Igor A Baburin

List of Publications by Year
in descending order

42	2,507	218677	276875
papers	citations	26 h-index	41 g-index

43	43	43	3993
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Exploring the 3D structure and defects of a self-assembled gold mesocrystal by coherent X-ray diffraction imaging. Nanoscale, 2021, 13, 10425-10435.	5.6	8
2	Morphogenesis of Magnetite Mesocrystals: Interplay between Nanoparticle Morphology and Solvation Shell. Chemistry of Materials, 2021, 33, 9119-9130.	6.7	11
3	Covalent Organic Framework (COFâ€1) under High Pressure. Angewandte Chemie - International Edition, 2020, 59, 1087-1092.	13.8	34
4	Interfacial Approach toward Benzeneâ€Bridged Polypyrrole Filmâ€“Based Microâ€Supercapacitors with Ultrahigh Volumetric Power Density. Advanced Functional Materials, 2020, 30, 1908243.	14.9	60
5	Acetylation of graphite oxide. Physical Chemistry Chemical Physics, 2020, 22, 21059-21067.	2.8	2
6	Identification of Prime Factors to Maximize the Photocatalytic Hydrogen Evolution of Covalent Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 9752-9762.	13.7	94
7	Isotopy classes for 3-periodic net embeddings. Acta Crystallographica Section A: Foundations and Advances, 2020, 76, 275-301.	0.1	4
8	On Cayley graphs of {b Z}^4. Acta Crystallographica Section A: Foundations and Advances, 2020, 76, 584-588.	0.1	0
9	Balancing Mechanical Stability and Ultrahigh Porosity in Crystalline Framework Materials. Angewandte Chemie - International Edition, 2018, 57, 13780-13783.	13.8	283
10	Mechanische StabilitÃt versus ultrahohe PorositÃt in kristallinen Netzwerkmaterialien: ein Balanceakt!. Angewandte Chemie, 2018, 130, 13976-13979.	2.0	25
11	Generating carbon schwarzites via zeolite-templating. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8116-E8124.	7.1	88
12	Graphite oxide swelling in molten sugar alcohols and their aqueous solutions. Carbon, 2018, 140, 157-163.	10.3	15
13	Porous graphite oxide pillared with tetrapod-shaped molecules. Carbon, 2017, 120, 145-156.	10.3	29
14	Multilayered intercalation of 1-octanol into Brodie graphite oxide. Nanoscale, 2017, 9, 6929-6936.	5.6	27
15	On the group-theoretical approach to the study of interpenetrating nets. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, 366-375.	0.1	10
16	A zeolitic imidazolate framework with conformational variety: conformational polymorphs versus frameworks with static conformational disorder. CrystEngComm, 2016, 18, 2477-2489.	2.6	26
17	Effect of Surface Properties on the Microstructure, Thermal, and Colloidal Stability of VB₂ Nanoparticles. Chemistry of Materials, 2015, 27, 5106-5115.	6.7	52
18	Hydrogen adsorption by perforated graphene. International Journal of Hydrogen Energy, 2015, 40, 6594-6599.	7.1	59

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19	Microwave-Assisted Synthesis of Defects Metal-Imidazolate-Amide-Imidate Frameworks and Improved CO₂ Capture. Inorganic Chemistry, 2015, 54, 10073-10080.	4.0	27
20	Porous Graphene Oxide/Diboronic Acid Materials: Structure and Hydrogen Sorption. Journal of Physical Chemistry C, 2015, 119, 27179-27191.	3.1	49
21	From zeolite nets to sp³carbon allotropes: a topology-based multiscale theoretical study. Physical Chemistry Chemical Physics, 2015, 17, 1332-1338.	2.8	45
22	Interconnection of Nanoparticles within 2D Superlattices of PbS/Oleic Acid Thin Films. Advanced Materials, 2014, 26, 3042-3049.	21.0	51
23	Indium Imidazolate Frameworks with Differently Distorted ReO3-Type Structures: Syntheses, Structures, Phase Transitions, and Crystallization Studies. Crystal Growth and Design, 2014, 14, 4664-4673.	3.0	11
24	Syntheses of two imidazolate-4-amide-5-imidate linker-based hexagonal metalâ€“organic frameworks with flexible ethoxy substituent. CrystEngComm, 2013, 15, 9394.	2.6	27
25	Subtle polymorphism of zinc imidazolate frameworks: temperature-dependent ground states in the energy landscape revealed by experiment and theory. CrystEngComm, 2013, 15, 4036-4040.	2.6	38
26	A rare alb-4,8-Cmce metalâ€“coordination network based on tetrazolate and phosphonate functionalized 1,3,5,7-tetraphenyladamantane. CrystEngComm, 2013, 15, 1235.	2.6	42
27	Zr- and Hf-Based Metalâ€“Organic Frameworks: Tracking Down the Polymorphism. Crystal Growth and Design, 2013, 13, 1231-1237.	3.0	262
28	Theoretical investigation of the electronic structure and quantum transport in the grapheneâ€“C(111) diamond surface system. Journal of Physics Condensed Matter, 2013, 25, 435302.	1.8	13
29	Dye Encapsulation Inside a New Mesoporous Metalâ€“Organic Framework for Multifunctional Solvatochromicâ€Response Function. Chemistry - A European Journal, 2012, 18, 13299-13303.	3.3	86
30	A family of 2D and 3D coordination polymers involving a trigonal tritopic linker. Dalton Transactions, 2012, 41, 4172.	3.3	25
31	An Isoreticular Family of Microporous Metalâ€“Organic Frameworks Based on Zinc and 2â€Substituted Imidazolateâ€4â€amideâ€5â€imidate: Syntheses, Structures and Properties. Chemistry - A European Journal, 2012, 18, 11630-11640.	3.3	26
32	The energy landscapes of zeolitic imidazolate frameworks (ZIFs): towards quantifying the presence of substituents on the imidazole ring. Journal of Materials Chemistry, 2012, 22, 10152-10154.	6.7	29
33	Packings of Carbon Nanotubes â€“ New Materials for Hydrogen Storage. Advanced Materials, 2011, 23, 1237-1241.	21.0	76
34	Route to a Family of Robust, Nonâ€interpenetrated Metalâ€“Organic Frameworks with ptoâ€like Topology. Chemistry - A European Journal, 2011, 17, 13007-13016.	3.3	127
35	Topological Diversity, Adsorption and Fluorescence Properties of MOFs Based on a Tetracarboxylate Ligand. European Journal of Inorganic Chemistry, 2010, 2010, 3835-3841.	2.0	36
36	A Highly Porous Metalâ€“Organic Framework with Open Nickel Sites. Angewandte Chemie - International Edition, 2010, 49, 8489-8492.	13.8	149

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37	Modelling polymorphs of metalâ€“organic frameworks: a systematic study of diamondoid zinc imidazolates. CrystEngComm, 2010, 12, 2809.	2.6	25
38	New Chiral and Flexible Metalâ^'Organic Framework with a Bifunctional Spiro Linker and Zn₄O-Nodes. Inorganic Chemistry, 2010, 49, 4440-4446.	4.0	51
39	Interpenetrated Three-Dimensional Networks of Hydrogen-Bonded Organic Species: A Systematic Analysis of the Cambridge Structural Database. Crystal Growth and Design, 2008, 8, 519-539.	3.0	232
40	Interpenetrated three-dimensional hydrogen-bonded networks from metalâ€“organic molecular and one- or two-dimensional polymeric motifs. CrystEngComm, 2008, 10, 1822.	2.6	160
41	Three-dimensional hydrogen-bonded frameworks in organic crystals: a topological study. Acta Crystallographica Section B: Structural Science, 2007, 63, 791-802.	1.8	72
42	Sizes of molecules in organic crystals: the Voronoiâ€“Dirichlet approach. Acta Crystallographica Section B: Structural Science, 2004, 60, 447-452.	1.8	20