Matteo Lusi

List of Publications by Year in descending order

69 papers	3,516 citations	147801 31 h-index	138484 58 g-index
76 all docs	76 docs citations	76 times ranked	4027 citing authors

#	Article	IF	Citations
1	Direct Air Capture of CO₂ by Physisorbent Materials. Angewandte Chemie - International Edition, 2015, 54, 14372-14377.	13.8	382
2	Benchmark C2H2/CO2 and CO2/C2H2 Separation by Two Closely Related Hybrid Ultramicroporous Materials. CheM, 2016, 1, 753-765.	11.7	349
3	Viologen-Based Conjugated Covalent Organic Networks via Zincke Reaction. Journal of the American Chemical Society, 2017, 139, 9558-9565.	13.7	228
4	Reversible Switching between Highly Porous and Nonporous Phases of an Interpenetrated Diamondoid Coordination Network That Exhibits Gateâ€Opening at Methane Storage Pressures. Angewandte Chemie - International Edition, 2018, 57, 5684-5689.	13.8	161
5	Solid-State Interconversions of Coordination Networks and Hydrogen-Bonded Salts. Angewandte Chemie - International Edition, 2007, 46, 1124-1128.	13.8	143
6	Hydrophobic pillared square grids for selective removal of CO₂ from simulated flue gas. Chemical Communications, 2015, 51, 15530-15533.	4.1	115
7	Solidâ€“Vapor Sorption of Xylenes: Prioritized Selectivity as a Means of Separating All Three Isomers Using a Single Substrate. Angewandte Chemie - International Edition, 2012, 51, 3928-3931.	13.8	114
8	Engineering Crystal Properties through Solid Solutions. Crystal Growth and Design, 2018, 18, 3704-3712.	3.0	109
9	Practical and Highly Selective Sulfur Ylide-Mediated Asymmetric Epoxidations and Aziridinations Using a Cheap and Readily Available Chiral Sulfide: Extensive Studies To Map Out Scope, Limitations, and Rationalization of Diastereo- and Enantioselectivities. Journal of the American Chemical Society, 2013, 135, 11951-11966.	13.7	102
10	Simultaneous Selfâ€Assembly of a [2]Catenane, a Trefoil Knot, and a Solomon Link from a Simple Pair of Ligands. Angewandte Chemie - International Edition, 2013, 52, 9956-9960.	13.8	99
11	Solid state synthesis of coordination compounds from basic metal salts. CrystEngComm, 2008, 10, 1790.	2.6	96
12	Flue-gas and direct-air capture of CO ₂ by porous metalâ€“organic materials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160025.	3.4	80
13	A rough guide to molecular solid solutions: design, synthesis and characterization of mixed crystals. CrystEngComm, 2018, 20, 7042-7052.	2.6	80
14	Crystal engineering of lattice metrics of perhalometallate salts and MOFs. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16033-16038.	7.1	65
15	Kitaigorodsky Revisited: Polymorphism and Mixed Crystals of Acridine/Phenazine. Chemistry - A European Journal, 2015, 21, 1735-1742.	3.3	57
16	Expanding the Scope of Molecular Mixed Crystals Enabled by Three Component Solid Solutions. Crystal Growth and Design, 2015, 15, 4098-4103.	3.0	53
17	Reversible Switching between Nonporous and Porous Phases of a New SIFSIX Coordination Network Induced by a Flexible Linker Ligand. Journal of the American Chemical Society, 2020, 142, 6896-6901.	13.7	51
18	[Câ€“Hâ‹¯anion] interactions mediate the templation and anion binding properties of topologically non-trivial metalâ€“organic structures in aqueous solutions. Chemical Science, 2016, 7, 2524-2531.	7.4	50

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19	Colloidal Cu2ZnSn(SSe)4 (CZTSSe) Nanocrystals: Shape and Crystal Phase Control to Form Dots, Arrows, Ellipsoids, and Rods. Chemistry of Materials, 2015, 27, 4742-4748.	6.7	49
20	Towards an understanding of the propensity for crystalline hydrate formation by molecular compounds. IUCrJ, 2016, 3, 430-439.	2.2	49
21	Determining Hydrogen Atom Positions for Hydrogen Bonded Interactions: A Distance-Dependent Neutron-Normalized Method. Crystal Growth and Design, 2011, 11, 5515-5521.	3.0	40
22	Two-step solid-state synthesis of PEPPSI-type compounds. Chemical Communications, 2015, 51, 9632-9635.	4.1	40
23	The effect of centred versus offset interpenetration on C₂H₂ sorption in hybrid ultramicroporous materials. Chemical Communications, 2017, 53, 11592-11595.	4.1	40
24	Theoretical Optimization of Pore Size and Chemistry in SIFSIX-3-M Hybrid Ultramicroporous Materials. Crystal Growth and Design, 2016, 16, 3890-3897.	3.0	37
25	General Routes to Alkyl Phosphatrioxaadamantane Ligands. Organometallics, 2008, 27, 3216-3224.	2.3	36
26	Fine-tuning of a thermosalient phase transition by solid solutions. CrystEngComm, 2016, 18, 4699-4703.	2.6	36
27	Unprecedented mechanochemical preparation of 18Crown[6] and 15Crown[5] adducts of ammonium hydrogen sulfate by grinding or kneading. CrystEngComm, 2005, 7, 276.	2.6	35
28	On the propulsion mechanism of â€œjumpingâ€•crystals. Chemical Communications, 2013, 49, 9293.	4.1	35
29	Towards polymorphism control in coordination networks and metallo-organic salts. CrystEngComm, 2010, 12, 4403.	2.6	34
30	Solution and Solid-State Preparation of 18-Crown-6 and 15-Crown-5 Adducts of Hydrogen Sulfate Salts and an Investigation of the Reversible Dehydration Processes. Crystal Growth and Design, 2007, 7, 919-924.	3.0	33
31	The role of weak interactions in controlling the mode of interpenetration in hybrid ultramicroporous materials. Chemical Communications, 2017, 53, 3978-3981.	4.1	33
32	A mechanochemically synthesised solid solution enables engineering of the sorption properties of a Werner clathrate. Chemical Communications, 2012, 48, 12171.	4.1	31
33	Metalâ€“Organic Self-Assembled Trefoil Knots for Câ€”Br Bond Activation. ACS Catalysis, 2019, 9, 1907-1914.	11.2	30
34	Plasticity in zwitterionic drugs: the bending properties of Pregabalin and Gabapentin and their hydrates. IUCrJ, 2019, 6, 630-634.	2.2	30
35	Solution and Solid-State Preparation of 18-Crown[6] Complexes with M[HSO4]n Salts (M = NH4+, K+,) Tj ETQq1 1 0.784314 rgBT /O Chemistry - A European Journal, 2007, 13, 5249-5255.	3.3	29
36	Improving Biopharmaceutical Properties of Vinpocetine Through Cocrystallization. Journal of Pharmaceutical Sciences, 2016, 105, 3626-3633.	3.3	27

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37	Reversible Switching between Highly Porous and Nonporous Phases of an Interpenetrated Diamondoid Coordination Network That Exhibits Gateâ€Opening at Methane Storage Pressures. Angewandte Chemie, 2018, 130, 5786-5791.	2.0	27
38	Cocrystals Help Break the â€œRulesâ€•of Isostructurality: Solid Solutions and Polymorphism in the Malic/Tartaric Acid System. Crystal Growth and Design, 2018, 18, 855-863.	3.0	27
39	Dynamic stereoisomerization in inherently chiral bimetallic [2]catenanes. Chemical Communications, 2015, 51, 5840-5843.	4.1	22
40	Potassium S2N-heteroscorpionates: structure and iridaboratrane formation. Dalton Transactions, 2011, 40, 4647.	3.3	21
41	Crystal synthesis of 1,4-phenylenediamine salts and coordination networks. CrystEngComm, 2011, 13, 4324-4331.	2.6	21
42	Investigation into the Solid and Solution Properties of Known and Novel Polymorphs of the Antimicrobial Molecule Clofazimine. Crystal Growth and Design, 2016, 16, 7240-7250.	3.0	21
43	Same or different â€“ that is the question: identification of crystal forms from crystal structure data. CrystEngComm, 2020, 22, 7170-7185.	2.6	21
44	Role of Biorelevant Dissolution Media in the Selection of Optimal Salt Forms of Oral Drugs: Maximizing the Gastrointestinal Solubility and in Vitro Activity of the Antimicrobial Molecule, Clofazimine. ACS Omega, 2017, 2, 8969-8981.	3.5	20
45	The role of solvation in proton transfer reactions: implications for predicting salt/co-crystal formation using the Î”pK_a rule. Faraday Discussions, 2022, 235, 446-466.	3.2	20
46	Solidâ€“vapour reactions as a post-synthetic modification tool for molecular crystals: the enclathration of benzene and toluene by Werner complexes. Chemical Communications, 2013, 49, 2634.	4.1	19
47	Crystal Engineering Approach to Generate Crystalline Inclusion Compounds in Which 5-Hydroxyisophthalic Acid Serves as a Host. Crystal Growth and Design, 2017, 17, 959-962.	3.0	19
48	Two-Step Mechanochemical Synthesis of Carbene Complexes of Palladium(II) and Platinum(II). Crystal Growth and Design, 2017, 17, 3151-3155.	3.0	19
49	Graph-Set Analysis Helps To Understand Charge Transfer in a Novel Ionic Cocrystal When the ΔpK_a Rule Fails. Crystal Growth and Design, 2019, 19, 5308-5313.	3.0	19
50	A rare cationic building block that generates a new type of polyhedral network with â€œcross-linkedâ€• pto topology. Chemical Communications, 2016, 52, 4160-4162.	4.1	18
51	Isostructural coordination polymers: epitaxis vs. solid solution. CrystEngComm, 2011, 13, 4311.	2.6	17
52	How Many Cocrystals Are We Missing? Assessing Two Crystal Engineering Approaches to Pharmaceutical Cocrystal Screening. Crystal Growth and Design, 2022, 22, 1390-1397.	3.0	17
53	Isomerism in rhodium(i) N,S-donor heteroscorpionates: ring substituent and ancillary ligand effects. Dalton Transactions, 2010, 39, 11616.	3.3	16
54	Post-synthetic modifications of cadmium-based knots and links. Chemical Communications, 2016, 52, 7398-7401.	4.1	16

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55	Desymmetrization by Asymmetric Copper-Catalyzed Intramolecular Câ€“H Insertion Reactions of Î±-Diazo-Î²-oxosulfones. Journal of Organic Chemistry, 2019, 84, 7543-7563.	3.2	14
56	The heterogeneous crystallization of a novel solvate of clozapine base in the presence of excipients. CrystEngComm, 2018, 20, 4370-4382.	2.6	13
57	A mixed molecular salt of lithium and sodium breaks the Hume-Rothery rules for solid solutions. Chemical Communications, 2019, 55, 2297-2300.	4.1	13
58	Diversity in a simple co-crystal: racemic and kryptoracemic behaviour. Chemical Communications, 2016, 52, 8309-8312.	4.1	11
59	Solution and calorimetric thermodynamic study of a new 1â€‰:â€‰1 sulfamethazineâ€“3-methylsalicylic acid co-crystal. CrystEngComm, 2020, 22, 3463-3473.	2.6	10
60	Temperature-dependent guest reorientation: a reversible orderâ€“disorder transformation in a single crystal. CrystEngComm, 2014, 16, 36-38.	2.6	9
61	Microwave assisted slurry conversion crystallization for manufacturing of new co-crystals of sulfamethazine and sulfamerazine. CrystEngComm, 2020, 22, 1381-1394.	2.6	8
62	Supramolecular Synthon Promiscuity in Phosphoric Acidâ€“Dihydrogen Phosphate Ionic Cocrystals. Crystal Growth and Design, 2022, 22, 3333-3342.	3.0	8
63	Hygroscopicity of lithium coordination polymers and their solid solutions. CrystEngComm, 2018, 20, 5940-5944.	2.6	6
64	Cortisone and cortisol break hydrogen-bonding rules to make a drugâ€“prodrug solid solution. IUCrJ, 2020, 7, 1124-1130.	2.2	4
65	Hydrogen-Bond Analysis: Statistical and Computational versus Experimental Position Refinement. Crystal Growth and Design, 2014, 14, 3480-3484.	3.0	2
66	Crystallographic evidences of the nature of homopolar H...H interactions. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s541-s541.	0.3	0
67	Design and synthesis of molecular materials: mixed crystals for finer engineering. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s59-s59.	0.1	0
68	Topochemical control in desolvation of coordination polymers. IUCrJ, 2015, 2, 166-167.	2.2	0
69	Crystallographic evidences of the nature of homopolar H...H interactions. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s165-s165.	0.3	0