Andreas Schneemann

List of Publications by Year
in descending order

56 papers	5,074 citations	172457 29 h-index	149698 56 g-index
59 all docs	59 docs citations	59 times ranked	6583 citing authors

#	Article	IF	Citations
1	Flexible metalâ€“organic frameworks. Chemical Society Reviews, 2014, 43, 6062-6096.	38.1	1,741
2	Nanostructured Metal Hydrides for Hydrogen Storage. Chemical Reviews, 2018, 118, 10775-10839.	47.7	461
3	Directing the Breathing Behavior of Pillared-Layered Metalâ€“Organic Frameworks via a Systematic Library of Functionalized Linkers Bearing Flexible Substituents. Journal of the American Chemical Society, 2012, 134, 9464-9474.	13.7	415
4	Nanoporous Nitrogenâ€Doped Graphene Oxide/Nickel Sulfide Composite Sheets Derived from a Metalâ€Organic Framework as an Efficient Electrocatalyst for Hydrogen and Oxygen Evolution. Advanced Functional Materials, 2017, 27, 1700451.	14.9	198
5	Massive Anisotropic Thermal Expansion and Thermoâ€Responsive Breathing in Metalâ€“Organic Frameworks Modulated by Linker Functionalization. Advanced Functional Materials, 2013, 23, 5990-5996.	14.9	187
6	Hydrophobic Metalâ€“Organic Frameworks. Advanced Materials, 2019, 31, e1900820.	21.0	138
7	Selfâ€Directed Localization of ZIFâ€8 Thin Film Formation by Conversion of ZnO Nanolayers. Advanced Functional Materials, 2014, 24, 4804-4811.	14.9	134
8	Covalent Grapheneâ€MOF Hybrids for Highâ€Performance Asymmetric Supercapacitors. Advanced Materials, 2021, 33, e2004560.	21.0	121
9	Shapeâ€Assisted 2D MOF/Graphene Derived Hybrids as Exceptional Lithiumâ€Ion Battery Electrodes. Advanced Functional Materials, 2019, 29, 1902539.	14.9	118
10	Liquid exfoliation of alkyl-ether functionalised layered metalâ€“organic frameworks to nanosheets. Chemical Communications, 2016, 52, 10474-10477.	4.1	98
11	Control of structural flexibility of layered-pillared metal-organic frameworks anchored at surfaces. Nature Communications, 2019, 10, 346.	12.8	93
12	Different Breathing Mechanisms in Flexible Pillared-Layered Metalâ€“Organic Frameworks: Impact of the Metal Center. Chemistry of Materials, 2018, 30, 1667-1676.	6.7	76
13	2D framework materials for energy applications. Chemical Science, 2021, 12, 1600-1619.	7.4	73
14	MOF Derived Porous ZnO/C Nanocomposites for Efficient Dye Photodegradation. ACS Applied Energy Materials, 2018, 1, 4695-4707.	5.1	72
15	Porous Dithiine-Linked Covalent Organic Framework as a Dynamic Platform for Covalent Polysulfide Anchoring in Lithiumâ€“Sulfur Battery Cathodes. Journal of the American Chemical Society, 2022, 144, 9101-9112.	13.7	71
16	A Solidâ€Solution Approach to Mixedâ€Metal Metalâ€“Organic Frameworks â€“ Detailed Characterization of Local Structures, Defects and Breathing Behaviour of Al/V Frameworks. European Journal of Inorganic Chemistry, 2013, 2013, 4546-4557.	2.0	69
17	Pore closure in zeolitic imidazolate frameworks under mechanical pressure. Chemical Science, 2018, 9, 1654-1660.	7.4	63
18	Zinc-1,4-benzenedicarboxylate-bipyridine frameworks â€“ linker functionalization impacts network topology during solvothermal synthesis. Journal of Materials Chemistry, 2012, 22, 909-918.	6.7	48

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19	Negative Thermal Expansion Design Strategies in a Diverse Series of Metalâ€“Organic Frameworks. Advanced Functional Materials, 2019, 29, 1904669.	14.9	48
20	Rational Design of Graphene Derivatives for Electrochemical Reduction of Nitrogen to Ammonia. ACS Nano, 2021, 15, 17275-17298.	14.6	48
21	Hierarchical porous metalâ€“organic framework materials for efficient oilâ€“water separation. Journal of Materials Chemistry A, 2022, 10, 2751-2785.	10.3	48
22	Targeted Manipulation of Metalâ€“Organic Frameworks To Direct Sorption Properties. ChemPhysChem, 2014, 15, 823-839.	2.1	46
23	Discovery of Polyoxo-Noble-Metalate-Based Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 3385-3389.	13.7	43
24	Characteristics of flexibility in metal-organic framework solid solutions of composition [Zn2(BME-bdc)x(DB-bdc)2â^'xdabco]n: In situ powder X-ray diffraction, in situ NMR spectroscopy, and molecular dynamics simulations. Microporous and Mesoporous Materials, 2015, 216, 64-74.	4.4	41
25	Tuning Thermal Expansion in Metalâ€“Organic Frameworks Using a Mixed Linker Solid Solution Approach. Journal of the American Chemical Society, 2019, 141, 12849-12854.	13.7	41
26	Metalâ€“Organic Frameworks: Hydrophobic Metalâ€“Organic Frameworks (Adv. Mater. 32/2019). Advanced Materials, 2019, 31, 1970230.	21.0	40
27	Nanoconfinement of Molecular Magnesium Borohydride Captured in a Bipyridine-Functionalized Metalâ€“Organic Framework. ACS Nano, 2020, 14, 10294-10304.	14.6	40
28	Hierarchical Porous Fluorinated Graphene Oxide@Metalâ€“Organic Gel Composite: Label-Free Electrochemical Aptasensor for Selective Detection of Thrombin. ACS Applied Materials & Interfaces, 2018, 10, 41089-41097.	8.0	38
29	Influence of Solventâ€Like Sidechains on the Adsorption of Light Hydrocarbons in Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2015, 21, 18764-18769.	3.3	32
30	Configurational Entropy Driven Highâ€Pressure Behaviour of a Flexible Metalâ€“Organic Framework (MOF). Angewandte Chemie - International Edition, 2021, 60, 787-793.	13.8	30
31	A Mechanistic Analysis of Phase Evolution and Hydrogen Storage Behavior in Nanocrystalline Mg(BH₄)₂ within Reduced Graphene Oxide. ACS Nano, 2020, 14, 1745-1756.	14.6	29
32	Lewis base mediated efficient synthesis and solvation-like hostâ€“guest chemistry of covalent organic framework-1. Chemical Communications, 2013, 49, 463-465.	4.1	26
33	A multifunctional covalently linked grapheneâ€“MOF hybrid as an effective chemiresistive gas sensor. Journal of Materials Chemistry A, 2021, 9, 17434-17441.	10.3	26
34	Controlled SBU Approaches to Isoreticular Metalâ€Organic Framework Rutheniumâ€Analogues of HKUSTâ€1. European Journal of Inorganic Chemistry, 2015, 2015, 3913-3920.	2.0	25
35	Influence of Co-adsorbates on CO₂ induced phase transition in functionalized pillared-layered metalâ€“organic frameworks. Journal of Materials Chemistry A, 2016, 4, 12963-12972.	10.3	25
36	Metalâ€“organic frameworks constructed from crown ether-based 1,4-benzenedicarboxylic acid derivatives. Dalton Transactions, 2016, 45, 3063-3069.	3.3	25

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37	Probing Local Structural Changes at Cu²⁺ in a Flexible Mixed-Metal Metal-Organic Framework by in Situ Electron Paramagnetic Resonance during CO₂ Ad- and Desorption. Journal of Physical Chemistry C, 2019, 123, 2940-2952.	3.1	24
38	Reversing the Irreversible: Thermodynamic Stabilization of LiAlH₄ Nanoconfined Within a Nitrogen-Doped Carbon Host. ACS Nano, 2021, 15, 10163-10174.	14.6	24
39	Increasing Alkyl Chain Length in a Series of Layered Metalâ€“Organic Frameworks Aids Ultrasonic Exfoliation to Form Nanosheets. Inorganic Chemistry, 2019, 58, 10837-10845.	4.0	23
40	Flexibility control in alkyl ether-functionalized pillared-layered MOFs by a Cu/Zn mixed metal approach. Dalton Transactions, 2019, 48, 6564-6570.	3.3	22
41	Two-dimensional MOF-based liquid marbles: surface energy calculations and efficient oilâ€“water separation using a ZIF-9-III@PVDF membrane. Journal of Materials Chemistry A, 2021, 9, 23651-23659.	10.3	20
42	Melting of Magnesium Borohydride under High Hydrogen Pressure: Thermodynamic Stability and Effects of Nanoconfinement. Chemistry of Materials, 2020, 32, 5604-5615.	6.7	18
43	Alkyl decorated metalâ€“organic frameworks for selective trapping of ethane from ethylene above ambient pressures. Dalton Transactions, 2021, 50, 10423-10435.	3.3	15
44	A superhydrophilic metalâ€“organic framework thin film for enhancing capillary-driven boiling heat transfer. Journal of Materials Chemistry A, 2021, 9, 25480-25487.	10.3	15
45	Al₂O₃ Atomic Layer Deposition on Nanostructured Î³-Mg(BH₄)₂ for H₂ Storage. ACS Applied Energy Materials, 2021, 4, 1150-1162.	5.1	13
46	Linker functionalisation triggers an alternative 3D-topology for Zn-isophthalate-4,4â€²-bipyridine frameworks. Dalton Transactions, 2017, 46, 8198-8203.	3.3	12
47	Coordinated Water as New Binding Sites for the Separation of Light Hydrocarbons in Metalâ€“Organic Frameworks with Open Metal Sites. ACS Applied Materials & Interfaces, 2020, 12, 9448-9456.	8.0	11
48	Configurational Entropy Driven Highâ€Pressure Behaviour of a Flexible Metalâ€“Organic Framework (MOF). Angewandte Chemie, 2021, 133, 800-806.	2.0	9
49	Asymmetric Supercapacitors: Covalent Grapheneâ€MOF Hybrids for Highâ€Performance Asymmetric Supercapacitors (Adv. Mater. 4/2021). Advanced Materials, 2021, 33, 2170028.	21.0	8
50	Ultrafine TiO₂ Nanoparticle Supported Nitrogenâ€Rich Graphitic Porous Carbon as an Efficient Anode Material for Potassiumâ€Ion Batteries. Advanced Energy and Sustainability Research, 2021, 2, 2100042.	5.8	8
51	Hierarchical Porous Grapheneâ€“Iron Carbide Hybrid Derived From Functionalized Graphene-Based Metalâ€“Organic Gel as Efficient Electrochemical Dopamine Sensor. Frontiers in Chemistry, 2020, 8, 544.	3.6	6
52	Recovery of MOF-5 from Extreme High-Pressure Conditions Facilitated by a Modern Pressure Transmitting Medium. Chemistry of Materials, 0, , .	6.7	6
53	Reactive Vapor-Phase Additives toward Destabilizing Î³-Mg(BH₄)₂ for Improved Hydrogen Release. ACS Applied Energy Materials, 2022, 5, 1690-1700.	5.1	5
54	InnenrÃ¼cktitelbild: Configurational Entropy Driven Highâ€Pressure Behaviour of a Flexible Metalâ€“Organic Framework (MOF) (Angew. Chem. 2/2021). Angewandte Chemie, 2021, 133, 1047-1047.	2.0	2

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55	Electrocatalysis: Nanoporous Nitrogenâ€Doped Graphene Oxide/Nickel Sulfide Composite Sheets Derived from a Metalâ€Organic Framework as an Efficient Electrocatalyst for Hydrogen and Oxygen Evolution (Adv. Funct. Mater. 33/2017). Advanced Functional Materials, 2017, 27, .	14.9	1
56	A Solid-Solution Approach to Mixed-Metal Metal-Organic Frameworks - Detailed Characterization of Local Structures, Defects and Breathing Behaviour of Al/V Frameworks. European Journal of Inorganic Chemistry, 2013, 2013, 4528-4528.	2.0	0