Ivan Halasz

List of Publications by Year
in descending order

92 papers	4,586 citations	101543 36 h-index	106344 65 g-index
103 all docs	103 docs citations	103 times ranked	3961 citing authors

#	Article	IF	Citations
1	Real-time and in situ monitoring of mechanochemical milling reactions. Nature Chemistry, 2013, 5, 66-73.	13.6	493
2	Ionâ€•and Liquidâ€Assisted Grinding: Improved Mechanochemical Synthesis of Metalâ€“Organic Frameworks Reveals Salt Inclusion and Anion Templating. Angewandte Chemie - International Edition, 2010, 49, 712-715.	13.8	343
3	In situ X-ray diffraction monitoring of a mechanochemical reaction reveals a unique topology metal-organic framework. Nature Communications, 2015, 6, 6662.	12.8	294
4	In Situ Monitoring and Mechanism of the Mechanochemical Formation of a Microporous MOF-74 Framework. Journal of the American Chemical Society, 2016, 138, 2929-2932.	13.7	194
5	Laboratory Realâ€Time and In Situ Monitoring of Mechanochemical Milling Reactions by Raman Spectroscopy. Angewandte Chemie - International Edition, 2014, 53, 6193-6197.	13.8	160
6	Real-Time and In Situ Monitoring of Mechanochemical Reactions: A New Playground for All Chemists. Journal of Physical Chemistry Letters, 2015, 6, 4129-4140.	4.6	149
7	Realâ€Time Inâ€…Situ Powder Xâ€•ray Diffraction Monitoring of Mechanochemical Synthesis of Pharmaceutical Cocrystals. Angewandte Chemie - International Edition, 2013, 52, 11538-11541.	13.8	141
8	In situ and real-time monitoring of mechanochemical milling reactions using synchrotron X-ray diffraction. Nature Protocols, 2013, 8, 1718-1729.	12.0	132
9	The curious case of (caffeine)Â·(benzoic acid): how heteronuclear seeding allowed the formation of an elusive cocrystal. Chemical Science, 2013, 4, 4417.	7.4	115
10	Mechanosynthesis of the Metallodrug Bismuth Subsalicylate from Bi₂O₃ and Structure of Bismuth Salicylate without Auxiliary Organic Ligands. Angewandte Chemie - International Edition, 2011, 50, 7858-7861.	13.8	110
11	In Situ Monitoring of the Mechanosynthesis of the Archetypal Metalâ€“Organic Framework HKUST-1: Effect of Liquid Additives on the Milling Reactivity. Inorganic Chemistry, 2017, 56, 6599-6608.	4.0	98
12	Exploring the Effect of Temperature on a Mechanochemical Reaction by in Situ Synchrotron Powder X-ray Diffraction. Crystal Growth and Design, 2016, 16, 2342-2347.	3.0	93
13	Single-Crystal-to-Single-Crystal Reactivity: Gray, Rather than Black or White. Crystal Growth and Design, 2010, 10, 2817-2823.	3.0	91
14	A model for a solvent-free synthetic organic research laboratory: click-mechanosynthesis and structural characterization of thioureas without bulk solvents. Green Chemistry, 2012, 14, 2462.	9.0	80
15	Mechanochemical reactions studied by in situ Raman spectroscopy: base catalysis in liquid-assisted grinding. Chemical Communications, 2015, 51, 8058-8061.	4.1	79
16	Mechanochemistry for â€œno solvent, no baseâ€•preparation of hydantoin-based active pharmaceutical ingredients: nitrofurantoin and dantrolene. Green Chemistry, 2018, 20, 2973-2977.	9.0	78
17	Enthalpy vs. friction: heat flow modelling of unexpected temperature profiles in mechanochemistry of metalâ€“organic frameworks. Chemical Science, 2018, 9, 2525-2532.	7.4	77
18	Direct Mechanocatalysis: Palladium as Milling Media and Catalyst in the Mechanochemical Suzuki Polymerization. Angewandte Chemie - International Edition, 2019, 58, 18942-18947.	13.8	75

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19	Quantitative in situ and real-time monitoring of mechanochemical reactions. Faraday Discussions, 2014, 170, 203-221.	3.2	73
20	Tandem In Situ Monitoring for Quantitative Assessment of Mechanochemical Reactions Involving Structurally Unknown Phases. Chemistry - A European Journal, 2017, 23, 13941-13949.	3.3	70
21	Clean and Efficient Synthesis Using Mechanochemistry: Coordination Polymers, Metal-Organic Frameworks and Metallodrugs. Croatica Chemica Acta, 2012, 85, 367-378.	0.4	67
22	Green and rapid mechanosynthesis of high-porosity NU- and UiO-type metalâ€“organic frameworks. Chemical Communications, 2018, 54, 6999-7002.	4.1	63
23	The physiological target for Leu<scp>RS</scp> translational quality control is norvaline. EMBO Journal, 2014, 33, 1639-1653.	7.8	58
24	Mechanosynthesis of nitrosobenzenes: a proof-of-principle study in combining solvent-free synthesis with solvent-free separations. Green Chemistry, 2012, 14, 1597.	9.0	50
25	On the predictability of supramolecular interactions in molecular cocrystals â€“ the view from the bench. CrystEngComm, 2016, 18, 5434-5439.	2.6	47
26	Control of Pharmaceutical Cocrystal Polymorphism on Various Scales by Mechanochemistry: Transfer from the Laboratory Batch to the Large-Scale Extrusion Processing. ACS Sustainable Chemistry and Engineering, 2019, 7, 7102-7110.	6.7	47
27	Mechanochemical carbonâ€“carbon bond formation that proceeds via a cocrystal intermediate. Chemical Communications, 2018, 54, 13216-13219.	4.1	46
28	Raman spectroscopy for real-time and in situ monitoring of mechanochemical milling reactions. Nature Protocols, 2021, 16, 3492-3521.	12.0	46
29	Dynamic Molecular Recognition in Solid State for Separating Mixtures of Isomeric Dicarboxylic Acids. Angewandte Chemie - International Edition, 2013, 52, 5504-5508.	13.8	44
30	European Research in Focus: Mechanochemistry for Sustainable Industry (COST Action) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (<	2.4	44
31	Desmotropy, Polymorphism, and Solidâ€State Proton Transfer: Four Solid Forms of an Aromatic oâ€Hydroxy Schiff Base. Chemistry - A European Journal, 2012, 18, 5620-5631.	3.3	41
32	Direct Visualization of a Mechanochemically Induced Molecular Rearrangement. Angewandte Chemie - International Edition, 2020, 59, 13458-13462.	13.8	41
33	A rational approach to screen for hydrated forms of the pharmaceutical derivative magnesium naproxen using liquid-assisted grinding. CrystEngComm, 2011, 13, 3125.	2.6	40
34	Solvent-free copper-catalyzed click chemistry for the synthesis of N-heterocyclic hybrids based on quinoline and 1,2,3-triazole. Beilstein Journal of Organic Chemistry, 2017, 13, 2352-2363.	2.2	40
35	Mechanochemical Preparation of Active Pharmaceutical Ingredients Monitored by In Situ Raman Spectroscopy. ACS Omega, 2020, 5, 28663-28672.	3.5	38
36	Isotope Labeling Reveals Fast Atomic and Molecular Exchange in Mechanochemical Milling Reactions. Journal of the American Chemical Society, 2019, 141, 1212-1216.	13.7	34

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37	Toward Mechanistic Understanding of Mechanochemical Reactions Using Real-Time In Situ Monitoring. Accounts of Chemical Research, 2022, 55, 1262-1277.	15.6	34
38	Solid-State Reaction Mechanisms in Monomerâ^'Dimer Interconversions ofp-Bromonitrosobenzene. Single-Crystal-to-Single-Crystal Photodissociation and Formation of New Non-van der Waals Close Contacts. Journal of Organic Chemistry, 2005, 70, 8461-8467.	3.2	33
39	Mechanochemical Preparation of 3,5-Disubstituted Hydantoins from Dipeptides and Unsymmetrical Ureas of Amino Acid Derivatives. Journal of Organic Chemistry, 2016, 81, 9802-9809.	3.2	29
40	Mechanism of Mechanochemical Câ^'H Bond Activation in an Azobenzene Substrate by Pd^{II} Catalysts. Chemistry - A European Journal, 2018, 24, 10672-10682.	3.3	28
41	Aging and Ball-Milling as Low-Energy and Environmentally Friendly Methods for the Synthesis of Pd(II) Photosensitizers. Organometallics, 2014, 33, 1227-1234.	2.3	27
42	Cross-dimerization of nitrosobenzenes in solution and in solid state. Journal of Molecular Structure, 2009, 918, 19-25.	3.6	25
43	Direkte Mechanokatalyse: Palladium als Mahlmaterial und Katalysator in der mechanochemischen Suzukiâ€Polymerisation. Angewandte Chemie, 2019, 131, 19118-19123.	2.0	23
44	Experimental and Theoretical Study of Selectivity in Mechanochemical Cocrystallization of Nicotinamide with Anthranilic and Salicylic Acid. Crystal Growth and Design, 2018, 18, 1539-1547.	3.0	22
45	Solid-State Chemistry and Polymorphism of the Nucleobase Adenine. Crystal Growth and Design, 2016, 16, 3262-3270.	3.0	21
46	Inâ€Situ and Realâ€time Monitoring of Mechanochemical Preparation of Li₂Mg(NH₂BH₃)₄ and Na₂Mg(NH₂BH₃)₄ and Their Thermal Dehydrogenation. Chemistry - A European Journal, 2017, 23, 16274-16282.	3.3	21
47	Impact of dehydration and mechanical amorphization on the magnetic properties of Ni(<scp>ii</scp>)-MOF-74. Journal of Materials Chemistry C, 2020, 8, 7132-7142.	5.5	21
48	Synthesis, structural characterization, and anion binding ability of sterically congested adamantane-calix[4]pyrroles and adamantane-calixphyrins. Tetrahedron, 2009, 65, 2051-2058.	1.9	20
49	Mechanistic Insights on the Mechanosynthesis of Phenytoin, a WHO Essential Medicine**. Chemistry - A European Journal, 2022, 28, .	3.3	20
50	Nitrosobenzene Dimerizations as a Model System for Studying Solid-State Reaction Mechanisms. Journal of Organic Chemistry, 2004, 69, 4829-4834.	3.2	19
51	Kabachnikâ€"Fields Reaction by Mechanochemistry: New Horizons from Old Methods. ACS Sustainable Chemistry and Engineering, 2020, 8, 18889-18902.	6.7	18
52	Open versus Interpenetrated: Switchable Supramolecular Trajectories in Mechanosynthesis of a Halogen-Bonded Borromean Network. CheM, 2021, 7, 146-154.	11.7	17
53	Three routes to nickel(ii) salicylaldehyde 4-phenyl and 4-methylthiosemicarbazonato complexes: mechanochemical, electrochemical and conventional approach. CrystEngComm, 2012, 14, 3039.	2.6	16
54	Multiple Solid Forms of 1,5-Bis(salicylidene)carbohydrazide: Polymorph-Modulated Thermal Reactivity. Crystal Growth and Design, 2014, 14, 2900-2912.	3.0	16

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55	Thermally induced crystal-to-crystal transformations accompanied by changes in the magnetic properties of a Cu^{II}-p-hydroquinonate polymer. CrystEngComm, 2011, 13, 391-395.	2.6	15
56	The cocrystal of 4-oxopimelic acid and 4,4â€²-bipyridine: polymorphism and solid-state transformations. New Journal of Chemistry, 2011, 35, 24-27.	2.8	15
57	Aryl substituted adamantaneâ€“dipyrromethanes: chromogenic and fluorescent anion sensors. Tetrahedron, 2013, 69, 1725-1734.	1.9	15
58	Vapour-induced solid-state Câ€“H bond activation for the clean synthesis of an organopalladium biothiol sensor. Chemical Communications, 2016, 52, 12960-12963.	4.1	15
59	Using Desmotropes, Cocrystals, and Salts to Manipulate Reactivity in Mechanochemical Organic Reactions. Journal of Organic Chemistry, 2021, 86, 14160-14168.	3.2	14
60	Structural and thermal characterization of zolpidem hemitartrate hemihydrate (form E) and its decomposition products by laboratory x-ray powder diffraction. Journal of Pharmaceutical Sciences, 2010, 99, 871-878.	3.3	13
61	Vi€Oâ‹¯C interactions in crystal structures of oxovanadium-coordination compounds. New Journal of Chemistry, 2013, 37, 619-623.	2.8	13
62	Synthesis and structure characterization of zinc and cadmium dipeptide coordination polymers. New Journal of Chemistry, 2016, 40, 4252-4257.	2.8	13
63	Direct Visualization of a Mechanochemically Induced Molecular Rearrangement. Angewandte Chemie, 2020, 132, 13560-13564.	2.0	12
64	Reversible Gasâ€“Solid Ammonia Nâ€“H Bond Activation Mediated by an Organopalladium Complex. Inorganic Chemistry, 2017, 56, 5342-5351.	4.0	11
65	Parametric Rietveld refinement for the evaluation of powder diffraction patterns collected as a function of pressure. Journal of Applied Crystallography, 2010, 43, 504-510.	4.5	10
66	Surface nucleation in solid-state dimerisation of nitrosobenzenes promoted by sublimation. CrystEngComm, 2011, 13, 4307.	2.6	10
67	Anthracene adamantylbisurea receptors: switching of anion binding by photocyclization. Tetrahedron, 2015, 71, 9321-9327.	1.9	9
68	Facile Mechanochemical Anion Substitution in Cyclopalladated Azo-Benzenes. Organometallics, 2019, 38, 4479-4484.	2.3	8
69	Mechanistic Study of the Mechanochemical Pd^{II}-Catalyzed Bromination of Aromatic Câ€“H Bonds by Experimental and Computational Methods. Organometallics, 2022, 41, 1284-1294.	2.3	8
70	Photoinduced Hâ€Abstraction in Homoâ€•and Protoadamantylphthalimide Derivatives in Solution and in Organized and Constrained Media. European Journal of Organic Chemistry, 2013, 2013, 929-938.	2.4	7
71	A Detailed Kinetico-Mechanistic Investigation on the Palladium Câ€“H Bond Activation in Azobenzenes and Their Monopalladated Derivatives. Inorganic Chemistry, 2020, 59, 17123-17133.	4.0	7
72	Mechanochemical Metathesis between AgNO₃ and NaX (X = Cl, Br, I) and Ag₂XNO₃ Double-Salt Formation. Inorganic Chemistry, 2020, 59, 12200-12208.	4.0	7

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73	DNA-specific selectivity in pairing of model nucleobases in the solid state. Chemical Communications, 2020, 56, 13524-13527.	4.1	7
74	Hydrogen phosphate and dihydrogen phosphate salts of 4-aminoazobenzene. Acta Crystallographica Section C: Crystal Structure Communications, 2007, 63, o61-o64.	0.4	6
75	Mechanochemical halogenation of unsymmetrically substituted azobenzenes. Beilstein Journal of Organic Chemistry, 0, 18, 680-687.	2.2	6
76	Mechanochemically induced crossâ€dimerizations of nitrosobenzenes. Kinetics and solidâ€state isotope effects. Journal of Physical Organic Chemistry, 2014, 27, 177-182.	1.9	5
77	Mechanochemical Synthesis and Thermal Dehydrogenation of Novel Calcium-Containing Bimetallic Amidoboranes. ACS Sustainable Chemistry and Engineering, 2021, 9, 2089-2099.	6.7	5
78	Real-Time Observation of â€œSoftâ€•Magic-Size Clusters during Hydrolysis of the Model Metallodrug Bismuth Disalicylate. Journal of the American Chemical Society, 2021, 143, 16332-16336.	13.7	5
79	Bis(dimethyl sulfoxide-Î¹O)bis(1-phenylbutane-1,3-dionato-Î¹2O,Oâ€²)nickel(II). Acta Crystallographica Section E: Structure Reports Online, 2004, 60, m367-m369.	0.2	4
80	The first adduct of bis(1,3-diphenyl-1,3-propanedionato)oxovanadium(IV). Acta Crystallographica Section E: Structure Reports Online, 2004, 60, m1920-m1922.	0.2	4
81	Structures of four polymorphs of the pesticide dithianon solved from X-ray powder diffraction data. Acta Crystallographica Section B: Structural Science, 2012, 68, 661-666.	1.8	4
82	Reactivity of Cations and Zwitterions Formed in Photochemical and Acid-Catalyzed Reactions fromm-Hydroxycycloalkyl-Substituted Phenol Derivatives. Journal of Organic Chemistry, 2015, 80, 12420-12430.	3.2	4
83	N-Benzyl-4-(hydroxyiminomethyl)pyridinium bromide. Acta Crystallographica Section E: Structure Reports Online, 2006, 62, o2423-o2424.	0.2	3
84	Electrochemical synthesis and crystal structure of a penta-coordinated silver(II) macrocyclic complex. Inorganica Chimica Acta, 2009, 362, 4009-4012.	2.4	3
85	Crystal structure of copper(<scp>ii</scp>) citrate monohydrate solved from a mixture powder X-ray diffraction pattern. Powder Diffraction, 2014, 29, 28-32.	0.2	3
86	Mechanochemical oxidation of graphite for graphene-hydrogel applications: Pitfalls and benefits. Materialia, 2020, 14, 100908.	2.7	3
87	Mechanochemical vs Wet Approach for Directing CO₂ Capture toward Various Carbonate and Bicarbonate Networks. ACS Sustainable Chemistry and Engineering, 2022, 10, 4374-4380.	6.7	3
88	Structural, Spectroscopic and Thermal Characterisation of bis (dibenzoylmethanato)Cd(II) Adducts with Dimethylsulfoxide and Water. Journal of Chemical Crystallography, 2008, 38, 793-800.	1.1	2
89	An Old Story in New Light: X-Ray Powder Diffraction Provides Novel Insights into a Long-Known Organic Solid-State Rearrangement Reaction. Croatica Chemica Acta, 2013, 86, 187-192.	0.4	2
90	2-Bromoethyl 2,3,4,6-tetra-O-acetyl-Î²-D-glucopyranoside. Acta Crystallographica Section E: Structure Reports Online, 2005, 61, o2644-o2645.	0.2	1

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91	Self-assembly of bis(1,3-diphenylpropane-1,3-dionato-Î²2O,Oâ€²)bis(thiomorpholine-Î²N)cobalt(II). Acta Crystallographica Section E: Structure Reports Online, 2006, 62, m283-m285.	0.2	1
92	Ewolucja wÄ™gierskiego modelu zarzÄ…dzania sÄ…downictwem i samorzÄ…du sÄ™dziowskiego na WÄ™grzech w latach 1989â€“2019. PrzeglÄ…d Prawa I Administracji, 0, 119, 171-180.	0.0	1