Stuart L James

List of Publications by Year
in descending order

61 papers	10,608 citations	94433 37 h-index	114465 63 g-index
64 all docs	64 docs citations	64 times ranked	10214 citing authors

#	Article	IF	Citations
1	Mechanochemistry Can Reduce Life Cycle Environmental Impacts of Manufacturing Active Pharmaceutical Ingredients. ACS Sustainable Chemistry and Engineering, 2022, 10, 1430-1439.	6.7	54
2	Selective Hydrogenation of Stearic Acid Using Mechanochemically Prepared Titania-Supported Pt and Ptâ€“Re Bimetallic Catalysts. ACS Sustainable Chemistry and Engineering, 2022, 10, 6934-6941.	6.7	8
3	Type 3 Porous Liquids for the Separation of Ethane and Ethene. ACS Applied Materials & Interfaces, 2021, 13, 932-936.	8.0	32
4	Pillararene for fluorescence detection of <i>n</i>-alkane vapours. Materials Chemistry Frontiers, 2021, 5, 7910-7920.	5.9	4
5	Towards MOFsâ€™ mass market adoption: MOF Technologiesâ€™ efficient and versatile one-step extrusion of shaped MOFs directly from raw materials. Faraday Discussions, 2021, 231, 312-325.	3.2	21
6	The changing state of porous materials. Nature Materials, 2021, 20, 1179-1187.	27.5	147
7	Noria and its derivatives as hosts for chemically and thermally robust Type II porous liquids. Chemical Science, 2021, 12, 14230-14240.	7.4	10
8	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
9	Manometric real-time studies of the mechanochemical synthesis of zeolitic imidazolate frameworks. Chemical Science, 2020, 11, 2141-2147.	7.4	64
10	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
11	Continuous and scalable synthesis of a porous organic cage by twin screw extrusion (TSE). Chemical Science, 2020, 11, 6582-6589.	7.4	30
12	Greener Dye Synthesis: Continuous, Solventâ€Free Synthesis of Commodity Perylene Diimides by Twinâ€Screw Extrusion. Angewandte Chemie, 2020, 132, 4508-4513.	2.0	16
13	Type 3 porous liquids based on non-ionic liquid phases â€“ a broad and tailorable platform of selective, fluid gas sorbents. Chemical Science, 2020, 11, 2077-2084.	7.4	81
14	Phenomenological Inferences on the Kinetics of a Mechanically Activated Knoevenagel Condensation: Understanding the â€œSnowballâ€• Kinetic Effect in Ball Milling. Molecules, 2019, 24, 3600.	3.8	15
15	Insights into mechanochemical reactions at the molecular level: simulated indentations of aspirin and meloxicam crystals. Chemical Science, 2019, 10, 2924-2929.	7.4	29
16	Papain-catalysed mechanochemical synthesis of oligopeptides by milling and twin-screw extrusion: application in the JuliÃ¡â€“Colonna enantioselective epoxidation. Green Chemistry, 2018, 20, 1262-1269.	9.0	94
17	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
18	Translating solid state organic synthesis from a mixer mill to a continuous twin screw extruder. Green Chemistry, 2018, 20, 4443-4447.	9.0	57

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19	Mechanochemical dehydrocoupling of dimethylamine borane and hydrogenation reactions using Wilkinson's catalyst. Chemical Communications, 2018, 54, 8355-8358.	4.1	27
20	Organic synthesis by Twin Screw Extrusion (TSE): continuous, scalable and solvent-free. Green Chemistry, 2017, 19, 1507-1518.	9.0	160
21	Understanding gas capacity, guest selectivity, and diffusion in porous liquids. Chemical Science, 2017, 8, 2640-2651.	7.4	115
22	Mechanoenzymatic peptide and amide bond formation. Green Chemistry, 2017, 19, 2620-2625.	9.0	81
23	Feedback Kinetics in Mechanochemistry: The Importance of Cohesive States. Angewandte Chemie - International Edition, 2017, 56, 15252-15256.	13.8	86
24	Feedback Kinetics in Mechanochemistry: The Importance of Cohesive States. Angewandte Chemie, 2017, 129, 15454-15458.	2.0	34
25	Solventless mechanochemical metallation of porphyrins. Green Chemistry, 2017, 19, 102-105.	9.0	29
26	The Dam Bursts for Porous Liquids. Advanced Materials, 2016, 28, 5712-5716.	21.0	88
27	<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
28	Assessing the effect of reducing agents on the selective catalytic reduction of NO_x over Ag/Al₂O₃ catalysts. Catalysis Science and Technology, 2016, 6, 1661-1666.	4.1	32
29	Synthesis by extrusion: continuous, large-scale preparation of MOFs using little or no solvent. Chemical Science, 2015, 6, 1645-1649.	7.4	347
30	Supramolecular gels in crystal engineering. CrystEngComm, 2015, 17, 7976-7977.	2.6	31
31	Liquids with permanent porosity. Nature, 2015, 527, 216-220.	27.8	402
32	Better understanding of mechanochemical reactions: Raman monitoring reveals surprisingly simple â€˜pseudo-fluidâ€™ model for a ball milling reaction. Chemical Communications, 2014, 50, 1585.	4.1	119
33	One-pot two-step mechanochemical synthesis: ligand and complex preparation without isolating intermediates. Green Chemistry, 2014, 16, 1374-1382.	9.0	118
34	Tackling a difficult question: how do crystals of coordination polymers form?. IUCrJ, 2014, 1, 263-264.	2.2	6
35	Mechanochemistry. Chemical Society Reviews, 2013, 42, 7494.	38.1	139
36	Application of heterogeneous catalysts prepared by mechanochemical synthesis. Chemical Society Reviews, 2013, 42, 7701.	38.1	177

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37	Porous organicâ€“inorganic hybrid aerogels based on Cr³⁺/Fe³⁺and rigid bridging carboxylates. Journal of Materials Chemistry, 2012, 22, 1862-1867.	6.7	87
38	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
39	Mechanochemical interconversion between discrete complexes and coordination networks â€“ formal hydration/dehydration by LAG. CrystEngComm, 2012, 14, 1994.	2.6	27
40	Efficient, Scalable, and Solvent-free Mechanochemical Synthesis of the OLED Material Alq₃ (q = 8-Hydroxyquinolinate). Crystal Growth and Design, 2012, 12, 5869-5872.	3.0	51
41	Alkylated organic cages: from porous crystals to neat liquids. Chemical Science, 2012, 3, 2153.	7.4	123
42	Mechanochemistry: opportunities for new and cleaner synthesis. Chemical Society Reviews, 2012, 41, 413-447.	38.1	2,281
43	Low-Temperature Selective Catalytic Reduction (SCR) of NO<i>_x</i> with <i>n</i>-Octane Using Solvent-Free Mechanochemically Prepared Ag/Al₂O₃ Catalysts. ACS Catalysis, 2011, 1, 1257-1262.	11.2	54
44	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
45	High Reactivity of Metalâ€“Organic Frameworks under Grinding Conditions: Parallels with Organic Molecular Materials. Angewandte Chemie - International Edition, 2010, 49, 3916-3919.	13.8	183
46	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
47	Mechanochemical synthesis of homo- and hetero-rare-earth(iii) metalâ€“organic frameworks by ball milling. CrystEngComm, 2010, 12, 3515.	2.6	86
48	Channelled crystals formed by tubular stacking of a 4 + 4 phenylene-piperazinemacrocycle. CrystEngComm, 2010, 12, 1048-1050.	2.6	7
49	Phosphines as building blocks in coordination-based self-assembly. Chemical Society Reviews, 2009, 38, 1744.	38.1	119
50	Metalâ€“organic gels as functionalisable supports for catalysis. New Journal of Chemistry, 2009, 33, 1070.	2.8	87
51	Fast, quantitative nucleoside protection under solvent-free conditions. Green Chemistry, 2008, 10, 627.	9.0	46
52	An array-based study of reactivity under solvent-free mechanochemical conditionsâ€”insights and trends. CrystEngComm, 2008, 10, 1839.	2.6	167
53	A pillared-grid MOF with large pores based on the Cu2(O2CR)4 paddle-wheel. CrystEngComm, 2007, 9, 449.	2.6	113
54	Porous Liquids. Chemistry - A European Journal, 2007, 13, 3020-3025.	3.3	220

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55	Solvent-free synthesis of a microporous metalâ€“organic framework. CrystEngComm, 2006, 8, 211.	2.6	487
56	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
57	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
58	Ring-opening polymerisation of coordination rings and cages. Macromolecular Symposia, 2004, 209, 119-132.	0.7	26
59	Metal-organic frameworks. Chemical Society Reviews, 2003, 32, 276.	38.1	3,163
60	Phosphine-based coordination cages and nanoporous coordination polymers. Macromolecular Symposia, 2003, 196, 187-199.	0.7	19
61	Triply-bridged diphos disilver helical complexes [Ag2(Î¼2-dppa-P,Pâ€²)3(anion)2] [dppa = bis(diphenylphosphino)acetylene]. Chemical Communications, 2000, , 617-618.	4.1	27