Radha Kishan Motkuri

List of Publications by Year
in descending order

78 papers	4,116 citations	136885 32 h-index	118793 62 g-index
89 all docs	89 docs citations	89 times ranked	5342 citing authors

#	Article	IF	Citations
1	High surface area magnetic double perovskite La2AlFeO6 as an efficient and stable photo-Fenton catalyst under a wide pH range. Applied Surface Science, 2022, 574, 151554.	3.1	9
2	Manipulating Pore Topology and Functionality to Promote Fluorocarbon-Based Adsorption Cooling. Accounts of Chemical Research, 2022, 55, 649-659.	7.6	9
3	Role of Zeolite Structural Properties toward Iodine Capture: A Head-to-head Evaluation of Framework Type and Chemical Composition. ACS Applied Materials & Interfaces, 2022, 14, 18439-18452.	4.0	27
4	Strain engineered gas-consumption electroreduction reactions: Fundamentals and perspectives. Coordination Chemistry Reviews, 2021, 429, 213649.	9.5	6
5	pH-Mediated Colorimetric and Luminescent Sensing of Aqueous Nitrate Anions by a Platinum(II) Luminophore@Mesoporous Silica Composite. ACS Applied Materials & Interfaces, 2021, 13, 16197-16209.	4.0	11
6	Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling. Angewandte Chemie, 2021, 133, 18185-18191.	1.6	0
7	Innentitelbild: Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling (Angew. Chem. 33/2021). Angewandte Chemie, 2021, 133, 17894-17894.	1.6	0
8	ESSENCE â€" A rapid, shear-enhanced, flow-through, capacitive electrochemical platform for rapid detection of biomolecules. Biosensors and Bioelectronics, 2021, 182, 113163.	5.3	14
9	Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling. Angewandte Chemie - International Edition, 2021, 60, 18037-18043.	7.2	16
10	Structureâ€"Property Correlation of Hierarchically Porous Carbons for Fluorocarbon Adsorption. ACS Applied Materials & Interfaces, 2021, 13, 54266-54273.	4.0	7
11	Understanding Time Dependence on Zinc Metalâ€"Organic Framework Growth Using in Situ Liquid Secondary Ion Mass Spectrometry. ACS Applied Materials & Interfaces, 2020, 12, 5090-5098.	4.0	10
12	Transition-Metal Nitroprussides Examined for Water Harvesting and Sorption Cooling. Inorganic Chemistry, 2020, 59, 15620-15625.	1.9	5
13	Understanding initial zeolite oligomerization steps with first principles calculations. AIChE Journal, 2020, 66, e17107.	1.8	12
14	An Ultraâ€Microporous Metalâ€"Organic Framework with Exceptional Xe Capacity. Chemistry - A European Journal, 2020, 26, 12544-12548.	1.7	10
15	Metalâ€"Organic Framework-Based Microfluidic Impedance Sensor Platform for Ultrasensitive Detection of Perfluorooctanesulfonate. ACS Applied Materials & Interfaces, 2020, 12, 10503-10514.	4.0	77
16	Metal Organic Frameworks for Xenon Storage Applications. , 2020, 2, 233-238.		10
17	Molecular Insight into Fluorocarbon Adsorption in Pore Expanded Metalâ€"Organic Framework Analogs. Journal of the American Chemical Society, 2020, 142, 3002-3012.	6.6	44
18	Kinetics and Mechanisms of ZnO to ZIFâ€8 Transformations in Supercritical CO 2 Revealed by Inâ€…Situ Xâ€ray Diffraction. ChemSusChem, 2020, 13, 2602-2612.	3.6	11

#	ARTICLE	IF	CITATIONS
19	Insight into Fluorocarbon Adsorption in Metal-Organic Frameworks via Experiments and Molecular Simulations. Scientific Reports, 2019, 9, 10289.	1.6	34
20	Multi-glass investigation of Stage III glass dissolution behavior from 22 to 90â€¯Â°C triggered by the addition of zeolite phases. Journal of Nuclear Materials, 2019, 523, 490-501.	1.3	16
21	In-situ monitoring of seeded and unseeded stage III corrosion using Raman spectroscopy. Npj Materials Degradation, 2019, 3, .	2.6	10
22	Isoreticular Expansion of Metalâ€“Organic Frameworks via Pillaring of Metal Templated Tunable Building Layers: Hydrogen Storage and Selective CO₂ Capture. Chemistry - A European Journal, 2019, 25, 14500-14505.	1.7	15
23	Selective Methane Oxidation to Methanol on Cu-Oxo Dimers Stabilized by Zirconia Nodes of an NU-1000 Metalâ€“Organic Framework. Journal of the American Chemical Society, 2019, 141, 9292-9304.	6.6	131
24	Probing the Sorption of Perfluorooctanesulfonate Using Mesoporous Metalâ€“Organic Frameworks from Aqueous Solutions. Inorganic Chemistry, 2019, 58, 8339-8346.	1.9	51
25	Investigation of reactive intermediates during the synthesis of di-n-butylmagnesium. Inorganica Chimica Acta, 2019, 489, 150-154.	1.2	3
26	Improving the sensitivity of electrochemical sensors through a complementary luminescent mode: A new spectroelectrochemical approach. Sensors and Actuators B: Chemical, 2019, 284, 663-674.	4.0	21
27	Dynamic Adsorption of CO₂/N₂ on Cation-Exchanged Chabazite SSZ-13: A Breakthrough Analysis. ACS Applied Materials & Interfaces, 2018, 10, 14287-14291.	4.0	27
28	A Tunable Bimetallic MOFâ€74 for Adsorption Chiller Applications. European Journal of Inorganic Chemistry, 2018, 2018, 885-889.	1.0	41
29	Techno-Economic Analysis of Magnesium Extraction from Seawater via a Catalyzed Organo-Metathetical Process. Jom, 2018, 70, 431-435.	0.9	9
30	Hierarchically Porous Carbon Materials for CO₂ Capture: The Role of Pore Structure. Industrial & Engineering Chemistry Research, 2018, 57, 1262-1268.	1.8	83
31	A Stable Graphitic, Nanocarbonâ€Encapsulated, Cobaltâ€Rich Coreâ€“Shell Electrocatalyst as an Oxygen Electrode in a Water Electrolyzer. Advanced Energy Materials, 2018, 8, 1702838.	10.2	113
32	An Efficient, Solvent-Free Process for Synthesizing Anhydrous MgCl₂. ACS Sustainable Chemistry and Engineering, 2018, 6, 1048-1054.	3.2	8
33	Exceptional Fluorocarbon Uptake with Mesoporous Metalâ€“Organic Frameworks for Adsorption-Based Cooling Systems. ACS Applied Energy Materials, 2018, 1, 5853-5858.	2.5	35
34	Water Electrolysis: A Stable Graphitic, Nanocarbonâ€Encapsulated, Cobaltâ€Rich Coreâ€“Shell Electrocatalyst as an Oxygen Electrode in a Water Electrolyzer (Adv. Energy Mater. 14/2018). Advanced Energy Materials, 2018, 8, 1870065.	10.2	7
35	A Non-condensing Thermal Compression Power Generation System. Energy Procedia, 2017, 129, 1041-1046.	1.8	2
36	Recent developments in the synthesis, properties, and biomedical applications of core/shell superparamagnetic iron oxide nanoparticles with gold. Biomaterials Science, 2017, 5, 2212-2225.	2.6	81

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37	Pore-Engineered Metalâ€“Organic Frameworks with Excellent Adsorption of Water and Fluorocarbon Refrigerant for Cooling Applications. Journal of the American Chemical Society, 2017, 139, 10601-10604.	6.6	128
38	Simulation and Experimental Study of Metal Organic Frameworks Used in Adsorption Cooling. Heat Transfer Engineering, 2017, 38, 1305-1315.	1.2	27
39	Recent Advances in Metal-Organic Frameworks for Heterogeneous Catalyzed Organic Transformations. Synthesis and Catalysis Open Access, 2016, 01, .	0.4	11
40	Impact of chabazite SSZ-13 textural properties and chemical composition on CO₂ adsorption applications. New Journal of Chemistry, 2016, 40, 4375-4385.	1.4	40
41	Synthesis Strategies for Ultrastable Zeolite GIS Polymorphs as Sorbents for Selective Separations. Chemistry - A European Journal, 2016, 22, 16078-16088.	1.7	31
42	Synthesis Strategies for Ultrastable Zeolite GIS Polymorphs as Sorbents for Selective Separations. Chemistry - A European Journal, 2016, 22, 15961-15961.	1.7	2
43	An Efficient Synthesis Strategy for Metal-Organic Frameworks: Dry-Gel Synthesis of MOF-74 Framework with High Yield and Improved Performance. Scientific Reports, 2016, 6, 28050.	1.6	67
44	Redoxâ€Active Metalâ€“Organic Composites for Highly Selective Oxygen Separation Applications. Advanced Materials, 2016, 28, 3572-3577.	11.1	55
45	Metalâ€“organic framework with optimally selective xenon adsorption and separation. Nature Communications, 2016, 7, ncomms11831.	5.8	325
46	A Computational and Experimental Study of Metal and Covalent Organic Frameworks Used in Adsorption Cooling. , 2015, , .		1
47	Controlling Porosity in Ligninâ€Derived Nanoporous Carbon for Supercapacitor Applications. ChemSusChem, 2015, 8, 411-411.	3.6	7
48	A Combined Experimental and Computational Study on the Stability of Nanofluids Containing Metal Organic Frameworks. Journal of Physical Chemistry B, 2015, 119, 8992-8999.	1.2	29
49	Separation of polar compounds using a flexible metalâ€“organic framework. Chemical Communications, 2015, 51, 8421-8424.	2.2	41
50	Potential of Metalâ€“Organic Frameworks for Separation of Xenon and Krypton. Accounts of Chemical Research, 2015, 48, 211-219.	7.6	330
51	Framework stabilization of Si-rich LTA zeolite prepared in organic-free media. Chemical Communications, 2015, 51, 269-272.	2.2	42
52	Controlling Porosity in Ligninâ€Derived Nanoporous Carbon for Supercapacitor Applications. ChemSusChem, 2015, 8, 428-432.	3.6	196
53	Computational studies of adsorption in metal organic frameworks and interaction of nanoparticles in condensed phases. Molecular Simulation, 2014, 40, 571-584.	0.9	21
54	Fluorocarbon adsorption in hierarchical porous frameworks. Nature Communications, 2014, 5, 4368.	5.8	104

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55	METAL ORGANIC FRAMEWORKSâ€“SYNTHESIS AND APPLICATIONS. , 2014, , 61-103.		6
56	Facile xenon capture and release at room temperature using a metalâ€“organic framework: a comparison with activated charcoal. Chemical Communications, 2012, 48, 347-349.	2.2	172
57	Role of hydrocarbons in pore expansion and contraction of a flexible metalâ€“organic framework. Chemical Communications, 2011, 47, 7077.	2.2	27
58	Synthesis, Characterization, and Application of Metal Organic Framework Nanostructures. Langmuir, 2010, 26, 18591-18594.	1.6	22
59	Flexible metalâ€“organic supramolecular isomers for gas separation. Chemical Communications, 2010, 46, 538-540.	2.2	173
60	Generation of 2D and 3D (PtS, Adamantanoid) Nets with a Flexible Tetrahedral Building Block. Crystal Growth and Design, 2010, 10, 3843-3846.	1.4	16
61	Metalâˆ’Organic Framework Isomers with Diamondoid Networks Constructed of a Semirigid Tetrahedral Linker. Crystal Growth and Design, 2010, 10, 5327-5333.	1.4	32
62	Prussian Blue Analogues for CO₂ and SO₂ Capture and Separation Applications. Inorganic Chemistry, 2010, 49, 4909-4915.	1.9	138
63	Gas-Induced Expansion and Contraction of a Fluorinated Metalâˆ’Organic Framework. Crystal Growth and Design, 2010, 10, 1037-1039.	1.4	152
64	Micro and mesoporous metalâ€“organic frameworks for catalysis applications. Dalton Transactions, 2010, 39, 1692-1694.	1.6	71
65	Dehydrated Prussian blues for CO2 storage and separation applications. CrystEngComm, 2010, 12, 4003.	1.3	35
66	Molecular Recognition between the Constituents of a Pseudorotaxane Studied by Scanning Tunneling Microscopy. Journal of Physical Chemistry C, 2009, 113, 12870-12877.	1.5	6
67	Flexible (Breathing) Interpenetrated Metalâˆ’Organic Frameworks for CO₂ Separation Applications. Journal of the American Chemical Society, 2008, 130, 16842-16843.	6.6	420
68	A novel zeolite based stationary phases for in situ synthesis and evaluation of porphyrins and calix (4) pyrroles. Journal of Molecular Catalysis A, 2007, 269, 30-34.	4.8	13
69	Bridging Rotaxanes' Wheelsâ€”Cyclochiral Bonnanes. Angewandte Chemie - International Edition, 2006, 45, 7296-7299.	7.2	35
70	A new environmentally friendly method for the synthesis of calix(4)pyrroles over molecular sieve catalysts. Journal of Molecular Catalysis A, 2005, 237, 155-160.	4.8	14
71	Helical Rosette Nanotubes with Tunable Stability and Hierarchy. Journal of the American Chemical Society, 2005, 127, 8307-8309.	6.6	134
72	A new route for the synthesis of 2-phenylpyridines over molecular sieve catalysts. Catalysis Communications, 2005, 6, 71-74.	1.6	4

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73	Immobilization of metalloporphyrin complexes in molecular sieves and their catalytic activity. Catalysis Communications, 2005, 6, 531-538.	1.6	32
74	Mass spectral study ofmeso-alkyl andmeso-cycloalkyl calix(4)pyrroles under electron impact conditions. Rapid Communications in Mass Spectrometry, 2004, 18, 2077-2086.	0.7	7
75	Synthesis of calixpyrroles and porphyrins over molecular sieve catalysts. Journal of Molecular Catalysis A, 2004, 223, 263-267.	4.8	23
76	Zeolite-catalyzed cyclocondensation reaction for the selective synthesis of 3,4-dihydropyrimidin-2(1H)-onesIICT Communication No. 4737.. Green Chemistry, 2001, 3, 305-306.	4.6	104
77	Liquid phase selective oxidation of alcohols over modified molecular sieves. Journal of Molecular Catalysis A, 2001, 172, 187-191.	4.8	21
78	Ammoxidation of picolines over modified silicoaluminophosphate molecular sieves. Microporous and Mesoporous Materials, 2000, 39, 125-134.	2.2	16