

# Zoltan Mucsi

## List of Publications by Year in descending order

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94  
papers

1,510  
citations

331670

21  
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395702

33  
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94  
all docs

94  
docs citations

94  
times ranked

1389  
citing authors

#	ARTICLE	IF	CITATIONS
1	Insights into a surprising reaction: The microwave-assisted direct esterification of phosphinic acids. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 2011.	2.8	102
2	Efficient Approach to Androstene-Fused Arylpyrazolines as Potent Antiproliferative Agents. Experimental and Theoretical Studies of Substituent Effects on BF <sub>3</sub> -Catalyzed Intramolecular [3 + 2] Cycloadditions of Olefinic Phenylhydrazones. <i>Journal of the American Chemical Society</i> , 2009, 131, 3894-3904.	13.7	79
3	A Quantitative Scale for the Extent of Conjugation of the Amide Bond. Amidity Percentage as a Chemical Driving Force. <i>Journal of Physical Chemistry A</i> , 2007, 111, 13245-13254.	2.5	55
4	A Quantitative Scale for the Degree of Aromaticity and Antiaromaticity: A Comparison of Theoretical and Experimental Enthalpies of Hydrogenation. <i>Journal of Physical Chemistry A</i> , 2007, 111, 1123-1132.	2.5	53
5	Amidicity Change as a Significant Driving Force and Thermodynamic Selection Rule of Transamidation Reactions. A Synergy between Experiment and Theory. <i>Journal of Physical Chemistry B</i> , 2008, 112, 7885-7893.	2.6	51
6	Calpastatin Subdomains A and C Are Activators of Calpain. <i>Journal of Biological Chemistry</i> , 2002, 277, 9022-9026.	3.4	50
7	Modeling Rate-Controlling Solvent Effects. The Pericyclic Meisenheimer Rearrangement of N-Propargylmorpholine N-Oxide. <i>Journal of the American Chemical Society</i> , 2005, 127, 7615-7631.	13.7	46
8	The Palladium Acetate-Catalyzed Microwave-Assisted Hirao Reaction without an Added Phosphorus Ligand as a "Green" Protocol: A Quantum Chemical Study on the Mechanism. <i>Advanced Synthesis and Catalysis</i> , 2017, 359, 4322-4331.	4.3	40
9	[3+3] Cyclization reactions of $\hat{1}^2$ -nitroenamines and $\hat{1}^2$ -enaminonitriles with $\hat{1}^{\pm}, \hat{1}^2$ -unsaturated carboxylic acid chlorides. <i>Tetrahedron</i> , 2008, 64, 5545-5550.	1.9	39
10	A neighbouring group effect leading to enhanced nucleophilic substitution of amines at the hindered $\hat{1}^{\pm}$ -carbon atom of an $\hat{1}^{\pm}$ -hydroxyphosphonate. <i>Tetrahedron Letters</i> , 2012, 53, 207-209.	1.4	39
11	Synthesis and use of $\hat{1}^{\pm}$ -aminophosphine oxides and N,N-bis(phosphinoylmethyl)amines "A study on the related ring platinum complexes. <i>Journal of Organometallic Chemistry</i> , 2016, 801, 111-121.	1.8	38
12	A quantum chemical study on the mechanism and energetics of the direct esterification, thioesterification and amidation of 1-hydroxy-3-methyl-3-phospholene 1-oxide. <i>RSC Advances</i> , 2014, 4, 11948.	3.6	37
13	Synthesis of novel isoxazoline-fused cyclic $\hat{1}^2$ -amino esters by regio- and stereo-selective 1,3-dipolar cycloaddition. <i>Tetrahedron</i> , 2011, 67, 4079-4085.	1.9	34
14	Binding-induced folding transitions in calpastatin subdomains A and C. <i>Protein Science</i> , 2009, 12, 2327-2336.	7.6	32
15	An Interpretation of the Rate Enhancing Effect of Microwaves "Modelling the Distribution and Effect of Local Overheating" A Case Study. <i>Current Organic Chemistry</i> , 2015, 19, 1436-1440.	1.6	30
16	Equilibrium, structural and antibacterial characterization of moxifloxacin- $\hat{1}^2$ -cyclodextrin complex. <i>Journal of Molecular Structure</i> , 2018, 1166, 228-236.	3.6	30
17	Substrate-dependent Competency of the Catalytic Triad of Prolyl Oligopeptidase. <i>Journal of Biological Chemistry</i> , 2002, 277, 44597-44605.	3.4	26
18	Quantitative Scale for the Extent of Conjugation of Carbonyl Groups: "Carbonylicity" Percentage as a Chemical Driving Force. <i>Journal of Physical Chemistry A</i> , 2008, 112, 9153-9165.	2.5	25

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19	Intramolecular approach to some new D-ring-fused steroidal isoxazolidines by 1,3-dipolar cycloaddition: synthesis, theoretical and in vitro pharmacological studies. <i>New Journal of Chemistry</i> , 2010, 34, 2671.	2.8	25
20	Amide Activation in Ground and Excited States. <i>Molecules</i> , 2018, 23, 2859.	3.8	25
21	Penicillin's catalytic mechanism revealed by inelastic neutrons and quantum chemical theory. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 20447-20455.	2.8	24
22	Palladium-catalyzed microwave-assisted Hirao reaction utilizing the excess of the diarylphosphine oxide reagent as the P-ligand; a study on the activity and formation of the $\text{PdP}(\text{O})\text{R}_2$ catalyst. <i>Pure and Applied Chemistry</i> , 2019, 91, 121-134.	1.9	24
23	Why are Phosphole Oxides Unstable? The Phenomenon of Antiaromaticity as a Destabilizing Factor. <i>European Journal of Organic Chemistry</i> , 2007, 2007, 4765-4771.	2.4	23
24	The synthesis of phosphinates: traditional versus green chemical approaches. <i>Green Processing and Synthesis</i> , 2014, 3, 103-110.	3.4	22
25	A Three-Step Conversion of Phenyl-1H-phosphinic Acid to Dialkyl Phenylphosphonates Including Two Microwave-Assisted Direct Esterification Steps. <i>Current Organic Synthesis</i> , 2014, 11, 767-772.	1.3	20
26	Synthesis of $\alpha$ -aminophosphonates from $\alpha$ -hydroxyphosphonates; a theoretical study. <i>Heteroatom Chemistry</i> , 2016, 27, 260-268.	0.7	20
27	Can Four-Membered Heterophosphete Structures Exist? The Contribution of Phosphorus d Orbitals to Antiaromaticity. <i>European Journal of Organic Chemistry</i> , 2007, 2007, 1759-1767.	2.4	19
28	An experimental and theoretical study of reaction mechanisms between nitriles and hydroxylamine. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 8036-8047.	2.8	19
29	A concise synthetic pathway towards 5-substituted indolizidines. <i>Tetrahedron Letters</i> , 2007, 48, 1159-1161.	1.4	18
30	1,6-Electrocyclization of 1-Azatriene Derivatives. <i>European Journal of Organic Chemistry</i> , 2008, 2008, 1092-1100.	2.4	18
31	Suzuki-Miyaura cross-coupling reactions of halo derivatives of 4H-pyrido[1,2-a]pyrimidin-4-ones. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 6559.	2.8	18
32	Experimental and Theoretical Study on the $\text{Ni}(\text{O})$ -Catalyzed Hirao Reaction of $\text{P}(\text{O})\text{H}$ Reagents and Halobenzenes: A $\text{Ni}(\text{O}) \rightarrow \text{Ni}(\text{II})$ or a $\text{Ni}(\text{II}) \rightarrow \text{Ni}(\text{IV})$ Mechanism?. <i>Journal of Organic Chemistry</i> , 2020, 85, 14486-14495.	3.2	18
33	Synthesis and conformational study of $\text{P}(\text{O})\text{R}_2$ heterocyclic androstane derivatives. <i>Heteroatom Chemistry</i> , 2008, 19, 7-14.	0.7	17
34	Systemic Energy Management by Strategically Located Functional Components within Molecular Frameworks, Determined by Systems Chemistry. <i>Journal of Physical Chemistry B</i> , 2009, 113, 10308-10314.	2.6	17
35	A surprising mechanism lacking the $\text{Ni}(\text{O})$ state during the $\text{Ni}(\text{II})$ -catalyzed $\text{C}-\text{C}$ cross-coupling reaction performed in the absence of a reducing agent: An experimental and a theoretical study. <i>Pure and Applied Chemistry</i> , 2020, 92, 493-503.	1.9	16
36	Aromaticity and Antiaromaticity of Four-Membered P-Heterocycles. <i>Current Organic Chemistry</i> , 2008, 12, 83-96.	1.6	15

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37	Reductive transformations of unsaturated azabicyclic nitrolactams. <i>Tetrahedron</i> , 2012, 68, 5547-5553.	1.9	15
38	Synthesis of Isoxazoline Derivatives Based on Nitrile Oxide Cycloaddition of Nitroso-Enamine. <i>European Journal of Organic Chemistry</i> , 2015, 2015, 6872-6890.	2.4	13
39	Milestones in microwave-assisted organophosphorus chemistry. <i>Pure and Applied Chemistry</i> , 2016, 88, 931-939.	1.9	13
40	High efficiency two-photon uncaging coupled by the correction of spontaneous hydrolysis. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 1958-1970.	2.8	13
41	Scope and limitation of propylene carbonate as a sustainable solvent in the Suzuki-Miyaura reaction. <i>RSC Advances</i> , 2019, 9, 37818-37824.	3.6	13
42	Revisiting the Phospanorbornene Family: New Alkyl Derivatives. <i>Heteroatom Chemistry</i> , 2015, 26, 335-347.	0.7	12
43	Focusing on the Catalysts of the Pd- and Ni-Catalyzed Hirao Reactions. <i>Molecules</i> , 2020, 25, 3897.	3.8	12
44	The influence of exocyclic phosphorous substituents on the intrinsic stability of four-membered heterophosphetes: a theoretical study. <i>Tetrahedron</i> , 2008, 64, 1868-1878.	1.9	11
45	Thermodynamic Role of Glutathione Oxidation by Peroxide and Peroxybcarbonate in the Prevention of Alzheimer's Disease and Cancer. <i>Journal of Physical Chemistry A</i> , 2009, 113, 9138-9149.	2.5	11
46	Regio- and Diastereoselective Synthesis of 2-Arylazetidines: Quantum Chemical Explanation of Baldwin's Rules for the Ring-Formation Reactions of Oxiranes. <i>Journal of Organic Chemistry</i> , 2020, 85, 11226-11239.	3.2	11
47	A Study on the Rearrangement of Dialkyl 1-Aryl-1-hydroxymethylphosphonates to Benzyl Phosphates. <i>Current Organic Chemistry</i> , 2020, 24, 465-471.	1.6	11
48	A Quantitative Scale for the Extent of Conjugation of Substituted Olefines. <i>Journal of Physical Chemistry A</i> , 2009, 113, 7953-7962.	2.5	9
49	A computational study of glutathione and its fragments: N-acetylcisteinylglycine and $\gamma$ -glutamylmethylamide. <i>Chemical Physics Letters</i> , 2011, 507, 168-173.	2.6	9
50	Hydrogenolysis of N- and O-protected hydroxyazetidines over palladium: Efficient and selective methods for ring opening and deprotecting reactions. <i>Journal of Molecular Catalysis A</i> , 2014, 395, 217-224.	4.8	9
51	The Potential of Microwave in Organophosphorus Syntheses. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2015, 190, 647-654.	1.6	9
52	Synthesis and spectroscopic characterization of novel GFP chromophore analogues based on aminoimidazolone derivatives. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 218, 161-170.	3.9	9
53	Theoretical Design, Synthesis, and In Vitro Neurobiological Applications of a Highly Efficient Two-Photon Caged GABA Validated on an Epileptic Case. <i>ACS Omega</i> , 2021, 6, 15029-15045.	3.5	9
54	Synthesis and Fluorescence Mechanism of the Aminoimidazolone Analogues of the Green Fluorescent Protein: Towards Advanced Dyes with Enhanced Stokes Shift, Quantum Yield and Two-Photon Absorption. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 5649-5660.	2.4	9

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55	A novel and convenient method for the preparation of 5-(diphenylmethylene)-1 H-pyrrol-2(5 H)-ones; synthesis and mechanistic study. <i>Tetrahedron</i> , 2016, 72, 5444-5455.	1.9	8
56	MW-Promoted Cu(I)-Catalyzed C-C Coupling Reactions without the Addition of Conventional Ligands; an Experimental and a Theoretical Study. <i>Catalysts</i> , 2021, 11, 933.	3.5	8
57	Structure-oriented rational design of chymotrypsin inhibitor models. <i>Protein Engineering, Design and Selection</i> , 2003, 16, 673-681.	2.1	7
58	Synthesis of Bis(phosphinoyl)amines and Phosphinoyl-Phosphorylamines by the N-Phosphinylation and N-Phosphorylation of 1-Alkylamino-2,5-dihydro-1H-phosphole 1-Oxides. <i>Heteroatom Chemistry</i> , 2015, 26, 134-141.	0.7	7
59	A novel preparation of chlorophospholenium chlorides and their application in the synthesis of phospholene boranes. <i>Tetrahedron Letters</i> , 2017, 58, 458-461.	1.4	7
60	Galls of European Fraxinus trees as new and abundant sources of valuable phenylethanoid and coumarin glycosides. <i>Industrial Crops and Products</i> , 2019, 139, 111517.	5.2	7
61	Kinetic and Theoretical Studies of a Facile, One-Pot Preparation of a Spirocyclohexylindolinone Derivative. <i>European Journal of Organic Chemistry</i> , 2006, 2006, 1769-1778.	2.4	6
62	Application of the Systems Chemistry Approach on the Ammonolysis of 1-Ethoxycarbonyl- and 1-Phenoxycarbonyl-3-(2-thienyl)oxindoles. A Method to Predict Reactivity. <i>Journal of Organic Chemistry</i> , 2012, 77, 7282-7290.	3.2	6
63	The Synthesis of 3-Phenylpropidronate Applying Phosphorus Trichloride and Phosphorous Acid in Methanesulfonic Acid. <i>Current Organic Chemistry</i> , 2016, 20, 1745-1752.	1.6	6
64	A Comprehensive Study of the Ca <sup>2+</sup> Ion Binding of Fluorescently Labelled BAPTA Analogues. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 5248-5261.	2.4	6
65	New Alkaloid Derivatives by the Reaction of 3,4-Dihydro- $\beta$ -Carbolines with 1,3- Dipoles; Synthesis and a Theoretical Study[1]. <i>Current Organic Chemistry</i> , 2011, 15, 1811-1825.	1.6	6
66	Synthesis of New $\beta$ -Carboline Derivatives Fused with $\beta$ -Lactam Rings: An Experimental and Theoretical Study. <i>Current Organic Chemistry</i> , 2013, 17, 1894-1902.	1.6	6
67	Solvent-Dependent Competitive Rearrangements of Cyclic Tertiary Propargylamine N-Oxides. <i>European Journal of Organic Chemistry</i> , 2004, 2004, 687-694.	2.4	5
68	Direct Esterification and Amidation of Phosphinic Acids Under Microwave Conditions. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2013, 188, 29-32.	1.6	5
69	The Synthesis of 3-Phosphabicyclo[3.1.0]-hexane 3-Oxides and 1,2-Dihydrophosphinine 1-Oxides with Lipophilic P-Alkoxy Substituents by Ring Enlargement. <i>Heteroatom Chemistry</i> , 2014, 25, 265-273.	0.7	5
70	Microwave irradiation and catalysis in organophosphorus reactions. <i>Pure and Applied Chemistry</i> , 2019, 91, 145-157.	1.9	5
71	Versatile synthesis of oxindole-1,3-dicarboxamides. <i>Tetrahedron</i> , 2010, 66, 7017-7027.	1.9	4
72	Ring Transformation of Unsaturated N-Bridgehead Fused Pyrimidin-4(3H)-ones: Role of Repulsive Electrostatic Nonbonded Interaction. <i>Journal of Organic Chemistry</i> , 2011, 76, 696-699.	3.2	4

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73	Disulfidicity: A scale to characterize the disulfide bond strength via the hydrogenation thermodynamics. <i>Chemical Physics Letters</i> , 2012, 539-540, 11-14.	2.6	4
74	Heteroatom effect on potential energy topology. A novel reaction mechanism of stereospecific Staudinger synthesis. <i>Tetrahedron</i> , 2014, 70, 9682-9694.	1.9	4
75	Chemoselective Strategy for the Direct Formation of Tetrahydro-2,5-methanobenzo[ <i>c</i> ]azepines or Azetotetrahydroisoquinolines via Regio- and Stereoselective Reactions. <i>Journal of Organic Chemistry</i> , 2019, 84, 7100-7112.	3.2	4
76	Simple route to new oxadiazaboroles and oxadiazoles via amidoximes. <i>Synthetic Communications</i> , 2020, 50, 1712-1723.	2.1	4
77	Synthesis of New 2-Benzazepino[4,5- <i>a</i> ]naphthalene Derivatives via 1,7-Electrocyclisation of Nonstabilised Azomethine Ylides. <i>Synlett</i> , 2010, 2010, 2411-2414.	1.8	3
78	Synthesis of $\hat{\pm}$ -hydroxyphosphonates and $\hat{\pm}$ -aminophosphonates. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2016, 191, 1564-1565.	1.6	3
79	Preparation of 2-phospholene oxides by the isomerization of 3-phospholene oxides. <i>Beilstein Journal of Organic Chemistry</i> , 2020, 16, 818-832.	2.2	3
80	Tissue-Specific Accumulation and Isomerization of Valuable Phenylethanoid Glycosides from <i>Plantago</i> and <i>Forsythia</i> Plants. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3880.	4.1	3
81	Engineering new peptidic inhibitors from a natural chymotrypsin inhibitor. <i>Journal of Peptide Science</i> , 2002, 8, 643-655.	1.4	2
82	Thermodynamic Functions of Molecular Conformations of (2-Fluoro-2-phenyl-1-ethyl)ammonium Ion and (2-Hydroxy-2-phenyl-1-ethyl)ammonium Ion as Models for Protonated Noradrenaline and Adrenaline: First-Principles Computational Study of Conformations and Thermodynamic Functions for the Noradrenaline and Adrenaline Models. <i>Journal of Physical Chemistry A</i> , 2009, 113, 2507-2515.	2.5	2
83	Energy Managements in the Chemical and Biochemical World, as It may be Understood from the Systems Chemistry Point of View. , 0, , .		2
84	Can Four Membered Heterophosphete Structures Exist? $\hat{\pm}$ -Heterogen $\hat{\pm}$ -Hetero Antiaromaticity as a Destabilizing Effect. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2008, 183, 726-727.	1.6	1
85	Controlled antioxidative steps of the cell. The concept of chalcogenicity. <i>Chemical Physics Letters</i> , 2013, 590, 83-86.	2.6	1
86	The Synthesis and Potential Use of Cyclic Phosphinic Acid Derivatives. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2015, 190, 668-671.	1.6	1
87	Radicality: A scale to compare reactivities of radicals. <i>Chemical Physics Letters</i> , 2015, 618, 99-101.	2.6	1
88	Mechanistic Study on the Acylation of Bis(2,2,2-Trifluoroethyl) Methylphosphonate by Carboxylic Esters. <i>ChemistrySelect</i> , 2017, 2, 7723-7734.	1.5	1
89	Electrocyclization and Unexpected Reactions of Non-Stabilised $\hat{\pm}$ , $\hat{1}^2$ : $\hat{1}^3$ , $\hat{1}$ -Unsaturated Azomethine Ylides. Experimental and Theoretical Study.. <i>Synthesis</i> , 0, , .	2.3	1
90	Reply to comment on $\hat{\pm}$ -Radicality: A scale to compare reactivities of radicals $\hat{\pm}$ . <i>Chemical Physics Letters</i> , 2016, 654, 141.	2.6	0

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91	Microwave irradiation and catalysis in organophosphorus chemistry. Phosphorus, Sulfur and Silicon and the Related Elements, 2019, 194, 391-395.	1.6	0
92	Reply to the "Comment on "Penicillin's catalytic mechanism revealed by inelastic neutrons and quantum chemical theory" by S. A. Glover, Phys. Chem. Chem. Phys., 2019, 21, 18012. Physical Chemistry Chemical Physics, 2019, 21, 25513-25517.	2.8	0
93	Newer developments in the green synthesis of tertiary phosphine oxides, phosphinates, phosphonates and their derivatives. Phosphorus, Sulfur and Silicon and the Related Elements, 0, , 1-6.	1.6	0
94	Microwave assisted P-C coupling reactions without directly added P-ligands. Phosphorus, Sulfur and Silicon and the Related Elements, 0, , 1-4.	1.6	0