

# Soumya Mukherjee

## List of Publications by Year in descending order

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89  
papers

7,686  
citations

101543  
36  
h-index

58581  
82  
g-index

94  
all docs

94  
docs citations

94  
times ranked

6856  
citing authors

#	ARTICLE	IF	CITATIONS
1	Threeâ€inâ€One C <sub>2</sub> H <sub>2</sub> â€Selectivityâ€Guided Adsorptive Separation across an Isorecticular Family of Cationic Squareâ€Lattice MOFs. Angewandte Chemie, 2022, 134, e202114132.	2.0	2
2	Threeâ€inâ€One C <sub>2</sub> H <sub>2</sub> â€Selectivityâ€Guided Adsorptive Separation across an Isorecticular Family of Cationic Squareâ€Lattice MOFs. Angewandte Chemie - International Edition, 2022, 61, .	13.8	33
3	Avoiding Pyrolysis and Calcination: Advances in the Benign Routes Leading to MOFâ€Derived Electrocatalysts. ChemElectroChem, 2022, 9, .	3.4	12
4	Dual In Situ Laser Techniques Underpin the Role of Cations in Impacting Electrocatalysts. Angewandte Chemie - International Edition, 2022, 61, .	13.8	16
5	Cover Feature: Avoiding Pyrolysis and Calcination: Advances in the Benign Routes Leading to MOFâ€Derived Electrocatalysts (ChemElectroChem 7/2022). ChemElectroChem, 2022, 9, .	3.4	0
6	Dual In Situ Laser Techniques Underpin the Role of Cations in Impacting Electrocatalysts. Angewandte Chemie, 2022, 134, .	2.0	7
7	How Reproducible are Surface Areas Calculated from the BET Equation?. Advanced Materials, 2022, 34, .	21.0	82
8	Water vapour induced reversible switching between a 1-D coordination polymer and a 0-D aqua complex. Chemical Communications, 2022, 58, 8218-8221.	4.1	5
9	CO <sub>2</sub> Capture by Hybrid Ultramicroporous TIFSIXâ€Ni under Humid Conditions Using Nonâ€Equilibrium Cycling. Angewandte Chemie - International Edition, 2022, 61, .	13.8	17
10	Porphyrinic MOF derived Single-atom electrocatalyst enables methanol oxidation. Chemical Engineering Journal, 2022, 449, 137888.	12.7	13
11	Allâ€inâ€One: Sensing, Adsorptive Removal, and Photocatalytic Degradation of Nitroâ€Explosive Contaminants by Microporous Polycarbazole Polymer. Macromolecular Rapid Communications, 2021, 42, e2000469.	3.9	13
12	Homochiral metalâ€organic frameworks for enantioseparation. Chemical Society Reviews, 2021, 50, 5706-5745.	38.1	86
13	Tin-Based Oxide, Alloy, and Selenide Li-Ion Battery Anodes Derived from a Bimetallic Metalâ€Organic Material. Journal of Physical Chemistry C, 2021, 125, 1180-1189.	3.1	6
14	Spiers Memorial Lecture: Coordination networks that switch between nonporous and porous structures: an emerging class of soft porous crystals. Faraday Discussions, 2021, 231, 9-50.	3.2	34
15	In Situ Tracking of Wettingâ€Front Transient Heat Release on a Surfaceâ€Mounted Metalâ€Organic Framework. Advanced Materials, 2021, 33, 2006980.	21.0	7
16	Aminoâ€Functionalised Hybrid Ultramicroporous Materials that Enable Singleâ€Step Ethylene Purification from a Ternary Mixture. Angewandte Chemie, 2021, 133, 10997-11004.	2.0	10
17	Aminoâ€Functionalised Hybrid Ultramicroporous Materials that Enable Singleâ€Step Ethylene Purification from a Ternary Mixture. Angewandte Chemie - International Edition, 2021, 60, 10902-10909.	13.8	56
18	Metalâ€Organic Frameworks: In Situ Tracking of Wettingâ€Front Transient Heat Release on a Surfaceâ€Mounted Metalâ€Organic Framework (Adv. Mater. 14/2021). Advanced Materials, 2021, 33, 2170109.	21.0	0

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19	Surface-Mounted Metal-Organic Frameworks: Past, Present, and Future Perspectives. <i>Langmuir</i> , 2021, 37, 6847-6863.	3.5	32
20	A decade of decoding. <i>Nature Reviews Chemistry</i> , 2021, 5, 600-601.	30.2	2
21	Advances in adsorptive separation of benzene and cyclohexane by metal-organic framework adsorbents. <i>Coordination Chemistry Reviews</i> , 2021, 437, 213852.	18.8	74
22	Efficient Capture of Trace Acetylene by an Ultramicroporous Metal-Organic Framework with Purine Binding Sites. <i>Chemistry of Materials</i> , 2021, 33, 5800-5808.	6.7	22
23	Porphyrinischer MOF-Film für vielfältige elektrochemische Sensorik. <i>Angewandte Chemie</i> , 2021, 133, 20714-20721.	2.0	5
24	Porphyrinic MOF Film for Multifaceted Electrochemical Sensing. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20551-20557.	13.8	105
25	Breaking the trade-off between selectivity and adsorption capacity for gas separation. <i>Chem</i> , 2021, 7, 3085-3098.	11.7	68
26	Hydrophobicity: a key factor en route to applications of metal-organic frameworks. <i>Trends in Chemistry</i> , 2021, 3, 911-925.	8.5	14
27	Pore Engineering for One-Step Ethylene Purification from a Three-Component Hydrocarbon Mixture. <i>Journal of the American Chemical Society</i> , 2021, 143, 1485-1492.	13.7	143
28	Post-synthetically modified metal-organic frameworks for sensing and capture of water pollutants. <i>Dalton Transactions</i> , 2021, 50, 17832-17850.	3.3	22
29	A superhydrophilic metal-organic framework thin film for enhancing capillary-driven boiling heat transfer. <i>Journal of Materials Chemistry A</i> , 2021, 9, 25480-25487.	10.3	15
30	One-step ethylene production from a four-component gas mixture by a single physisorbent. <i>Nature Communications</i> , 2021, 12, 6507.	12.8	64
31	Crystal engineered hybrid ultramicroporous materials for single-step ethylene purification from C <sub>2</sub> H <sub>2</sub> -CO <sub>2</sub> ternary mixture. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2021, 77, C126-C126.	0.1	0
32	Halogen-C <sub>2</sub> H <sub>2</sub> Binding in Ultramicroporous Metal-Organic Frameworks (MOFs) for Benchmark C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> Separation Selectivity. <i>Chemistry - A European Journal</i> , 2020, 26, 4923-4929.	3.3	72
33	[Cu(4-phenylpyridine) <sub>4</sub> ](trifluoromethanesulfonate) <sub>2</sub> , a Werner complex that exhibits high selectivity for <i>o</i> -xylene. <i>Chemical Communications</i> , 2020, 56, 1940-1943.	4.1	17
34	An overview on trace CO <sub>2</sub> removal by advanced physisorbent materials. <i>Journal of Environmental Management</i> , 2020, 255, 109874.	7.8	45
35	Porphyrin based metal-organic framework films: nucleation and growth. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25941-25950.	10.3	24
36	Crystal engineering of porous coordination networks to enable separation of C <sub>2</sub> hydrocarbons. <i>Chemical Communications</i> , 2020, 56, 10419-10441.	4.1	123

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37	Innentitelbild: Ultramicropore Engineering by Dehydration to Enable Molecular Sieving of H <sub>2</sub> by Calcium Trimesate (Angew. Chem. 37/2020). Angewandte Chemie, 2020, 132, 15898-15898.	2.0	0
38	A square lattice topology coordination network that exhibits highly selective C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> separation performance. SmartMat, 2020, 1, e1008.	10.7	7
39	Crystal engineering of a rectangular $\sqrt{3} \times \sqrt{3}$ coordination network to enable xylenes selectivity over ethylbenzene. Chemical Science, 2020, 11, 6889-6895.	7.4	26
40	Crystal Engineering of Hybrid Coordination Networks: From Form to Function. Trends in Chemistry, 2020, 2, 506-518.	8.5	55
41	Ultramicropore Engineering by Dehydration to Enable Molecular Sieving of H <sub>2</sub> by Calcium Trimesate. Angewandte Chemie, 2020, 132, 16322-16328.	2.0	8
42	Ultramicropore Engineering by Dehydration to Enable Molecular Sieving of H <sub>2</sub> by Calcium Trimesate. Angewandte Chemie - International Edition, 2020, 59, 16188-16194.	13.8	28
43	Cleaving Carboxyls: Understanding Thermally Triggered Hierarchical Pores in the Metal-Organic Framework MIL-121. Journal of the American Chemical Society, 2019, 141, 14257-14271.	13.7	53
44	Metal-organic framework based carbon capture and purification technologies for clean environment. , 2019, , 5-61.		21
45	Stabilizing Metal-Organic Polyhedra (MOP): Issues and Strategies. Chemistry - an Asian Journal, 2019, 14, 3096-3108.	3.3	66
46	Synergistic sorbent separation for one-step ethylene purification from a four-component mixture. Science, 2019, 366, 241-246.	12.6	360
47	Tuning the Gate-Opening Pressure in a Switching pcu Coordination Network, X <sub>5</sub> Zn, by Pillar-Ligand Substitution. Angewandte Chemie - International Edition, 2019, 58, 18212-18217.	13.8	55
48	Hydrophobic metal-organic frameworks: Potential toward emerging applications. APL Materials, 2019, 7, 050701.	5.1	40
49	Highly Selective, High-Capacity Separation of <i>o</i> -Xylene from C <sub>8</sub> Aromatics by a Switching Adsorbent Layered Material. Angewandte Chemie - International Edition, 2019, 58, 6630-6634.	13.8	69
50	Highly Selective, High-Capacity Separation of <i>o</i> -Xylene from C <sub>8</sub> Aromatics by a Switching Adsorbent Layered Material. Angewandte Chemie, 2019, 131, 6702-6706.	2.0	10
51	Tuning the Gate-Opening Pressure in a Switching pcu Coordination Network, X <sub>5</sub> Zn, by Pillar-Ligand Substitution. Angewandte Chemie, 2019, 131, 18380-18385.	2.0	12
52	Trace CO <sub>2</sub> capture by an ultramicroporous physisorbent with low water affinity. Science Advances, 2019, 5, eaax9171.	10.3	143
53	Hydrophobic Shielding of Outer Surface: Enhancing the Chemical Stability of Metal-Organic Polyhedra. Angewandte Chemie, 2019, 131, 1053-1057.	2.0	8
54	Hydrophobic Shielding of Outer Surface: Enhancing the Chemical Stability of Metal-Organic Polyhedra. Angewandte Chemie - International Edition, 2019, 58, 1041-1045.	13.8	45

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55	Crystal engineering of dichromate pillared hybrid ultramicroporous materials incorporating pyrazole-based ligands. <i>CrystEngComm</i> , 2018, 20, 1193-1197.	2.6	11
56	Potential of metal-organic frameworks for adsorptive separation of industrially and environmentally relevant liquid mixtures. <i>Coordination Chemistry Reviews</i> , 2018, 367, 82-126.	18.8	105
57	Finding the Optimal Balance between the Pore Size and Pore Chemistry in Hybrid Ultramicroporous Materials for Trace Acetylene Capture. <i>ACS Applied Nano Materials</i> , 2018, 1, 6000-6004.	5.0	12
58	Layered Bimetallic Metal-Organic Material Derived Cu <sub>2</sub> SnS <sub>3</sub> /SnS <sub>2</sub> /C Composite for Anode Applications in Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2018, 5, 3764-3770.	3.4	10
59	Coordination Network That Reversibly Switches between Two Nonporous Polymorphs and a High Surface Area Porous Phase. <i>Journal of the American Chemical Society</i> , 2018, 140, 15572-15576.	13.7	51
60	Self-Assembled, Fluorine-Rich Porous Organic Polymers: A Class of Mechanically Stiff and Hydrophobic Materials. <i>Chemistry - A European Journal</i> , 2018, 24, 11771-11778.	3.3	8
61	Recyclable switching between nonporous and porous phases of a square lattice (<math>\sqrt{2}</math>) topology coordination network. <i>Chemical Communications</i> , 2018, 54, 7042-7045.	4.1	37
62	Metal-organic frameworks: functional luminescent and photonic materials for sensing applications. <i>Chemical Society Reviews</i> , 2017, 46, 3242-3285.	38.1	2,457
63	Polar Pore Surface Guided Selective CO <sub>2</sub> Adsorption in a Prefunctionalized Metal-Organic Framework. <i>Crystal Growth and Design</i> , 2017, 17, 3581-3587.	3.0	34
64	Toxic Aromatics Induced Responsive Facets for a Pore Surface Functionalized Luminescent Coordination Polymer. <i>Inorganic Chemistry</i> , 2017, 56, 6864-6869.	4.0	10
65	A Bifunctional Metal-Organic Framework: Striking CO <sub>2</sub> -Selective Sorption Features along with Guest-Induced Tuning of Luminescence. <i>ChemPlusChem</i> , 2016, 81, 702-707.	2.8	12
66	Harnessing Lewis acidic open metal sites of metal-organic frameworks: the foremost route to achieve highly selective benzene sorption over cyclohexane. <i>Chemical Communications</i> , 2016, 52, 8215-8218.	4.1	76
67	Influence of Tuned Linker Functionality on Modulation of Magnetic Properties and Relaxation Dynamics in a Family of Six Isotypic Ln <sub>2</sub> (Ln = Dy and Gd) Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 11283-11298.	4.0	83
68	An Ultrahydrophobic Fluorous Metal-Organic Framework Derived Recyclable Composite as a Promising Platform to Tackle Marine Oil Spills. <i>Chemistry - A European Journal</i> , 2016, 22, 10937-10943.	3.3	91
69	Frontispiece: A Bifunctional Metal-Organic Framework: Striking CO <sub>2</sub> -Selective Sorption Features along with Guest-Induced Tuning of Luminescence. <i>ChemPlusChem</i> , 2016, 81, .	2.8	0
70	One dimensional coordination polymers of Cd(II) and Zn(II): Synthesis, structure, polar packing through strong inter-chain hydrogen bonding and gas adsorption studies. <i>Polyhedron</i> , 2016, 106, 163-170.	2.2	16
71	Two-dimensional flexible Ni(II)-based porous coordination polymer showing single-crystal to single-crystal transformation, selective gas adsorption and catalytic properties. <i>Polyhedron</i> , 2016, 105, 228-237.	2.2	26
72	Selective Detection of 2,4,6-Trinitrophenol (TNP) by a $\pi$ -Stacked Organic Crystalline Solid in Water. <i>Crystal Growth and Design</i> , 2015, 15, 3493-3497.	3.0	70

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73	Chiral biomolecule based dodecanuclear dysprosium( $\text{Dy}^{\text{III}}$ )-copper( $\text{Cu}^{\text{II}}$ ) clusters: structural analyses and magnetic properties. <i>Inorganic Chemistry Frontiers</i> , 2015, 2, 854-859.	6.0	9
74	Exploiting Framework Flexibility of a Metal-Organic Framework for Selective Adsorption of Styrene over Ethylbenzene. <i>Inorganic Chemistry</i> , 2015, 54, 4403-4408.	4.0	50
75	Exploitation of Guest Accessible Aliphatic Amine Functionality of a Metal-Organic Framework for Selective Detection of 2,4,6-Trinitrophenol (TNP) in Water. <i>Crystal Growth and Design</i> , 2015, 15, 4627-4634.	3.0	137
76	A $\pi$ -electron deficient diaminotriazine functionalized MOF for selective sorption of benzene over cyclohexane. <i>Chemical Communications</i> , 2015, 51, 15386-15389.	4.1	64
77	Selective and Sensitive Aqueous-Phase Detection of 2,4,6-Trinitrophenol (TNP) by an Amine-Functionalized Metal-Organic Framework. <i>Chemistry - A European Journal</i> , 2015, 21, 965-969.	3.3	297
78	Recent Progress in the Realm of Homonuclear $\text{Ln}_6$ Single molecule magnets: Structural Overview and Synthetic Approaches. <i>Proceedings of the Indian National Science Academy</i> , 2015, 81, .	1.4	0
79	Slow Magnetic Relaxation in an Asymmetrically Coupled Heptanuclear Dysprosium(III)-Nickel(II) Architecture. <i>Proceedings of the National Academy of Sciences India Section A - Physical Sciences</i> , 2014, 84, 151-156.	1.2	4
80	Guest-Responsive Function of a Dynamic Metal-Organic Framework with a $\pi$ Lewis Acidic Pore Surface. <i>Chemistry - A European Journal</i> , 2014, 20, 15303-15308.	3.3	43
81	Capsule voided nanospace confinement in a $\pi$ -stacked supramolecular organic solid. <i>CrystEngComm</i> , 2014, 16, 4691.	2.6	9
82	Gas Adsorption, Magnetism, and Single-Crystal to Single-Crystal Transformation Studies of a Three-Dimensional Mn(II) Porous Coordination Polymer. <i>Crystal Growth and Design</i> , 2014, 14, 5585-5592.	3.0	33
83	Structures and Magnetic Properties of Two Analogous $\text{Dy}_6$ Wheels with Electron-Donation and -Withdrawal Effects. <i>Inorganic Chemistry</i> , 2014, 53, 7554-7560.	4.0	30
84	Framework-Flexibility Driven Selective Sorption of p-Xylene over Other Isomers by a Dynamic Metal-Organic Framework. <i>Scientific Reports</i> , 2014, 4, 5761.	3.3	81
85	Structural Dynamism and Controlled Chemical Blocking/Unblocking of Active Coordination Space of a Soft Porous Crystal. <i>Inorganic Chemistry</i> , 2013, 52, 12784-12789.	4.0	16
86	Bi-porous metal-organic framework with hydrophilic and hydrophobic channels: selective gas sorption and reversible iodine uptake studies. <i>CrystEngComm</i> , 2013, 15, 9465.	2.6	64
87	Highly Selective Detection of Nitro Explosives by a Luminescent Metal-Organic Framework. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 2881-2885.	13.8	1,206
88	An asymmetrically connected hexanuclear $\text{DyIII}_6$ cluster exhibiting slow magnetic relaxation. <i>Inorganic Chemistry Communication</i> , 2013, 35, 144-148.	3.9	17
89	$\text{CO}_2$ Capture by Hybrid Ultramicroporous TIFSIX-3-Ni under Humid Conditions Using Non-Equilibrium Cycling. <i>Angewandte Chemie</i> , 0, , .	2.0	3