Karim Adil

List of Publications by Year
in descending order

94 papers	10,437 citations	76326 40 h-index	39675 94 g-index
106 all docs	106 docs citations	106 times ranked	9425 citing authors

#	Article	IF	Citations
1	Facile modifications of HKUST-1 by V, Nb and Mn for low-temperature selective catalytic reduction of nitrogen oxides by NH3. Catalysis Today, 2022, 384-386, 25-32.	4.4	6
2	Perspectives in Adsorptive and Catalytic Mitigations of NO_x Using Metalâ€“Organic Frameworks. Energy & Fuels, 2022, 36, 3347-3371.	5.1	13
3	Efficient Splitting of Trans-/Cis-Olefins Using an Anion-Pillared Ultramicroporous Metalâ€“Organic Framework with Guest-Adaptive Pore Channels. Engineering, 2022, 11, 80-86.	6.7	13
4	Cation-deficient Ca-doping lanthanum tungstate Ca2.06La2.61â–¡0.33W2O12: Structure and transport property study. Journal of Solid State Chemistry, 2022, 313, 123310.	2.9	2
5	The chemistry of metalâ€“organic frameworks with face-centered cubic topology. Coordination Chemistry Reviews, 2022, 468, 214644.	18.8	14
6	Operando Elucidation on the Working State of Immobilized Fluorinated Iron Porphyrin for Selective Aqueous Electroreduction of CO₂ to CO. ACS Catalysis, 2021, 11, 6499-6509.	11.2	27
7	Investigation of Mn Promotion on HKUSTâ€1 Metalâ€Organic Frameworks for Lowâ€Temperature Selective Catalytic Reduction of NO with NH₃. ChemCatChem, 2021, 13, 4029-4037.	3.7	6
8	Advances on CO2 storage. Synthetic porous solids, mineralization and alternative solutions. Chemical Engineering Journal, 2021, 419, 129569.	12.7	43
9	Versatility vs stability. Are the assets of metalâ€“organic frameworks deployable in aqueous acidic and basic media?. Coordination Chemistry Reviews, 2021, 443, 214020.	18.8	33
10	Differential guest location by host dynamics enhances propylene/propane separation in a metal-organic framework. Nature Communications, 2020, 11, 6099.	12.8	44
11	Diammonium tetraborate dihydrate as hydrolytic by-product of ammonia borane in aqueous alkaline conditions. International Journal of Hydrogen Energy, 2020, 45, 9927-9935.	7.1	10
12	Computationally Assisted Assessment of the Metalâ€Organic Framework/Polymer Compatibility in Composites Integrating a Rigid Polymer. Advanced Theory and Simulations, 2019, 2, 1900116.	2.8	5
13	Imaging defects and their evolution in a metalâ€“organic framework at sub-unit-cell resolution. Nature Chemistry, 2019, 11, 622-628.	13.6	371
14	Fluorinated MOF platform for selective removal and sensing of SO2 from flue gas and air. Nature Communications, 2019, 10, 1328.	12.8	292
15	A Tailor-Made Interpenetrated MOF with Exceptional Carbon-Capture Performance from Flue Gas. CheM, 2019, 5, 950-963.	11.7	118
16	Conformationâ€Controlled Molecular Sieving Effects for Membraneâ€Based Propylene/Propane Separation. Advanced Materials, 2019, 31, e1807513.	21.0	117
17	Enriching the Reticular Chemistry Repertoire with Minimal Edge-Transitive Related Nets: Access to Highly Coordinated Metalâ€“Organic Frameworks Based on Double Six-Membered Rings as Net-Coded Building Units. Journal of the American Chemical Society, 2019, 141, 20480-20489.	13.7	42
18	Extremely Hydrophobic POPs to Access Highly Porous Storage Media and Capturing Agent for Organic Vapors. CheM, 2019, 5, 180-191.	11.7	42

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19	Hydrocarbon recovery using ultra-microporous fluorinated MOF platform with and without uncoordinated metal sites: I- structure properties relationships for C2H2/C2H4 and CO2/C2H2 separation. Chemical Engineering Journal, 2019, 359, 32-36.	12.7	77
20	Concurrent Sensing of CO₂ and H₂O from Air Using Ultramicroporous Fluorinated Metalâ€“Organic Frameworks: Effect of Transduction Mechanism on the Sensing Performance. ACS Applied Materials & Interfaces, 2019, 11, 1706-1712.	8.0	35
21	Room-temperature synthesis of a new stable (N₂H₄)WO₃ compound: a route for hydrazine trapping. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2019, 75, 127-133.	1.1	2
22	Advances in Shaping of Metalâ€“Organic Frameworks for CO₂ Capture: Understanding the Effect of Rubbery and Glassy Polymeric Binders. Industrial & Engineering Chemistry Research, 2018, 57, 16897-16902.	3.7	46
23	Enhanced Separation of Butane Isomers via Defect Control in a Fumarate/Zirconium-Based Metal Organic Framework. Langmuir, 2018, 34, 14546-14551.	3.5	43
24	Trianglamine-Based Supramolecular Organic Framework with Permanent Intrinsic Porosity and Tunable Selectivity. Journal of the American Chemical Society, 2018, 140, 14571-14575.	13.7	78
25	Natural gas upgrading using a fluorinated MOF with tuned H2S and CO2 adsorption selectivity. Nature Energy, 2018, 3, 1059-1066.	39.5	214
26	Achieving Superprotonic Conduction with a 2D Fluorinated Metalâ€“Organic Framework. Journal of the American Chemical Society, 2018, 140, 13156-13160.	13.7	103
27	Enabling Fluorinated MOFâ€Based Membranes for Simultaneous Removal of H₂S and CO₂ from Natural Gas. Angewandte Chemie - International Edition, 2018, 57, 14811-14816.	13.8	176
28	Enabling Fluorinated MOFâ€Based Membranes for Simultaneous Removal of H₂S and CO₂ from Natural Gas. Angewandte Chemie, 2018, 130, 15027-15032.	2.0	17
29	Topology meets MOF chemistry for pore-aperture fine tuning: ftw-MOF platform for energy-efficient separations via adsorption kinetics or molecular sieving. Chemical Communications, 2018, 54, 6404-6407.	4.1	65
30	Upgrading gasoline to high octane numbers using a zeolite-like metalâ€“organic framework molecular sieve with ana-topology. Chemical Communications, 2018, 54, 9414-9417.	4.1	23
31	Carbonization of covalent triazine-based frameworks via ionic liquid induction. Journal of Materials Chemistry A, 2018, 6, 15564-15568.	10.3	13
32	Enriching the Reticular Chemistry Repertoire: Merged Nets Approach for the Rational Design of Intricate Mixed-Linker Metalâ€“Organic Framework Platforms. Journal of the American Chemical Society, 2018, 140, 8858-8867.	13.7	129
33	Metalâ€“organic frameworks to satisfy gas upgrading demands: fine-tuning thesoc-MOF platform for the operative removal of H₂S. Journal of Materials Chemistry A, 2017, 5, 3293-3303.	10.3	94
34	Applying the Power of Reticular Chemistry to Finding the Missing alb-MOF Platform Based on the (6,12)-Coordinated Edge-Transitive Net. Journal of the American Chemical Society, 2017, 139, 3265-3274.	13.7	104
35	Hydrolytically stable fluorinated metal-organic frameworks for energy-efficient dehydration. Science, 2017, 356, 731-735.	12.6	275
36	Gas/vapour separation using ultra-microporous metalâ€“organic frameworks: insights into the structure/separation relationship. Chemical Society Reviews, 2017, 46, 3402-3430.	38.1	1,033

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37	CO₂ Capture Using the SIFSIX-2-Cu-i Metalâ€“Organic Framework: A Computational Approach. Journal of Physical Chemistry C, 2017, 121, 27462-27472.	3.1	14
38	A Fine-Tuned MOF for Gas and Vapor Separation: A Multipurpose Adsorbent for Acid Gas Removal, Dehydration, and BTX Sieving. CheM, 2017, 3, 822-833.	11.7	83
39	Valuing Metalâ€“Organic Frameworks for Postcombustion Carbon Capture: A Benchmark Study for Evaluating Physical Adsorbents. Advanced Materials, 2017, 29, 1702953.	21.0	88
40	A Fine-Tuned Metalâ€“Organic Framework for Autonomous Indoor Moisture Control. Journal of the American Chemical Society, 2017, 139, 10715-10722.	13.7	224
41	A metal-organic frameworkâ€“based splitter for separating propylene from propane. Science, 2016, 353, 137-140.	12.6	892
42	A Fine-Tuned Fluorinated MOF Addresses the Needs for Trace CO₂ Removal and Air Capture Using Physisorption. Journal of the American Chemical Society, 2016, 138, 9301-9307.	13.7	366
43	Reticular Chemistry at Its Best: Directed Assembly of Hexagonal Building Units into the Awaited Metal-Organic Framework with the Intricate Polybenzene Topology, pbz-MOF. Journal of the American Chemical Society, 2016, 138, 12767-12770.	13.7	101
44	Supramolecular Selfâ€Assembly of Histidineâ€Cappedâ€Dialkoxyâ€Anthracene: A Visibleâ€Lightâ€Triggered Platform for Facile siRNA Delivery. Chemistry - A European Journal, 2016, 22, 13789-13793.	3.3	12
45	[Ag₆₇(SPhMe₂)₃₂(PPh₃)₈]³⁺: Synthesis, Total Structure, and Optical Properties of a Large Box-Shaped Silver Nanocluster. Journal of the American Chemical Society, 2016, 138, 14727-14732.	13.7	167
46	Crystal structure and ion conducting properties of La5NbMo2O16. Journal of Solid State Chemistry, 2016, 237, 411-416.	2.9	11
47	Reticular Synthesis of HKUST-like tbo-MOFs with Enhanced CH₄ Storage. Journal of the American Chemical Society, 2016, 138, 1568-1574.	13.7	193
48	Ultraâ€Tuning of the Rareâ€Earth fcuâ€MOF Aperture Size for Selective Molecular Exclusion of Branched Paraffins. Angewandte Chemie - International Edition, 2015, 54, 14353-14358.	13.8	222
49	Investigation of the La2O3â€“Nb2O5â€“WO3 ternary phase diagram: Isolation and crystal structure determination of the original La3NbWO10 material. Journal of Solid State Chemistry, 2015, 229, 129-134.	2.9	3
50	A supermolecular building layer approach for gas separation and storage applications: the eea and rtl MOF platforms for CO₂ capture and hydrocarbon separation. Journal of Materials Chemistry A, 2015, 3, 6276-6281.	10.3	105
51	A facile solvent-free synthesis route for the assembly of a highly CO₂ selective and H₂S tolerant NiSIFSIX metalâ€“organic framework. Chemical Communications, 2015, 51, 13595-13598.	4.1	134
52	Versatile rare earth hexanuclear clusters for the design and synthesis of highly-connectedftw-MOFs. Chemical Science, 2015, 6, 4095-4102.	7.4	127
53	Tunable Rare Earth fcu-MOF Platform: Access to Adsorption Kinetics Driven Gas/Vapor Separations via Pore Size Contraction. Journal of the American Chemical Society, 2015, 137, 5034-5040.	13.7	308
54	MOF Crystal Chemistry Paving the Way to Gas Storage Needs: Aluminum-Based soc-MOF for CH₄, O₂, and CO₂ Storage. Journal of the American Chemical Society, 2015, 137, 13308-13318.	13.7	632

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55	Synthesis, Structural Characterization and Thermal Behavior of New Organicâ€“Inorganic Sulfate. Journal of Cluster Science, 2015, 26, 1413-1424.	3.3	1
56	Zeolite-like metalâ€“organic frameworks (ZMOFs): design, synthesis, and properties. Chemical Society Reviews, 2015, 44, 228-249.	38.1	662
57	A supermolecular building approach for the design and construction of metalâ€“organic frameworks. Chemical Society Reviews, 2014, 43, 6141-6172.	38.1	708
58	Made-to-order metal-organic frameworks for trace carbon dioxide removal and air capture. Nature Communications, 2014, 5, 4228.	12.8	510
59	Discovery and introduction of a (3,18)-connected net as an ideal blueprint for the design of metalâ€“organic frameworks. Nature Chemistry, 2014, 6, 673-680.	13.6	396
60	Investigation of the composition space diagram of the ZnF2â€“3,5-diamino-1,2,4-triazoleâ€“HFâ€“H2O chemical system and structural characterization of a new fluorinated guanazolate MOF [Zn3F2]Â·(Am2TAZ)4. Journal of Fluorine Chemistry, 2013, 150, 104-108.	1.7	13
61	Infrared, polarized Raman and ab initio calculations of the vibrational spectra of [N(C3H7)4]2Cu2Cl6 crystals. Vibrational Spectroscopy, 2013, 64, 10-20.	2.2	36
62	Hydrothermal synthesis, ab-initio structure determination and NMR study of the first mixed Cuâ€“Al fluorinated MOF. CrystEngComm, 2013, 15, 3430.	2.6	23
63	Structural Characterization and Infrared and Electrical Properties of the New Inorganic-Organic Hybrid Compound. Journal of Chemistry, 2013, 2013, 1-10.	1.9	5
64	Poly[bis(Î¼-purin-9-ido-Îº2N7:N9)zinc]. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, m449-m449.	0.2	0
65	Poly[(Î¼3-hydrogenphosphato)(4H-1,2,4-triazole-ÎºN1)zinc]. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, m1426-m1427.	0.2	0
66	SMARTER crystallography of the fluorinated inorganicâ€“organic compound Zn3Al2F12Â·[HAmTAZ]6. Dalton Transactions, 2012, 41, 6232.	3.3	43
67	Tandem Payne/Meinwald versus Meinwald rearrangements on the Î±-hydroxy- or Î±-silyloxy-spiro epoxide skeleton. Organic and Biomolecular Chemistry, 2012, 10, 502-505.	2.8	15
68	Hydrothermal Synthesis and Characterization Properties of C7H12N2[H2PO4]2.1/2H2O. Phosphorus, Sulfur and Silicon and the Related Elements, 2012, 187, 1173-1182.	1.6	4
69	Structural flexibility and intrinsic dynamics in the M2(2,6-ndc)2(dabco) (M = Ni, Cu, Co, Zn) metalâ€“organic frameworks. Journal of Materials Chemistry, 2012, 22, 10303.	6.7	139
70	Mixed metalIIâ€“metalIV hybrid fluorides. Journal of Fluorine Chemistry, 2012, 134, 29-34.	1.7	10
71	A New Organicâ€“Inorganic Hybrid Oxyfluorotitanate [Hgua]₂Â·(Ti₅O₅F₁₂) as a Transparent UV Filter. Inorganic Chemistry, 2011, 50, 5671-5678.	4.0	13
72	ZnAlF5Â·[TAZ]: an Al fluorinated MOF of MIL-53(Al) topology with cationic {Zn(1,2,4 triazole)}2+ linkers. Journal of Materials Chemistry, 2011, 21, 3949.	6.7	32

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73	Fluoroaluminates of purine and DNA bases, adenine, guanine: [Hpur]2Â·(AlF5), [Hade]3Â·(AlF6)Â·6.5H2O, [Hguan]3Â·(Al3F12). Solid State Sciences, 2011, 13, 151-157.	3.2	8
74	A new one-dimensional hybrid material lattice: AC conductivity and structural characterization of [C7H12N2][CdCl4]. Ionics, 2011, 17, 145-155.	2.4	17
75	7,9-Bis(hydroxymethyl)-7H-purine-2,6,8(1H,3H,9H)trione. Acta Crystallographica Section E: Structure Reports Online, 2011, 67, o1458-o1458.	0.2	3
76	Synthesis, spectroscopy, thermal behavior, and X-ray crystal structure of two lead(II) complexes with 4â€²-(4-tolyl)-2,2â€²;6â€²,2â€³-terpyridine (ttpy). Journal of Coordination Chemistry, 2011, 64, 4421-4433.	2.2	10
77	Novel Layered Hybrid Fluoroaluminate in the Composition Space Diagram of the Al(OH)3-HguaCl-HFaq-EtOH System. Inorganic Chemistry, 2010, 49, 2392-2397.	4.0	17
78	Structural chemistry of organically-templated metal fluorides. Dalton Transactions, 2010, 39, 5983.	3.3	58
79	Third structure determination by powder diffractometry round robin (SDPDRR-3). Powder Diffraction, 2009, 24, 254-262.	0.2	31
80	Crystal chemistry of three new monodimensional fluorometalates templated with ethylenediamine. Solid State Sciences, 2009, 11, 1582-1586.	3.2	11
81	Evidence of 13 hybrid fluoroaluminates in the composition space diagram of the Al(OH)3â€“trenâ€“HFâ€“ethanol system. Journal of Fluorine Chemistry, 2009, 130, 1099-1105.	1.7	20
82	Total synthesis of a novel macrotetrolide. Tetrahedron, 2008, 64, 11296-11303.	1.9	12
83	Diethylenetriaminium hexafluoridotitanate(IV) fluoride. Acta Crystallographica Section E: Structure Reports Online, 2008, 64, m1375-m1375.	0.2	3
84	A new 1D hybrid fluoroaluminate templated by an original tetramine. Polyhedron, 2007, 26, 2493-2497.	2.2	3
85	Hydrogen bonded H3O+, H2O, HF, Fâ¯ in fluoride metalates (Al, Cr, Fe, Zr, Ta) templated with tren (tris-(2-aminoethyl)amine). Journal of Fluorine Chemistry, 2007, 128, 404-412.	1.7	19
86	Bis[tris(2-ammonioethyl)amine] bis(pentafluoridooxidomolybdate) difluoride monohydrate. Acta Crystallographica Section E: Structure Reports Online, 2007, 63, m1511-m1513.	0.2	5
87	[H4tren]3/2Â·(Al6F24)Â·3H2O, the most condensed fluoride in the Al(OH)3-tren-HFaq.-ethanol system. Solid State Sciences, 2007, 9, 531-534.	3.2	14
88	Two-dimensional composition diagram of the Al(OH)3-dien-HFaq.-ethanol system: Evidence of a new tetrahedral (Al4F18)6â¯ polyanion. Journal of Fluorine Chemistry, 2006, 127, 1349-1354.	1.7	15
89	On isoelectronic fluorides [H3tren]â‹…(AlF6)â‹…H2O, [H3tren]â‹…(AlF6)â‹…HF, [H4tren]â‹…(AlF6)â‹…(F) and the iron analogue [H4tren]â‹…(FeF6)â‹…(F). Solid State Sciences, 2006, 8, 698-703.	3.2	23
90	Diethylenetriaminium hexafluoroaluminate dihydrate. Acta Crystallographica Section E: Structure Reports Online, 2005, 61, m1178-m1180.	0.2	1

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91	Synthesis and structures of new hybrid fluorides templated by tetraprotonated pentaerythrityl tetramine. Solid State Sciences, 2004, 6, 1229-1235.	3.2	18
92	Ternary and tetrahedral symmetry in hybrid fluorides, fluoride carbonates and carbonates. Journal of Fluorine Chemistry, 2004, 125, 1709-1714.	1.7	8
93	Tris(2-ammonioethyl)aminium decafluorominium monohydrate, (H4tren)[Al2F10]Â·H2O. Acta Crystallographica Section E: Structure Reports Online, 2004, 60, m1379-m1381.	0.2	3
94	Synthesis, structure determination and magnetic behaviour of the first porous hybrid oxyfluorinated vanado(iii)carboxylate: MIL-71 or Viii2(OH)2F2{O2C-C6H4-CO2}Â·H2O. Journal of Materials Chemistry, 2003, 13, 2208-2212.	6.7	84