Kangcai Wang

List of Publications by Year
in descending order

38 papers	1,263 citations	361413 20 h-index	361022 35 g-index
38 all docs	38 docs citations	38 times ranked	1019 citing authors

#	Article	IF	Citations
1	Accelerating the discovery of insensitive high-energy-density materials by a materials genome approach. Nature Communications, 2018, 9, 2444.	12.8	245
2	Stabilization of the Pentazolate Anion in a Zeolitic Architecture with Na₂₀N₆₀ and Na₂₄N₆₀ Nanocages. Angewandte Chemie - International Edition, 2018, 57, 2592-2595.	13.8	100
3	A luminescent heterometallic metalâ€“organic framework for the naked-eye discrimination of nitroaromatic explosives. Chemical Communications, 2017, 53, 10318-10321.	4.1	78
4	Hunting for advanced high-energy-density materials with well-balanced energy and safety through an energetic hostâ€“guest inclusion strategy. Journal of Materials Chemistry A, 2019, 7, 19248-19257.	10.3	69
5	Synthesis of Thermally Stable and Insensitive Energetic Materials by Incorporating the Tetrazole Functionality into a Fused-Ring 3,6-Dinitropyrazolo-[4,3-c]Pyrazole Framework. ACS Applied Materials & Interfaces, 2019, 11, 45914-45921.	8.0	58
6	Construction of a Thermally Stable and Highly Energetic Metalâ€“Organic Framework as Lead-Free Primary Explosives. Crystal Growth and Design, 2018, 18, 1896-1902.	3.0	53
7	Melamine N-oxide based self-assembled energetic materials with balanced energy & sensitivity and enhanced combustion behavior. Chemical Engineering Journal, 2020, 395, 125114.	12.7	48
8	Iodocuprate-containing ionic liquids as promoters for green propulsion. Journal of Materials Chemistry A, 2018, 6, 22819-22829.	10.3	44
9	Effects of closo-icosahedral periodoborane salts on hypergolic reactions of 70% H₂O₂ with energetic ionic liquids. Journal of Materials Chemistry A, 2018, 6, 19989-19997.	10.3	43
10	Self-Assembly of Nitrogen-Rich Heterocyclic Compounds with Oxidants for the Development of High-Energy Materials. ACS Applied Materials & Interfaces, 2021, 13, 28390-28397.	8.0	38
11	Accelerating the discovery of energetic melt-castable materials by a high-throughput virtual screening and experimental approach. Journal of Materials Chemistry A, 2021, 9, 21723-21731.	10.3	37
12	Supramolecular Templating Approach for the Solvent-Free Synthesis of Open-Framework Metal Oxalates. Inorganic Chemistry, 2016, 55, 7817-7819.	4.0	32
13	Revisiting the reactive chemistry of FOX-7: cyclization of FOX-7 affords the fused-ring polynitro compounds. Chemical Communications, 2019, 55, 3497-3500.	4.1	31
14	[LiNa(N5)2(H2O)4]Â·H2O: a novel heterometallic cyclo- $$m{N}_5^-$$ N 5 â¯ framework with helical chains. Science China Materials, 2019, 62, 283-288.	6.3	29
15	Exploration of new water stable proton-conducting materials in an amino acid-templated metal phosphate system. Dalton Transactions, 2018, 47, 654-658.	3.3	26
16	Decoding the crystal engineering of graphite-like energetic materials: from theoretical prediction to experimental verification. Journal of Materials Chemistry A, 2020, 8, 5975-5985.	10.3	26
17	Ionothermal Synthesis of Open-Framework Metal Phosphates Using a Multifunctional Ionic Liquid. Inorganic Chemistry, 2018, 57, 8726-8729.	4.0	25
18	Towards Nâ€Alkylimidazole Boraneâ€based Hypergolic Fuels. Chemistry - an Asian Journal, 2016, 11, 3528-3533.	3.3	21

#	Article	IF	Citations
19	Heterometallic Hybrid Open Frameworks: Synthesis and Application for Selective Detection of Nitro Explosives. Crystal Growth and Design, 2017, 17, 1836-1842.	3.0	21
20	â€œTandem-actionâ€•ferrocenyl iodocuprates promoting low temperature hypergolic ignitions of â€œgreenâ€• EILâ€“H₂O₂bipropellants. Journal of Materials Chemistry A, 2020, 8, 14661-14670.	10.3	21
21	Synthesis and Properties of Triaminocyclopropenium Cation Based Ionic Liquids as Hypergolic Fluids. Chemistry - A European Journal, 2018, 24, 4620-4627.	3.3	20
22	Amine-Ligated Approach for the Synthesis of Extra-Large-Pore Zinc Phosphites with qtz-h and bnn Topologies. Inorganic Chemistry, 2016, 55, 3727-3729.	4.0	19
23	Fluorescent heterometallic MOFs: tunable framework charges and application for explosives detection. CrystEngComm, 2016, 18, 8301-8308.	2.6	19
24	Fabrication of protonated g-C₃N₄ nanosheets as promising proton conductive materials. Chemical Communications, 2019, 55, 7414-7417.	4.1	18
25	Microporous Metal-Organic Frameworks Based on Zinc Clusters and Their Fluorescence Enhancements towards Acetone and Chloroform. European Journal of Inorganic Chemistry, 2016, 2016, 3411-3416.	2.0	17
26	Synthesis and Properties of 3,6â€Dinitropyrazolo[4,3â€c]â€pyrazole (DNPP) Derivatives. Propellants, Explosives, Pyrotechnics, 2020, 45, 546-553.	1.6	17
27	New open-framework cobalt sulfate-oxalates based on molecular and chain-like building blocks. Dalton Transactions, 2014, 43, 13476-13479.	3.3	16
28	Construction of hydrothermally stable beryllium phosphite open-frameworks with high proton conductivity. CrystEngComm, 2017, 19, 3997-4002.	2.6	13
29	Hydride- and boron-free solid hypergolic H2O2-ignitophores. Chemical Engineering Journal, 2021, 426, 131806.	12.7	13
30	Open-framework beryllium phosphates with a zeolitic CrB4 topology and their structural analogues containing 12-ring channels. CrystEngComm, 2015, 17, 2162-2167.	2.6	12
31	Hunting for Energetic Complexes as Hypergolic Promoters for Green Propellants Using Hydrogen Peroxide as Oxidizer. Inorganic Chemistry, 2021, 60, 17033-17039.	4.0	11
32	In Situ Encapsulation of Imidazolium Proton Carriers in Anionic Open Frameworks Leads the Way to Proton-Conducting Materials. European Journal of Inorganic Chemistry, 2017, 2017, 2295-2300.	2.0	10
33	Synthesis of 5/6/5-fused tricyclic-cation-based cyclo-N5â^’ salt with high density and heat of formation. Energetic Materials Frontiers, 2020, 1, 172-177.	3.2	9
34	Unearthing hidden hypergolic potential of energetic complexes with hydrogen peroxide. Combustion and Flame, 2022, 244, 112235.	5.2	9
35	Structural Analysis and Controllable Fabrication of Two Pentazolate-Based 3D Topological Networks. Inorganic Chemistry, 2021, 60, 8409-8413.	4.0	8
36	Open-Framework Beryllium Hydrogen Phosphates with (3,4)-Connected Networks. European Journal of Inorganic Chemistry, 2014, 2014, 2025-2028.	2.0	4

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37	Two open-framework zinc phosphites constructed from different secondary building units. Inorganic Chemistry Communication, 2016, 72, 96-99.	3.9	2
38	Energetic complexes as promoters for the green hypergolic bipropellant of EIL-H2O2 combinations. FirePhysChem, 2021, , .	3.4	1