2018, 20, 26643-26659.	1.3	12
33	Production of pions, kaons, (anti-)protons and $$phi $$ mesons in Xeâ€“Xe collisions at $$sqrt{s_{mathrm{NN}}}$$Â=Â5.44 TeV. European Physical Journal C, 2021, 81, 1.	1.4	12
34	Potential energy surface for high-energy N + N₂ collisions. Physical Chemistry Chemical Physics, 2021, 23, 26273-26284.	1.3	12
35	Hydrogen bonding in peptide secondary structures. International Journal of Quantum Chemistry, 2005, 105, 302-312.	1.0	11
36	Oviposition preferences of Maculinea alcon as influenced by aphid (Aphis gentianae) and fungal (Puccinia gentianae) infestation of larval host plants. Ecological Entomology, 2009, 34, 90-97.	1.1	11

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37	Hyper Open-Shell States: The Lowest Excited Spin States of O Atom, Fe²⁺ Ion, and FeF₂. Journal of the American Chemical Society, 2017, 139, 12569-12578.	6.6	11
38	On the thermal expansion of molecules. Structural Chemistry, 2011, 22, 111-121.	1.0	10
39	Quasiclassical Trajectory Analysis of the N2 + N2 Reaction Using a New Ab Initio Potential Energy Surface. , 2014, , .		10
40	Modification of Jet Structure in High-Multiplicity pp Collisions due to Multiple-Parton Interactions and Observing a Multiplicity-Independent Characteristic Jet Size. Advances in High Energy Physics, 2019, 2019, 1-12.	0.5	10
41	Water Catalysis of the Reaction of Methanol with OH Radical in the Atmosphere is Negligible. Angewandte Chemie, 2020, 132, 10918-10922.	1.6	10
42	Molecular Geometry of Vanadium Dichloride and Vanadium Trichloride: A Gas-Phase Electron Diffraction and Computational Study. Inorganic Chemistry, 2010, 49, 2816-2821.	1.9	9
43	Iron dihalides: structures and thermodynamic properties from computation and an electron diffraction study of iron diiodide. Structural Chemistry, 2011, 22, 327-336.	1.0	9
44	Is the Inversion of Phosphorus Trihalides (PF3, PCl3, PBr3, and PI3) a Diradical Process?. Journal of Physical Chemistry A, 2019, 123, 301-312.	1.1	9
45	Group 14 structural variations: perhalo derivatives of the â€œdimetallenesâ€• dicarbenes, disilenes, digermenes, distannenes, and diplumbenes. Structural Chemistry, 2013, 24, 837-850.	1.0	8
46	The NaDyBr4 complex; its molecular structure and thermodynamic properties. Structural Chemistry, 2006, 17, 225-233.	1.0	7
47	Vapor phase tin diiodide: its structure and thermodynamics, a computational study. Structural Chemistry, 2007, 18, 641-648.	1.0	7
48	Curious matrix effects: a computational, electron diffraction, and vibrational spectroscopic study of dysprosium triiodide. Dalton Transactions, 2010, 39, 6221.	1.6	7
49	Structures and thermodynamic properties of aluminum oxyhalides: a computational study. Structural Chemistry, 2008, 19, 595-602.	1.0	6
50	About the structure of CH5 + and structural variations in related systems. Structural Chemistry, 2017, 28, 297-301.	1.0	6
51	On the thermal expansion of molecules: a sequel. Structural Chemistry, 2011, 22, 1065-1066.	1.0	5
52	Molecular Structure and Vibrational Spectra of Mixed MDyX₄ (M = Li, Na, K, Rb, Cs; X = F,) Tj ETQq0 0 0 rgBT /Overlock 10 T Inorganic Chemistry, 2012, 51, 543-556.	1.9	5
53	Chemistry, commentary and community: Discussion of â€œThe NaDyBr4 complex: its molecular structure and thermodynamic propertiesâ€•by Varga and Hargittai. Structural Chemistry, 2007, 18, 269-271.	1.0	4
54	Jet Structure Studies in Small Systems. Universe, 2019, 5, 132.	0.9	4

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55	Metalâ€“ligand interactions in complexes of cyclen-based ligands with Bi and Ac. Structural Chemistry, 2021, 32, 1719-1731.	1.0	3
56	Thiolated cationic poly(aspartamides) with side group dependent gelation properties for the delivery of anionic polyelectrolytes. Journal of Materials Chemistry B, 2022, 10, 5946-5957.	2.9	3
57	Paradigms and paradoxes: the conformation of the fundamental unit of hyaluronic acid. Structural Chemistry, 2010, 21, 1211-1214.	1.0	2
58	Singletâ€“triplet competition in the low-lying energy states of C4O4â^'n S n (nÂ=Â1â€“3) molecules. Structural Chemistry, 2015, 26, 1229-1240.	1.0	2
59	B2N2O4: Prediction of a Magnetic Ground State for a Light Main-Group Molecule. Inorganic Chemistry, 2015, 54, 8552-8559.	1.9	2
60	Significant Ï€-stacking effect between 2,4,6-triphenyl-1-phosphabenzenes. Structural Chemistry, 2017, 28, 1243-1253.	1.0	2
61	Multiplicity Dependence of the Jet Structures in pp Collisions at LHC Energies. Proceedings (mdpi), 2019, 10, 3.	0.2	2
62	H2O coordination in macropa complexes of f elements (Ac, La, Lu): feasibility of the 11th coordination site. Structural Chemistry, 2021, 32, 643-653.	1.0	2
63	Investigation of self-excited ultrahigh speed induction generators for Distributed Generation Systems. , 2011, , .		1
64	The role of the underlying event in the Î›c+ enhancement in high-energy pp collisions. Journal of Physics G: Nuclear and Particle Physics, 2022, 49, 075005.	1.4	1
65	Time average approach for the calculation of quasi-subharmonics of PWM technique in ultra high speed AC motor supply. , 2010, , .		0
66	Development of animated material for e-learning in solar powered electric vehicles. , 2013, , .		0
67	Wind energy penetration into distributed generation and its static and dynamic features. , 2014, , .		0
68	The Partonic Origin of Multiplicity Scaling in Heavy and Light Flavor Jets. Symmetry, 2022, 14, 1379.	1.1	0