# Zoltan Varga

## List of Publications by Year in Descending Order



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| 60 papers | 1,120 citations | 17 h-index | 31 g-index |
| 72 ext. papers | 1,404 ext. citations | 3.9 avg, IF | 4.72 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 60 | Prompt D0, D+, and D*+ production in PbPb collisions at $$ sqrt{s_{mathrm{NN}}} $$ = 5.02 TeV. *Journal of High Energy Physics*, **2022**, 2022, 1 | 5.4 | 1 |
| 59 | Potential energy surface for high-energy N + N collisions. *Physical Chemistry Chemical Physics*, **2021**, 23, 26273-26284 | 3.6 | 1 |
| 58 | Permutationally Restrained Diabatization by Machine Intelligence. *Journal of Chemical Theory and Computation*, **2021**, 17, 1106-1116 | 6.4 | 4 |
| 57 | H2O coordination in macropa complexes of f elements (Ac, La, Lu): feasibility of the 11th coordination site. *Structural Chemistry*, **2021**, 32, 643-653 | 1.8 | 1 |
| 56 | Potential energy surfaces for high-energy N + O collisions. *Journal of Chemical Physics*, **2021**, 154, 084304 | 3.9 | 4 |
| 55 | Production of pions, kaons, (anti-)protons and (phi ) mesons in XeXe collisions at (sqrt{s_{mathrm{NN}}}) = 5.44 TeV. *European Physical Journal C*, **2021**, 81, 1 | 4.2 | 2 |
| 54 | Metal–ligand interactions in complexes of cyclen-based ligands with Bi and Ac. *Structural Chemistry*, **2021**, 32, 1719-1731 | 1.8 | 0 |
| 53 | Multi-state pair-density functional theory. *Faraday Discussions*, **2020**, 224, 348-372 | 3.6 | 14 |
| 52 | Many-Body Permutationally Invariant Polynomial Neural Network Potential Energy Surface for N. *Journal of Chemical Theory and Computation*, **2020**, 16, 4822-4832 | 6.4 | 18 |
| 51 | Water Catalysis of the Reaction of Methanol with OH Radical in the Atmosphere is Negligible. *Angewandte Chemie*, **2020**, 132, 10918-10922 | 3.6 | 5 |
| 50 | Water Catalysis of the Reaction of Methanol with OH Radical in the Atmosphere is Negligible. *Angewandte Chemie - International Edition*, **2020**, 59, 10826-10830 | 16.4 | 7 |
| 49 | Conservation of Angular Momentum in Direct Nonadiabatic Dynamics. *Journal of Physical Chemistry Letters*, **2020**, 11, 1135-1140 | 6.4 | 8 |
| 48 | Jet Structure Studies in Small Systems. *Universe*, **2019**, 5, 132 | 2.5 | 2 |
| 47 | Multiplicity Dependence of the Jet Structures in pp Collisions at LHC Energies. *Proceedings (mdpi)*, **2019**, 10, 3 | 0.3 | 2 |
| 46 | Vibrational Energy Transfer and Collision-Induced Dissociation in O+O2 Collisions. *Journal of Thermophysics and Heat Transfer*, **2019**, 33, 797-807 | 1.3 | 28 |
| 45 | 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 | 1 | 5 |
| 44 | Is the Inversion of Phosphorus Trihalides (PF, PCl, PBr, and PI) a Diradical Process?. *Journal of Physical Chemistry A*, **2019**, 123, 301-312 | 2.8 | 8 |

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| 43 | Hyper Open-Shell Excited Spin States of Transition-Metal Compounds: FeF, FeF□□Ethane, and FeF□□Ethylene. *Journal of Physical Chemistry A*, **2018**, 122, 2563-2579 | 2.8 | 8 |
| 42 | Potential energy surface of triplet O. *Journal of Chemical Physics*, **2018**, 148, 124314 | 3.9 | 27 |
| 41 | Direct diabatization based on nonadiabatic couplings: the N/D method. *Physical Chemistry Chemical Physics*, **2018**, 20, 26643-26659 | 3.6 | 8 |
| 40 | About the structure of CH5 + and structural variations in related systems. *Structural Chemistry*, **2017**, 28, 297-301 | 1.8 | 3 |
| 39 | Assessment of electronic structure methods for the determination of the ground spin states of Fe(ii), Fe(iii) and Fe(iv) complexes. *Physical Chemistry Chemical Physics*, **2017**, 19, 13049-13069 | 3.6 | 72 |
| 38 | Significant □stacking effect between 2,4,6-triphenyl-1-phosphabenzenes. *Structural Chemistry*, **2017**, 28, 1243-1253 | 1.8 | 2 |
| 37 | Potential energy surfaces of quintet and singlet O. *Journal of Chemical Physics*, **2017**, 147, 034301 | 3.9 | 35 |
| 36 | Hyper Open-Shell States: The Lowest Excited Spin States of O Atom, Fe Ion, and FeF. *Journal of the American Chemical Society*, **2017**, 139, 12569-12578 | 16.4 | 8 |
| 35 | Potential energy surfaces for O + O collisions. *Journal of Chemical Physics*, **2017**, 147, 154312 | 3.9 | 41 |
| 34 | A quasiclassical trajectory study of the N2(X(1)□+ O((3)P) -ⁿNO(X(2)□+ N((4)S) reaction. *Journal of Chemical Physics*, **2016**, 144, 234314 | 3.9 | 12 |
| 33 | Potential energy surface of triplet N2O2. *Journal of Chemical Physics*, **2016**, 144, 024310 | 3.9 | 44 |
| 32 | Global triplet potential energy surfaces for the N2(X(1)□+ O((3)P) -ⁿNO(X(2)□+ N((4)S) reaction. *Journal of Chemical Physics*, **2016**, 144, 024309 | 3.9 | 28 |
| 31 | Singlet□riplet competition in the low-lying energy states of C4O4□ S n (n = 1□) molecules. *Structural Chemistry*, **2015**, 26, 1229-1240 | 1.8 | 2 |
| 30 | B2N2O4: Prediction of a Magnetic Ground State for a Light Main-Group Molecule. *Inorganic Chemistry*, **2015**, 54, 8552-9 | 5.1 | 1 |
| 29 | An improved potential energy surface and multi-temperature quasiclassical trajectory calculations of N2 + N2 dissociation reactions. *Journal of Chemical Physics*, **2015**, 143, 054304 | 3.9 | 124 |
| 28 | Quasiclassical Trajectory Analysis of the N2 + N2 Reaction Using a New Ab Initio Potential Energy Surface **2014**, | | 10 |
| 27 | Group 14 structural variations: perhalo derivatives of the □imetallenes□dicarbenes, disilenes, digermenes, distannenes, and diplumbenes. *Structural Chemistry*, **2013**, 24, 837-850 | 1.8 | 4 |
| 26 | Global ab initio ground-state potential energy surface of N4. *Journal of Chemical Physics*, **2013**, 139, 044309 | 3.9 | 128 |

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| 25 | Structure and other molecular properties of actinide trichlorides AnCl3 (An = Th-Cm). *Journal of Physical Chemistry A*, **2013**, 117, 11357-63 | 2.8 | 11 |
| 24 | Molecular structure and vibrational spectra of mixed MDyX4 (M = Li, Na, K, Rb, Cs; X = F, Cl, Br, I) vapor complexes: a computational and matrix-isolation infrared spectroscopic study. *Inorganic Chemistry*, **2012**, 51, 543-56 | 5.1 | 3 |
| 23 | Theoretical study of the structure and bonding in ThC2 and UC2. *Journal of Physical Chemistry A*, **2012**, 116, 747-55 | 2.8 | 24 |
| 22 | Comprehensive study of the structure of aluminum trihalides from electron diffraction and computation. *Structural Chemistry*, **2012**, 23, 879-893 | 1.8 | 8 |
| 21 | On the thermal expansion of molecules. *Structural Chemistry*, **2011**, 22, 111-121 | 1.8 | 9 |
| 20 | Iron dihalides: structures and thermodynamic properties from computation and an electron diffraction study of iron diiodide. *Structural Chemistry*, **2011**, 22, 327-336 | 1.8 | 8 |
| 19 | On the thermal expansion of molecules: a sequel. *Structural Chemistry*, **2011**, 22, 1065-1066 | 1.8 | 5 |
| 18 | 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, 1039-45 | 5.1 | 12 |
| 17 | Molecular geometry of vanadium dichloride and vanadium trichloride: a gas-phase electron diffraction and computational study. *Inorganic Chemistry*, **2010**, 49, 2816-21 | 5.1 | 7 |
| 16 | Curious matrix effects: a computational, electron diffraction, and vibrational spectroscopic study of dysprosium triiodide. *Dalton Transactions*, **2010**, 39, 6221-30 | 4.3 | 5 |
| 15 | Paradigms and paradoxes: the conformation of the fundamental unit of hyaluronic acid. *Structural Chemistry*, **2010**, 21, 1211-1214 | 1.8 | 2 |
| 14 | 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 | 2.1 | 7 |
| 13 | Does the 4f electron configuration affect molecular geometries? A joint computational, vibrational spectroscopic, and electron diffraction study of dysprosium tribromide. *Inorganic Chemistry*, **2009**, 48, 4143-53 | 5.1 | 15 |
| 12 | 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 | 3.9 | 22 |
| 11 | Structures and thermodynamic properties of aluminum oxyhalides: a computational study. *Structural Chemistry*, **2008**, 19, 595-602 | 1.8 | 5 |
| 10 | The elusive structure of CrCl(2): a combined computational and gas-phase electron-diffraction study. *Chemistry - A European Journal*, **2008**, 14, 5130-43 | 4.8 | 17 |
| 9 | Molecular constants of aluminum monohalides: caveats for computations of simple inorganic molecules. *Journal of Physical Chemistry A*, **2007**, 111, 6-8 | 2.8 | 12 |
| 8 | Chemistry, commentary and community: Discussion of the NaDyBr4 complex: its molecular structure and thermodynamic properties by Varga and Hargittai. *Structural Chemistry*, **2007**, 18, 269-271 | 1.8 | 3 |

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| 7 | Vapor phase tin diiodide: its structure and thermodynamics, a computational study. *Structural Chemistry*, **2007**, 18, 641-648 | 1.8 | 7 |
| 6 | Quasilinear molecule par excellence, SrCl2: structure from high-temperature gas-phase electron diffraction and quantum-chemical calculations--computed structures of SrCl2.argon complexes. *Chemistry - A European Journal*, **2006**, 12, 8345-57 | 4.8 | 23 |
| 5 | Halogen acceptors in hydrogen bonding. *Coordination Chemistry Reviews*, **2006**, 250, 710-727 | 23.2 | 160 |
| 4 | The NaDyBr4 complex; its molecular structure and thermodynamic properties. *Structural Chemistry*, **2006**, 17, 225-233 | 1.8 | 6 |
| 3 | Substituent effects on long-range interactions in the β-sheet structure of oligopeptides. *Computational and Theoretical Chemistry*, **2005**, 755, 247-251 | | 14 |
| 2 | Hydrogen bonding in peptide secondary structures. *International Journal of Quantum Chemistry*, **2005**, 105, 302-312 | 2.1 | 10 |
| 1 | Long-Range Effects in Oligopeptides. A Theoretical Study of the β-Sheet Structure of Glyn (n = 2−10). *Journal of Physical Chemistry A*, **2004**, 108, 6869-6873 | 2.8 | 23 |