Mihails Arhangelskis

List of Publications by Year
in descending order

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52	1,188	331259	395343
papers	citations	21 h-index	33 g-index

61	61	61	1513
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental and Theoretical Evaluation of the Stability of True MOF Polymorphs Explains Their Mechanochemical Interconversions. Journal of the American Chemical Society, 2017, 139, 7952-7957.	6.6	93
2	Halogen-bonded cocrystallization with phosphorus, arsenic and antimony acceptors. Nature Communications, 2019, 10, 61.	5.8	78
3	Advantages of mechanochemical cocrystallisation in the solid-state chemistry of pigments: colour-tuned fluorescein cocrystals. CrystEngComm, 2013, 15, 6289.	1.3	67
4	Polymorphs, hydrates and solvates of a co-crystal of caffeine with anthranilic acid. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2014, 70, 72-80.	0.5	62
5	Hypergolic zeolitic imidazolate frameworks (ZIFs) as next-generation solid fuels: Unlocking the latent energetic behavior of ZIFs. Science Advances, 2019, 5, eaav9044.	4.7	52
6	Challenging the Ostwald rule of stages in mechanochemical cocrystallisation. Chemical Science, 2020, 11, 10092-10100.	3.7	49
7	On the predictability of supramolecular interactions in molecular cocrystals â€“ the view from the bench. CrystEngComm, 2016, 18, 5434-5439.	1.3	47
8	Solid state grinding as a tool to aid enantiomeric resolution by cocrystallisation. Chemical Communications, 2012, 48, 11340.	2.2	46
9	Computational evaluation of metal pentazolate frameworks: inorganic analogues of azolate metalâ€“organic frameworks. Chemical Science, 2018, 9, 3367-3375.	3.7	39
10	Crystal structure landscape of ethenzamide: a physicochemical property study. CrystEngComm, 2017, 19, 826-833.	1.3	37
11	Linker Substituents Control the Thermodynamic Stability in Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 21720-21729.	6.6	36
12	Mechanochemical synthesis of pyrazine:dicarboxylic acid cocrystals and a study of dissociation by quantitative phase analysis. CrystEngComm, 2012, 14, 5203.	1.3	34
13	Cocrystal Dissociation under Controlled Humidity: A Case Study of Caffeineâ€“Glutaric Acid Cocrystal Polymorphs. Organic Process Research and Development, 2019, 23, 845-851.	1.3	34
14	Theoretical Prediction and Experimental Evaluation of Topological Landscape and Thermodynamic Stability of a Fluorinated Zeolitic Imidazolate Framework. Chemistry of Materials, 2019, 31, 3777-3783.	3.2	31
15	Investigation of an Amide-Pseudo Amide Hydrogen Bonding Motif within a Series of Theophylline:Amide Cocrystals. Crystal Growth and Design, 2016, 16, 51-58.	1.4	30
16	Welcoming Gallium- and Indium-Fumarate MOFs to the Family: Synthesis, Comprehensive Characterization, Observation of Porous Hydrophobicity, and CO₂ Dynamics. ACS Applied Materials & Interfaces, 2018, 10, 28582-28596.	4.0	30
17	Mechanochemical Synthesis of Olanzapine Salts and Their Hydration Stability Study Using Powder X-ray Diffraction. Crystal Growth and Design, 2018, 18, 2138-2150.	1.4	27
18	Hypergolic Triggers as Coâ€crystal Formers: Coâ€crystallization for Creating New Hypergolic Materials with Tunable Energy Content. Angewandte Chemie - International Edition, 2019, 58, 18399-18404.	7.2	25

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19	Disappearing Polymorphs in Metalâ€“Organic Framework Chemistry: Unexpected Stabilization of a Layered Polymorph over an Interpenetrated Threeâ€Dimensional Structure in Mercury Imidazolate. Chemistry - A European Journal, 2020, 26, 1811-1818.	1.7	25
20	Mechanochemical reactivity inhibited, prohibited and reversed by liquid additives: examples from crystal-form screens. Chemical Science, 2021, 12, 3264-3269.	3.7	25
21	Rationalization of the Color Properties of Fluorescein in the Solid State: A Combined Computational and Experimental Study. Chemistry - A European Journal, 2016, 22, 10065-10073.	1.7	24
22	Metalâ€“Organic Frameworks as Fuels for Advanced Applications: Evaluating and Modifying the Combustion Energy of Popular MOFs. Chemistry of Materials, 2019, 31, 4882-4888.	3.2	21
23	Mechanochemical Formation of Racemic Praziquantel Hemihydrate with Improved Biopharmaceutical Properties. Pharmaceutics, 2020, 12, 289.	2.0	21
24	Towards the systematic crystallisation of molecular ionic cocrystals: insights from computed crystal form landscapes. Faraday Discussions, 2018, 211, 401-424.	1.6	20
25	Experimental and Theoretical Investigation of Structures, Stoichiometric Diversity, and Bench Stability of Cocrystals with a Volatile Halogen Bond Donor. Crystal Growth and Design, 2018, 18, 2387-2396.	1.4	19
26	Mechanochemical reactions of cocrystals: comparing theory with experiment in the making and breaking of halogen bonds in the solid state. Chemical Communications, 2020, 56, 8293-8296.	2.2	18
27	Open versus Interpenetrated: Switchable Supramolecular Trajectories in Mechanosynthesis of a Halogen-Bonded Borromean Network. CheM, 2021, 7, 146-154.	5.8	17
28	Crystallization at Solvent Interfaces Enables Access to a Variety of Cocrystal Polymorphs and Hydrates. Crystal Growth and Design, 2018, 18, 3263-3268.	1.4	15
29	On the kinetics of solvate formation through mechanochemistry. CrystEngComm, 2019, 21, 2097-2104.	1.3	14
30	Air oxidation of sulfur mustard gas simulants using a pyrene-based metalâ€“organic framework photocatalyst. Beilstein Journal of Nanotechnology, 2019, 10, 2422-2427.	1.5	14
31	Metalâ€“organic frameworks as hypergolic additives for hybrid rockets. Chemical Science, 2022, 13, 3424-3436.	3.7	14
32	Cocrystal trimorphism as a consequence of the orthogonality of halogen- and hydrogen-bonds synthons. Chemical Communications, 2019, 55, 14066-14069.	2.2	13
33	Solid-state photoreactivity of 9-substituted acridizinium bromide salts. CrystEngComm, 2014, 16, 10830-10836.	1.3	12
34	Ab Initio Prediction of Metal-Organic Framework Structures. Chemistry of Materials, 2020, 32, 5835-5844.	3.2	11
35	Mechanochemical Synthesis and Physicochemical Characterization of Previously Unreported Praziquantel Solvates with 2-Pyrrolidone and Acetic Acid. Pharmaceutics, 2021, 13, 1606.	2.0	10
36	Time-Dependent Density-Functional Theory for Modeling Solid-State Fluorescence Emission of Organic Multicomponent Crystals. Journal of Physical Chemistry A, 2018, 122, 7514-7521.	1.1	9

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37	Mechanochemical Synthesis of Polymorphic Ureaâ€‰â‹…â€‰Adipic Acid Cocrystal as a Sustainedâ€Release Nitrogen Source. ChemSusChem, 2022, 15, e202102445.	8.6	9
38	Solvent-free ageing reactions of rare earth element oxides: from geomimetic synthesis of new metalâ€“organic materials towards a simple, environmentally friendly separation of scandium. Green Chemistry, 2020, 22, 4364-4375.	4.6	8
39	Polymorphism and surface diversity arising from stress-induced transformations â€“ the case of multicomponent forms of carbamazepine. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 54-67.	0.5	8
40	Crystal structure evaluation: calculating relative stabilities and other criteria: general discussion. Faraday Discussions, 2018, 211, 325-381.	1.6	7
41	Hypergolic Triggers as Coâ€crystal Formers: Coâ€crystallization for Creating New Hypergolic Materials with Tunable Energy Content. Angewandte Chemie, 2019, 131, 18570-18575.	1.6	7
42	Simplifying and expanding the scope of boron imidazolate framework (BIF) synthesis using mechanochemistry. Chemical Science, 2021, 12, 14499-14506.	3.7	7
43	Influence of ligand composition on crystal structure formation â€“ isostructurality and morphotropism. CrystEngComm, 2021, 23, 317-323.	1.3	6
44	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.	6.6	5
45	Understanding stress-induced disorder and breakage in organic crystals: beyond crystal structure anisotropy. Chemical Science, 2021, 12, 14270-14280.	3.7	5
46	Structure searching methods: general discussion. Faraday Discussions, 2018, 211, 133-180.	1.6	3
47	Mechanosynthesis of Eutectics of Antiâ€inflammatory Drug Ethenzamide â€“ A Comparison with Analogous Cocrystals. Chemistry Methods, 2021, 1, 408-414.	1.8	3
48	Effect of Vehicle Composition on the Preparation of Different Types of Dapsone Crystals for Topical Drug Delivery. Molecular Pharmaceutics, 0, , .	2.3	1
49	Crystal structure of 1-(N-morpholiniomethyl)spirobi(4-methyl-3-oxo- 2,5-dioxa-1-silacyclopentan)ate dihydrate, C11H19NO7Si Â· 2H2O. Zeitschrift Fur Kristallographie - New Crystal Structures, 2011, 226, .	0.1	0
50	Combined use of solid-state NMR spectroscopy and theoretical modelling as a method of structure determination. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, a421-a421.	0.0	0
51	Real-time monitoring of mechanochemical formation of pharmaceutical cocrystals using synchrotron X-ray diffraction. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, a277-a277.	0.0	0
52	Understanding the stepwise mechanism in the formation of halogen-bonded organic cocrystals by mechanochemistry. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, a372-a372.	0.0	0