

Sebastian Henke

List of Publications by Year in descending order

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57
papers

3,618
citations

136740

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docs citations

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times ranked

4268
citing authors

#	ARTICLE	IF	CITATIONS
1	Directing the Breathing Behavior of Pillared-Layered Metal-Organic Frameworks via a Systematic Library of Functionalized Linkers Bearing Flexible Substituents. <i>Journal of the American Chemical Society</i> , 2012, 134, 9464-9474.	6.6	415
2	Hybrid glasses from strong and fragile metal-organic framework liquids. <i>Nature Communications</i> , 2015, 6, 8079.	5.8	242
3	Identifying the Role of Terahertz Vibrations in Metal-Organic Frameworks: From Gate-Opening Phenomenon to Shear-Driven Structural Destabilization. <i>Physical Review Letters</i> , 2014, 113, 215502.	2.9	202
4	Massive Anisotropic Thermal Expansion and Thermo-Responsive Breathing in Metal-Organic Frameworks Modulated by Linker Functionalization. <i>Advanced Functional Materials</i> , 2013, 23, 5990-5996.	7.8	187
5	Mechanical Tunability via Hydrogen Bonding in Metal-Organic Frameworks with the Perovskite Architecture. <i>Journal of the American Chemical Society</i> , 2014, 136, 7801-7804.	6.6	160
6	Liquid-Phase Epitaxy of Multicomponent Layer-Based Porous Coordination Polymer Thin Films of [M(L)(P) _{0.5}] Type: Importance of Deposition Sequence on the Oriented Growth. <i>Chemistry - A European Journal</i> , 2011, 17, 1448-1455.	1.7	155
7	Gated Channels in a Honeycomb-like Zinc-Dicarboxylate-Bipyridine Framework with Flexible Alkyl Ether Side Chains. <i>Journal of the American Chemical Society</i> , 2011, 133, 2064-2067.	6.6	153
8	Meltable Mixed-Linker Zeolitic Imidazolate Frameworks and Their Microporous Glasses: From Melting Point Engineering to Selective Hydrocarbon Sorption. <i>Journal of the American Chemical Society</i> , 2019, 141, 12362-12371.	6.6	143
9	Flexibility and Sorption Selectivity in Rigid Metal-Organic Frameworks: The Impact of Ether-Functionalised Linkers. <i>Chemistry - A European Journal</i> , 2010, 16, 14296-14306.	1.7	128
10	Porous purple glass – a cobalt imidazolate glass with accessible porosity from a meltable cobalt imidazolate framework. <i>Journal of Materials Chemistry A</i> , 2019, 7, 985-990.	5.2	109
11	Liquid exfoliation of alkyl-ether functionalised layered metal-organic frameworks to nanosheets. <i>Chemical Communications</i> , 2016, 52, 10474-10477.	2.2	98
12	Current Trends in Metal-Organic and Covalent Organic Framework Membrane Materials. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15153-15164.	7.2	96
13	Fabrication of a CO ₂ -selective membrane by stepwise liquid-phase deposition of an alkylether functionalized pillared-layered metal-organic framework [Cu ₂ L ₂ P] _n on a macroporous support. <i>Microporous and Mesoporous Materials</i> , 2012, 150, 76-82.	2.2	93
14	A New Class of Lasing Materials: Intrinsic Stimulated Emission from Nonlinear Optically Active Metal-Organic Frameworks. <i>Advanced Materials</i> , 2017, 29, 1605637.	11.1	91
15	Extreme Flexibility in a Zeolitic Imidazolate Framework: Porous to Dense Phase Transition in Desolvated ZIF-4. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6447-6451.	7.2	87
16	Multiphoton Absorption in Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14743-14748.	7.2	79
17	Different Breathing Mechanisms in Flexible Pillared-Layered Metal-Organic Frameworks: Impact of the Metal Center. <i>Chemistry of Materials</i> , 2018, 30, 1667-1676.	3.2	76
18	Research Update: Mechanical properties of metal-organic frameworks – Influence of structure and chemical bonding. <i>APL Materials</i> , 2014, 2, 123902.	2.2	67

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19	Simultaneous Gas-Phase Loading of MOFs with Two Metal Precursors: towards Bimetallic@MOF. European Journal of Inorganic Chemistry, 2009, 2009, 3131-3140.	1.0	64
20	Pore closure in zeolitic imidazolate frameworks under mechanical pressure. Chemical Science, 2018, 9, 1654-1660.	3.7	63
21	Guest-dependent mechanical anisotropy in pillared-layered soft porous crystals – a nanoindentation study. Chemical Science, 2014, 5, 2392.	3.7	62
22	Functional conductive nanomaterials via polymerisation in nano-channels: PEDOT in a MOF. Materials Horizons, 2017, 4, 64-71.	6.4	60
23	Frustrated flexibility in metal-organic frameworks. Nature Communications, 2021, 12, 4097.	5.8	55
24	In-situ Observation of Successive Crystallizations and Metastable Intermediates in the Formation of Metal-Organic Frameworks. Angewandte Chemie - International Edition, 2016, 55, 2012-2016.	7.2	53
25	Multiple phase-transitions upon selective CO ₂ adsorption in an alkyl ether functionalized metal-organic framework – an in situ X-ray diffraction study. CrystEngComm, 2011, 13, 6399.	1.3	50
26	Zinc-1,4-benzenedicarboxylate-bipyridine frameworks – linker functionalization impacts network topology during solvothermal synthesis. Journal of Materials Chemistry, 2012, 22, 909-918.	6.7	48
27	Control of Metal-Organic Framework Crystallization by Metastable Intermediate Pre-equilibrium Species. Angewandte Chemie - International Edition, 2019, 58, 566-571.	7.2	47
28	Targeted Manipulation of Metal-Organic Frameworks To Direct Sorption Properties. ChemPhysChem, 2014, 15, 823-839.	1.0	46
29	Characteristics of flexibility in metal-organic framework solid solutions of composition [Zn ₂ (BME-bdc) _x (DB-bdc) _{2-x} dabco] _n : In situ powder X-ray diffraction, in situ NMR spectroscopy, and molecular dynamics simulations. Microporous and Mesoporous Materials, 2015, 216, 64-74.	2.2	41
30	Mixed-linker solid solutions of functionalized pillared-layer MOFs – adjusting structural flexibility, gas sorption, and thermal responsiveness. Dalton Transactions, 2016, 45, 4230-4241.	1.6	40
31	Tuneable mechanical and dynamical properties in the ferroelectric perovskite solid solution [NH ₃] _{1-x} [NH ₂ OH] _x Zn(HCOO) ₃ . Chemical Science, 2016, 7, 5108-5112.		33
32	Influence of Solvent-Like Sidechains on the Adsorption of Light Hydrocarbons in Metal-Organic Frameworks. Chemistry - A European Journal, 2015, 21, 18764-18769.	1.7	32
33	Time-Resolved In-situ X-ray Diffraction Reveals Metal-Dependent Metal-Organic Framework Formation. Angewandte Chemie - International Edition, 2016, 55, 14081-14084.	7.2	32
34	Coordination polymers of alkali metal trithiocyanurates: structure determinations and ionic conductivity measurements using single crystals. CrystEngComm, 2013, 15, 9400.	1.3	28
35	Manganese Tetraboride, MnB ₄ : High-Temperature Crystal Structure, ⁵⁵ Mn NMR Spectroscopy, Solid Solutions, and Mechanical Properties. Chemistry - A European Journal, 2015, 21, 8177-8181.	1.7	26
36	Flexibility control in alkyl ether-functionalized pillared-layered MOFs by a Cu/Zn mixed metal approach. Dalton Transactions, 2019, 48, 6564-6570.	1.6	22

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37	Guest-mediated phase transitions in a flexible pillared-layered metal-organic framework under high-pressure. <i>Chemical Science</i> , 2021, 12, 13793-13801.	3.7	19
38	Multiphotonenabsorption in Metallorganischen Gerüstverbindungen. <i>Angewandte Chemie</i> , 2017, 129, 14938-14943.	1.6	18
39	Defect Creation in Surface-Mounted Metal-Organic Framework Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 2655-2661.	4.0	18
40	Systematic molecular engineering of Zn-ketoiminates for application as precursors in atomic layer depositions of zinc oxide. <i>Dalton Transactions</i> , 2016, 45, 19012-19023.	1.6	17
41	In-Situ Observation of Successive Crystallizations and Metastable Intermediates in the Formation of Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2016, 128, 2052-2056.	1.6	15
42	The synergistic effect of heterostructured dissimilar metal-organic framework thin films on adsorption properties. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12990-12995.	5.2	15
43	Mechanical Properties of a Calcium Dietary Supplement, Calcium Fumarate Trihydrate. <i>Inorganic Chemistry</i> , 2015, 54, 11186-11192.	1.9	14
44	Photochemical Approach to the Cyclohepta[b]indole Scaffold by Annulative Two-Carbon Ring-Expansion. <i>Chemistry - A European Journal</i> , 2020, 26, 11974-11978.	1.7	14
45	Fabrication of zinc-dicarboxylate- and zinc-pyrazolate-carboxylate-framework thin films through vapour-solid deposition. <i>Dalton Transactions</i> , 2018, 47, 14179-14183.	1.6	13
46	Linker functionalisation triggers an alternative 3D-topology for Zn-isophthalate-4,4'-bipyridine frameworks. <i>Dalton Transactions</i> , 2017, 46, 8198-8203.	1.6	12
47	Tuning the High-Pressure Phase Behaviour of Highly Compressible Zeolitic Imidazolate Frameworks: From Discontinuous to Continuous Pore Closure by Linker Substitution. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	12
48	Coordination environments and π -conjugation in dense lithium coordination polymers. <i>CrystEngComm</i> , 2016, 18, 398-406.	1.3	11
49	Time-Resolved In-Situ X-ray Diffraction Reveals Metal-Dependent Metal-Organic Framework Formation. <i>Angewandte Chemie</i> , 2016, 128, 14287-14290.	1.6	8
50	Transition metal coordination complexes of chryszazin. <i>CrystEngComm</i> , 2016, 18, 5121-5129.	1.3	7
51	Aktuelle Trends zu Metallorganischen und kovalenten organischen Netzwerken als Membranmaterialien. <i>Angewandte Chemie</i> , 2021, 133, 15281-15293.	1.6	6
52	Disorder and polymorphism in Cu(II)-polyoxometalate complexes: [Cu _{1.5} (H ₂ O) _{7.5} PW ₁₂ O ₄₀] \cdot 4.75H ₂ O, cis- & trans-[Cu ₂ (H ₂ O) ₁₀ SiW ₁₂ O ₄₀] \cdot 6H ₂ O. <i>CrystEngComm</i> , 2016, 18, 5327-5332.	1.3	3
53	Control of Metal-Organic Framework Crystallization by Metastable Intermediate Pre-equilibrium Species. <i>Angewandte Chemie</i> , 2019, 131, 576-581.	1.6	3
54	Porous Materials: Massive Anisotropic Thermal Expansion and Thermo-Responsive Breathing in Metal-Organic Frameworks Modulated by Linker Functionalization (<i>Adv. Funct. Mater.</i> 48/2013). <i>Advanced Functional Materials</i> , 2013, 23, 5966-5966.	7.8	1

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55	Structural flexibility in prototypical zeolitic imidazolate frameworks. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s85-s86.	0.0	1
56	Redetermination of the crystal structure of tetrammineplatinum(II) dichloride – A microporous hydrogen-bonded 3D network exhibiting a temperature-dependent order-disorder phase transition. <i>Inorganica Chimica Acta</i> , 2019, 495, 119002.	1.2	0
57	Tuning the High-Pressure Phase Behaviour of Highly Compressible Zeolitic Imidazolate Frameworks: From Discontinuous to Continuous Pore Closure by Linker Substitution. <i>Angewandte Chemie</i> , 0, , .	1.6	0