Stuart L James

List of Publications by Year in descending order

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Version: 2024-02-01

61 papers 10,608 citations

94433 37 h-index 63 g-index

64 all docs 64
docs citations

64 times ranked 10214 citing authors

#	Article	IF	CITATIONS
1	Metal-organic frameworks. Chemical Society Reviews, 2003, 32, 276.	38.1	3,163
2	Mechanochemistry: opportunities for new and cleaner synthesis. Chemical Society Reviews, 2012, 41, 413-447.	38.1	2,281
3	Solvent-free synthesis of a microporous metal–organic framework. CrystEngComm, 2006, 8, 211.	2.6	487
4	Liquids with permanent porosity. Nature, 2015, 527, 216-220.	27.8	402
5	Synthesis by extrusion: continuous, large-scale preparation of MOFs using little or no solvent. Chemical Science, 2015, 6, 1645-1649.	7.4	347
6	Porous Liquids. Chemistry - A European Journal, 2007, 13, 3020-3025.	3.3	220
7	<i>In Situ</i> 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
8	High Reactivity of Metal–Organic Frameworks under Grinding Conditions: Parallels with Organic Molecular Materials. Angewandte Chemie - International Edition, 2010, 49, 3916-3919.	13.8	183
9	Application of heterogeneous catalysts prepared by mechanochemical synthesis. Chemical Society Reviews, 2013, 42, 7701.	38.1	177
10	An array-based study of reactivity under solvent-free mechanochemical conditions—insights and trends. CrystEngComm, 2008, 10, 1839.	2.6	167
11	Organic synthesis by Twin Screw Extrusion (TSE): continuous, scalable and solvent-free. Green Chemistry, 2017, 19, 1507-1518.	9.0	160
12	The changing state of porous materials. Nature Materials, 2021, 20, 1179-1187.	27.5	147
13	Mechanochemistry. Chemical Society Reviews, 2013, 42, 7494.	38.1	139
14	Study of the mechanochemical formation and resulting properties of an archetypal MOF: Cu3(BTC)2 (BTC = 1,3,5-benzenetricarboxylate). CrystEngComm, 2010, 12, 4063.	2.6	123
15	Alkylated organic cages: from porous crystals to neat liquids. Chemical Science, 2012, 3, 2153.	7.4	123
16	Phosphines as building blocks in coordination-based self-assembly. Chemical Society Reviews, 2009, 38, 1744.	38.1	119
17	Better understanding of mechanochemical reactions: Raman monitoring reveals surprisingly simple †pseudo-fluid†model for a ball milling reaction. Chemical Communications, 2014, 50, 1585.	4.1	119
18	One-pot two-step mechanochemical synthesis: ligand and complex preparation without isolating intermediates. Green Chemistry, 2014, 16, 1374-1382.	9.0	118

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19	Understanding gas capacity, guest selectivity, and diffusion in porous liquids. Chemical Science, 2017, 8, 2640-2651.	7.4	115
20	A pillared-grid MOF with large pores based on the Cu2(O2CR)4 paddle-wheel. CrystEngComm, 2007, 9, 449.	2.6	113
21	Papain-catalysed mechanochemical synthesis of oligopeptides by milling and twin-screw extrusion: application in the Juliá–Colonna enantioselective epoxidation. Green Chemistry, 2018, 20, 1262-1269.	9.0	94
22	The Dam Bursts for Porous Liquids. Advanced Materials, 2016, 28, 5712-5716.	21.0	88
23	Metal–organic gels as functionalisable supports for catalysis. New Journal of Chemistry, 2009, 33, 1070.	2.8	87
24	Porous organic–inorganic hybrid aerogels based on Cr ³⁺ /Fe ³⁺ and rigid bridging carboxylates. Journal of Materials Chemistry, 2012, 22, 1862-1867.	6.7	87
25	Mechanochemical synthesis of homo- and hetero-rare-earth(iii) metal–organic frameworks by ball milling. CrystEngComm, 2010, 12, 3515.	2.6	86
26	Feedback Kinetics in Mechanochemistry: The Importance of Cohesive States. Angewandte Chemie - International Edition, 2017, 56, 15252-15256.	13.8	86
27	Mechanoenzymatic peptide and amide bond formation. Green Chemistry, 2017, 19, 2620-2625.	9.0	81
28	Type 3 porous liquids based on non-ionic liquid phases – a broad and tailorable platform of selective, fluid gas sorbents. Chemical Science, 2020, 11, 2077-2084.	7.4	81
29	Solvent-Free, Continuous Synthesis of Hydrazone-Based Active Pharmaceutical Ingredients by Twin-Screw Extrusion. ACS Sustainable Chemistry and Engineering, 2020, 8, 12230-12238.	6.7	71
30	Manometric real-time studies of the mechanochemical synthesis of zeolitic imidazolate frameworks. Chemical Science, 2020, 11, 2141-2147.	7.4	64
31	Translating solid state organic synthesis from a mixer mill to a continuous twin screw extruder. Green Chemistry, 2018, 20, 4443-4447.	9.0	57
32	Low-Temperature Selective Catalytic Reduction (SCR) of NO <i>_x</i> with <i>n</i> -Octane Using Solvent-Free Mechanochemically Prepared Ag/Al ₂ O ₃ Catalysts. ACS Catalysis, 2011, 1, 1257-1262.	11.2	54
33	Mechanochemistry Can Reduce Life Cycle Environmental Impacts of Manufacturing Active Pharmaceutical Ingredients. ACS Sustainable Chemistry and Engineering, 2022, 10, 1430-1439.	6.7	54
34	Efficient, Scalable, and Solvent-free Mechanochemical Synthesis of the OLED Material Alq ₃ (q = 8-Hydroxyquinolinate). Crystal Growth and Design, 2012, 12, 5869-5872.	3.0	51
35	Fast, quantitative nucleoside protection under solvent-free conditions. Green Chemistry, 2008, 10, 627.	9.0	46
36	Greener Dye Synthesis: Continuous, Solventâ€Free Synthesis of Commodity Perylene Diimides by Twinâ€Screw Extrusion. Angewandte Chemie - International Edition, 2020, 59, 4478-4483.	13.8	46

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37	Synthesis of nucleoside analogues in a ball mill: fast, chemoselective and high yielding acylation without undesirable solvents. Green Chemistry, 2011, 13, 1778.	9.0	41
38	ROP relationships between coordination polymers and discrete complexes: discrete bowl-shaped isomers of a 2-dimensional {M4L3}n polymer. CrystEngComm, 2004, 6, 408.	2.6	38
39	Feedback Kinetics in Mechanochemistry: The Importance of Cohesive States. Angewandte Chemie, 2017, 129, 15454-15458.	2.0	34
40	Assessing the effect of reducing agents on the selective catalytic reduction of NO _x over Ag/Al ₂ O ₃ catalysts. Catalysis Science and Technology, 2016, 6, 1661-1666.	4.1	32
41	Type 3 Porous Liquids for the Separation of Ethane and Ethene. ACS Applied Materials & Samp; Interfaces, 2021, 13, 932-936.	8.0	32
42	Supramolecular gels in crystal engineering. CrystEngComm, 2015, 17, 7976-7977.	2.6	31
43	Continuous and scalable synthesis of a porous organic cage by twin screw extrusion (TSE). Chemical Science, 2020, 11, 6582-6589.	7.4	30
44	Solventless mechanochemical metallation of porphyrins. Green Chemistry, 2017, 19, 102-105.	9.0	29
45	Insights into mechanochemical reactions at the molecular level: simulated indentations of aspirin and meloxicam crystals. Chemical Science, 2019, 10, 2924-2929.	7.4	29
46	Triply-bridged diphos disilver helical complexes [Ag2($\hat{l}\frac{1}{4}$ 2-dppa-P,Pâ \in 2)3(anion)2] [dppa = bis(diphenylphosphino)acetylene]. Chemical Communications, 2000, , 617-618.	4.1	27
47	Mechanochemical interconversion between discrete complexes and coordination networks – formal hydration/dehydration by LAG. CrystEngComm, 2012, 14, 1994.	2.6	27
48	Mechanochemical dehydrocoupling of dimethylamine borane and hydrogenation reactions using Wilkinson's catalyst. Chemical Communications, 2018, 54, 8355-8358.	4.1	27
49	Ring-opening polymerisation of coordination rings and cages. Macromolecular Symposia, 2004, 209, 119-132.	0.7	26
50	Towards MOFs' mass market adoption: MOF Technologies' efficient and versatile one-step extrusion of shaped MOFs directly from raw materials. Faraday Discussions, 2021, 231, 312-325.	3.2	21
51	Phosphine-based coordination cages and nanoporous coordination polymers. Macromolecular Symposia, 2003, 196, 187-199.	0.7	19
52	Use of Batch Mixing To Investigate the Continuous Solvent-Free Mechanical Synthesis of OLED Materials by Twin-Screw Extrusion (TSE). ACS Sustainable Chemistry and Engineering, 2018, 6, 193-201.	6.7	19
53	Greener Dye Synthesis: Continuous, Solventâ€Free Synthesis of Commodity Perylene Diimides by Twinâ€Screw Extrusion. Angewandte Chemie, 2020, 132, 4508-4513.	2.0	16
54	Phenomenological Inferences on the Kinetics of a Mechanically Activated Knoevenagel Condensation: Understanding the "Snowball―Kinetic Effect in Ball Milling. Molecules, 2019, 24, 3600.	3.8	15

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55	Effect of Coordinating Solvents on Solution Speciation and the Crystallisation via ROP of a Triphos-Silver Coordination Cage. Journal of Inorganic and Organometallic Polymers and Materials, 2005, 15, 431-437.	3.7	13
56	Noria and its derivatives as hosts for chemically and thermally robust Type II porous liquids. Chemical Science, 2021, 12, 14230-14240.	7.4	10
57	Selective Hydrogenation of Stearic Acid Using Mechanochemically Prepared Titania-Supported Pt and Pt–Re Bimetallic Catalysts. ACS Sustainable Chemistry and Engineering, 2022, 10, 6934-6941.	6.7	8
58	Channelled crystals formed by tubular stacking of a 4 + 4 phenylene-piperazinemacrocycle. CrystEngComm, 2010, 12, 1048-1050.	2.6	7
59	Tackling a difficult question: how do crystals of coordination polymers form?. IUCrJ, 2014, 1, 263-264.	2.2	6
60	Pillararene for fluorescence detection of <i>n</i> -alkane vapours. Materials Chemistry Frontiers, 2021, 5, 7910-7920.	5.9	4
61	A more direct way to make catalysts: one-pot ligand-assisted aerobic stripping and electrodeposition of copper on graphite. Green Chemistry, 2012, 14, 1643.	9.0	3