Michael FrÃ¶ba

List of Publications by Year
in descending order

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110	6,539	136740	62479
papers	citations	32 h-index	80 g-index

118	118	118	8075
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Additiveâ€Free, Gelled Nanoinks as a 3D Printing Toolbox for Hierarchically Structured Bulk Aerogels. Advanced Functional Materials, 2022, 32, .	7.8	8
2	Structure of Water at Hydrophilic and Hydrophobic Interfaces: Raman Spectroscopy of Water Confined in Periodic Mesoporous (Organo)Silicas. Journal of Physical Chemistry C, 2022, 126, 3520-3531.	1.5	11
3	Additiveâ€Free, Gelled Nanoinks as a 3D Printing Toolbox for Hierarchically Structured Bulk Aerogels (Adv. Funct. Mater. 19/2022). Advanced Functional Materials, 2022, 32, .	7.8	1
4	Strengthening Engineered Nanocrystal Three-Dimensional Superlattices via Ligand Conformation and Reactivity. ACS Nano, 2022, 16, 11692-11707.	7.3	8
5	Influence of surface wettability on methane hydrate formation in hydrophilic and hydrophobic mesoporous silicas. Chemical Engineering Journal, 2021, 405, 126955.	6.6	28
6	Dynamics of water confined in mesopores with variable surface interaction. Journal of Chemical Physics, 2021, 154, 094505.	1.2	25
7	Blatterâ€Radicalâ€Grafted Mesoporous Silica as Prospective Nanoplatform for Spin Manipulation at Ambient Conditions. Angewandte Chemie - International Edition, 2021, 60, 8683-8688.	7.2	17
8	Specific heat capacity of wood betweenÂâ˜140 and 50ÂÂ°C in dry and wet state. Holzforschung, 2021, 75, 779-785.	0.9	4
9	Blatterâ€Radicalâ€Grafted Mesoporous Silica as Prospective Nanoplatform for Spin Manipulation at Ambient Conditions. Angewandte Chemie, 2021, 133, 8765-8770.	1.6	2
10	Influence of Pore Surface Chemistry on the Rotational Dynamics of Nanoconfined Water. Journal of Physical Chemistry C, 2021, 125, 16864-16874.	1.5	13
11	Design and Characterization of Metal Nanoparticle Infiltrated Mesoporous Metalâ€“Organic Frameworks. Inorganic Chemistry, 2021, 60, 13000-13010.	1.9	5
12	Shape Matters: The Effect of Particle Morphology on the Fast-Charging Performance of LiFePO₄/C Nanoparticle Composite Electrodes. ACS Omega, 2021, 6, 24062-24069.	1.6	12
13	From the outside to the inside: Elucidation of the mechanism of pseudomorphic transformation of SBA-15 into MCM-41 by following its time-resolved conversion. Microporous and Mesoporous Materials, 2021, 328, 111442.	2.2	1
14	Nanoporous hybrid coreâ€“shell nanoparticles for sequential release. Journal of Materials Chemistry B, 2020, 8, 776-786.	2.9	13
15	Stabilizing and destabilizing effects of drug-excipient interactions in spray-dried, freeze-dried, and granulated Sennae fructus extracts. Drying Technology, 2020, 38, 1882-1890.	1.7	2
16	Nanopore effects on the combustion temperature of resorcinol-formaldehyde xerogels. Microporous and Mesoporous Materials, 2020, 307, 110496.	2.2	0
17	Determination of mesopores in the wood cell wall at dry and wet state. Scientific Reports, 2020, 10, 9543.	1.6	20
18	Structural Changes of Hierarchically Nanoporous Organosilica/Silica Hybrid Materials by Pseudomorphic Transformation. Chemistry - A European Journal, 2020, 26, 11220-11230.	1.7	5

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19	Detailed and Direct Observation of Sulfur Crystal Evolution During Operando Analysis of a Liâ€“S Cell with Synchrotron Imaging. Journal of Physical Chemistry Letters, 2020, 11, 5674-5679.	2.1	5
20	Diving into the chiral pool: enantiopure microporous polysilsesquioxane spheres from both enantiomers with an oxazolidinone motif. Journal of Sol-Gel Science and Technology, 2019, 89, 148-155.	1.1	2
21	Measuring the Heat of Interaction between Lignocellulosic Materials and Water. Forests, 2019, 10, 674.	0.9	13
22	Comparative Gas Sorption and Cryoporometry Study of Mesoporous Glass Structure: Application of the Serially Connected Pore Model. Frontiers in Chemistry, 2019, 7, 230.	1.8	11
23	Insights into the influence of the pore size and surface area of activated carbons on the energy storage of electric double layer capacitors with a new potentially universally applicable capacitor model. Physical Chemistry Chemical Physics, 2019, 21, 3122-3133.	1.3	114
24	Radical-Doped Metalâ€“Organic Framework: Route to Nanoscale Defects and Magnetostructural Functionalities. Inorganic Chemistry, 2019, 58, 8471-8479.	1.9	28
25	Selective Control of Ion Transport by Nanoconfinement: Ionic Liquid in Mesoporous Resorcinolâ€“Formaldehyde Monolith. ACS Applied Materials & Interfaces, 2019, 11, 24423-24434.	4.0	6
26	Millimeter-sized micellar-templated silica beads and phenylene-bridged mesoporous organosilica beads. Microporous and Mesoporous Materials, 2019, 284, 327-335.	2.2	4
27	Nitric Oxide Adsorption in Cu₃btc₂-Type MOFsâ€”Physisorption and Chemisorption as NONOates. Journal of Physical Chemistry C, 2019, 123, 4299-4307.	1.5	20
28	A new set of metalâ€“organic frameworks synthesised from diisophthalate-based, 2â€²-phosphorus-substituted m-terphenyl linker molecules. Dalton Transactions, 2019, 48, 15127-15135.	1.6	1
29	3D Anionic Silicate Covalent Organic Framework with srs Topology. Journal of the American Chemical Society, 2018, 140, 5330-5333.	6.6	174
30	A Modular Enzyme Cascade for Coenzyme Regeneration: A Simple Approach to Master the Circumstance of Leaching. European Journal of Organic Chemistry, 2018, 2018, 2228-2232.	1.2	1
31	Increase of porosity by combining semi-carbonization and KOH activation of formaldehyde resins to prepare high surface area carbons for supercapacitor applications. Applied Surface Science, 2018, 427, 1055-1064.	3.1	47
32	Graphene-like metalâ€“organic frameworks: morphology control, optimization of thin film electrical conductivity and fast sensing applications. CrystEngComm, 2018, 20, 6458-6471.	1.3	70
33	A Metalâ€“Organic Framework with Tetrahedral Aluminate Sites as a Singleâ€Ion Li + Solid Electrolyte. Angewandte Chemie, 2018, 130, 16925-16929.	1.6	8
34	A Metalâ€“Organic Framework with Tetrahedral Aluminate Sites as a Singleâ€Ion Li⁺ Solid Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 16683-16687.	7.2	65
35	Biomimetic water channels: general discussion. Faraday Discussions, 2018, 209, 205-229.	1.6	10
36	Alginateâ€Derived Salt/Polymer Composites for Thermochemical Heat Storage. Advanced Sustainable Systems, 2018, 2, 1700160.	2.7	22

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37	Water Transport in Periodic Mesoporous Organosilica Materials. Journal of Physical Chemistry C, 2018, 122, 12673-12680.	1.5	6
38	MOF-templated synthesis of 3D Bi2O3 supracrystals with bcc packing. Nanoscale, 2018, 10, 17099-17104.	2.8	1
39	Chemically Resistant, Shapeable, and Conducting Metalâ€Organic Gels and Aerogels Built from Dithiooxamidato Ligand. Advanced Functional Materials, 2017, 27, 1605448.	7.8	40
40	Stimuliâ€Responsive Materials: Chemically Resistant, Shapeable, and Conducting Metalâ€Organic Gels and Aerogels Built from Dithiooxamidato Ligand (Adv. Funct. Mater. 15/2017). Advanced Functional Materials, 2017, 27, .	7.8	1
41	Hierarchical 3D-ordered macro-/mesoporous organosilicas with inverse opal morphology synthesized by a combination of nanocasting and pseudomorphic transformation. Journal of Materials Chemistry C, 2017, 5, 5263-5268.	2.7	9
42	Immobilization of Alcohol Dehydrogenase from E. coli onto Mesoporous Silica for Application as a Cofactor Recycling System. ChemCatChem, 2017, 9, 1148-1148.	1.8	4
43	Immobilization of Alcohol Dehydrogenase from E. coli onto Mesoporous Silica for Application as a Cofactor Recycling System. ChemCatChem, 2017, 9, 1197-1210.	1.8	10
44	Eigenschaften von Wasser in den Poren von periodisch mesoporÃ¶sen Organosilicas â€“ NanoabprÃgung der lokalen Struktur. Angewandte Chemie, 2017, 129, 12519-12523.	1.6	3
45	Properties of Water Confined in Periodic Mesoporous Organosilicas: Nanoimprinting the Local Structure. Angewandte Chemie - International Edition, 2017, 56, 12348-12351.	7.2	36
46	Pseudomorphic Transformation of Porous Glasses into Micelleâ€Templated Silica. Chemie-Ingenieur-Technik, 2017, 89, 863-875.	0.4	8
47	Mesoporous hollow carbon spheres for lithiumâ€“sulfur batteries: distribution of sulfur and electrochemical performance. Beilstein Journal of Nanotechnology, 2016, 7, 1229-1240.	1.5	28
48	Magnesium Sulfate/Polymer Composites forÂSeasonal, Thermochemical Energy Storage. Chemie-Ingenieur-Technik, 2016, 88, 379-384.	0.4	12
49	Kinetic investigations of 6-phosphogluconate dehydrogenase confined in mesoporous silica. Journal of Molecular Catalysis B: Enzymatic, 2016, 132, 5-15.	1.8	9
50	Adsorption and Desorption of Isoflurane on Carbonaceous Adsorbents and Zeolites at Low Concentrations in Gas Phase. Journal of Chemical & Engineering Data, 2016, 61, 686-692.	1.0	12
51	Distribution of Sulfur in Carbon/Sulfur Nanocomposites Analyzed by Small-Angle X-ray Scattering. Langmuir, 2016, 32, 2780-2786.	1.6	36
52	A New Set of Isoreticular, Homochiral Metalâ€“Organic Frameworks with ucp Topology. Chemistry of Materials, 2016, 28, 519-528.	3.2	26
53	Fluorine magic: one new organofluorine linker leads to three new metalâ€“organic frameworks. CrystEngComm, 2015, 17, 353-360.	1.3	26
54	Lightâ€Harvesting Threeâ€Chromophore Systems Based on Biphenylâ€Bridged Periodic Mesoporous Organosilica. Chemistry - A European Journal, 2015, 21, 331-346.	1.7	35

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55	Tuning the nitric oxide release behavior of amino functionalized HKUST-1. Microporous and Mesoporous Materials, 2015, 216, 118-126.	2.2	40
56	Influence of the hydrophilicâ€“hydrophobic contrast of porous surfaces on the enzymatic performance. Journal of Materials Chemistry B, 2015, 3, 2341-2349.	2.9	18
57	Sorption of Acetaldehyde and Hexanal in Trace Concentrations on Carbonâ€Based Adsorbents. Chemical Engineering and Technology, 2015, 38, 125-130.	0.9	2
58	A water-born Zr-based porous coordination polymer: Modulated synthesis of Zr-fumarate MOF. Microporous and Mesoporous Materials, 2015, 203, 186-194.	2.2	95
59	Crystal structures of 1-bromo-3,5-bis(4,4-dimethyl-1,3-oxazolin-2-yl)benzene 0.15-hydrate and 3,5-bis(4,4-dimethyl-1,3-oxazolin-2-yl)-1-iodobenzene. Acta Crystallographica Section E: Crystallographic Communications, 2015, 71, 1125-1131.	0.2	0
60	Periodic Mesoporous Organosilicas as Adsorbents of Toxic Trace Gases out of the Ambient Air. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 632-640.	0.6	25
61	Nanostructured and nanoporous LiFePO4 and LiNi0.5Mn1.5O4-Î´ as cathode materials for lithium-ion batteries. Progress in Solid State Chemistry, 2014, 42, 218-241.	3.9	15
62	Hierarchically Structured MCMâ€41 Silica Beads via Nanocasting in Combination with â€œPoreâ€protectedâ€• Pseudomorphic Transformation. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 565-569.	0.6	12
63	Combining Nitrogen, Argon, and Water Adsorption for Advanced Characterization of Ordered Mesoporous Carbons (CMKs) and Periodic Mesoporous Organosilicas (PMOs). Langmuir, 2013, 29, 14893-14902.	1.6	137
64	Soggy-sand effects in liquid composite electrolytes with mesoporous materials as fillers. Journal of Materials Chemistry A, 2013, 1, 12560.	5.2	29
65	Surface and in-depth characterization of lithium-ion battery cathodes at different cycle states using confocal micro-X-ray fluorescence-X-ray absorption near edge structure analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2013, 85, 62-70.	1.5	27
66	Designing Inorganic Porous Materials for Enzyme Adsorption and Applications in Biocatalysis. ChemCatChem, 2013, 5, 862-884.	1.8	107
67	On the Way to Cofactor Regeneration in Nanopores: Tailoring Porous Materials for Glucoseâ€6â€phosphate Dehydrogenase Immobilization. ChemCatChem, 2013, 5, 931-938.	1.8	18
68	Linker extensions in metalâ€“organic frameworks: a way to isoreticular networks or new topologies?. CrystEngComm, 2013, 15, 9429.	1.3	9
69	Amino substituted Cu3(btc)2: a new metalâ€“organic framework with a versatile functionality. Chemical Communications, 2012, 48, 11196.	2.2	63
70	Gas Adsorption Properties and Selectivity in CuII/Adeninato/Carboxylato Metal-Biomolecule Frameworks. European Journal of Inorganic Chemistry, 2012, 2012, 5921-5933.	1.0	31
71	Metalâ€“organic frameworks and related materials for hydrogen purification: Interplay of pore size and pore wall polarity. RSC Advances, 2012, 2, 4382.	1.7	37
72	A new series of isoreticular copper-based metalâ€“organic frameworks containing non-linear linkers with different group 14 central atoms. Journal of Materials Chemistry, 2012, 22, 10294.	6.7	9

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73	Conductivity of liquid lithium electrolytes with dispersed mesoporous silica particles. Electrochimica Acta, 2012, 60, 1-6.	2.6	7
74	Vitalising porous inorganic silica networks with organic functionsâ€"PMOs and related hybrid materials. Chemical Society Reviews, 2011, 40, 608-620.	18.7	257
75	New Microporous Materials for Acetylene Storage and C₂H₂/CO₂ Separation: Insights from Molecular Simulations. ChemPhysChem, 2010, 11, 2220-2229.	1.0	118
76	Periodic Mesoporous Organosilica (PMO) Materials with Uniform Spherical Coreâ€Shell Structure. Chemistry - A European Journal, 2010, 16, 10447-10452.	1.7	40
77	Optical and magnetic properties of quasi oneâ€dimensional dilute magnetic ZnMnS and antiferromagnetic MnS. Physica Status Solidi (B): Basic Research, 2010, 247, 2522-2536.	0.7	7
78	In situ SAXD Studies on Phenylene- and Thiophene-Bridged Periodic Mesoporous Organosilicas (PMOs). Chemistry of Materials, 2010, 22, 3746-3751.	3.2	4
79	Towards peptide formation inside the channels of a new divinylaniline-bridged periodic mesoporous organosilica. Chemical Communications, 2010, 46, 2495.	2.2	43
80	Preferred Hydrogen Adsorption Sites in Various MOFsâ€"A Comparative Computational Study. ChemPhysChem, 2009, 10, 2647-2657.	1.0	75
81	Gas Storage in Porous Solids. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 2007-2007.	0.6	1
82	Synthesis and Characterization of Chiral Benzylic Etherâ€Bridged Periodic Mesoporous Organosilicas. Chemistry - A European Journal, 2008, 14, 5935-5940.	1.7	55
83	Systematic extension of the length of the organic conjugated Ï€-system of mesoporous silica-based organicâ€"inorganic hybrid materials. Journal of Materials Chemistry, 2008, 18, 2587.	6.7	37
84	Minimal number of atoms to constitute a magnet: Suppression of magnetic order in spherical MnS nanoparticles. Physical Review B, 2008, 78, .	1.1	9
85	Quantitative description of the temporal behavior of the internalMn3d5luminescence in ensembles ofZn0.99Mn0.01Squantum dots. Physical Review B, 2007, 75, .	1.1	12
86	Vibrational Spectroscopy of Periodic Mesoporous Organosilicas (PMOs) and Their Precursors:â€‰ A Closer Look. Journal of Physical Chemistry C, 2007, 111, 5648-5660.	1.5	52
87	Selective adsorption of solvents in a multiscale device. Microfluidics and Nanofluidics, 2007, 3, 299-305.	1.0	2
88	Synthesis and characterization of highly ordered bifunctional aromatic periodic mesoporous organosilicas with different pore sizes. Journal of Materials Chemistry, 2006, 16, 2809-2818.	6.7	86
89	(II,Mn)VI nanostructures in mesoporous silica hosts â€" from powder samples to thin films. Physica Status Solidi (B): Basic Research, 2006, 243, 831-834.	0.7	6
90	Concentration and size dependence of the dynamics of the Mn 3d5 luminescence in wire-like arrangements of (Zn,Mn)S nanoparticles. Physica Status Solidi (B): Basic Research, 2006, 243, 839-843.	0.7	4

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91	Silica-Based Mesoporous Organicâ€“Inorganic Hybrid Materials. Angewandte Chemie - International Edition, 2006, 45, 3216-3251.	7.2	2,787
92	Spherical Particles of Phenylene-Bridged Periodic Mesoporous Organosilica for High-Performance Liquid Chromatography. Angewandte Chemie - International Edition, 2006, 45, 5210-5214.	7.2	165
93	Periodic Mesoporous Organosilicas with a Bifunctional Conjugated Organic Unit and Crystal-like Pore Walls. Chemistry of Materials, 2005, 17, 6674-6678.	3.2	105
94	Iron modified mesoporous carbon and silica catalysts for methanol decomposition. Reaction Kinetics and Catalysis Letters, 2004, 83, 299-305.	0.6	9
95	In situ Synchrotron SAXS/XRD Study on the Formation of Ordered Mesoscopic Hybrid Materials with Crystal-Like Walls. Chemistry of Materials, 2004, 16, 5564-5566.	3.2	38
96	Periodic Mesoporous Organosilicas PMOs with Different Organic Bridging Groups: Synthesis and Characterization. Materials Research Society Symposia Proceedings, 2002, 726, 1.	0.1	4
97	Modification of the Magnetic and Electronic Properties of Ordered Arrays of (II, Mn)VI Quantum Wires Due to Reduced Lateral Dimensions. Physica Status Solidi (B): Basic Research, 2002, 229, 31-34.	0.7	22
98	Triblock copolymer assisted synthesis of periodic mesoporous organosilicas (PMOs) with large pores. Chemical Communications, 2001, , 2032-2033.	2.2	166
99	Organic template directed growth of one- and two-dimensional GeX2/template superstructures (X=S,) Tj ETQq1 1 0.784314 rgBT /Ov	1.5	9
100	Systematic Sorption Studies on Surfce and Pore Size Characteristics of Different MCM - 48 Silica Materials. Studies in Surface Science and Catalysis, 2000, 128, 259-268.	1.5	7
101	Towards ordered arrays of magnetic semiconductor quantum wires. Applied Physics Letters, 2000, 76, 3531-3533.	1.5	51
102	Sorption and Pore Condensation Behavior of Nitrogen, Argon, and Krypton in Mesoporous MCM-48 Silica Materials. Journal of Physical Chemistry B, 2000, 104, 7932-7943.	1.2	126
103	Isomorphic Substitution and Postsynthesis Incorporation of Zirconium into MCM-48 Mesoporous Silica. Journal of Physical Chemistry B, 1999, 103, 2037-2041.	1.2	134
104	New Synthetic Pathways to Mesostructured Thiogermanates. Materials Research Society Symposia Proceedings, 1998, 547, 433.	0.1	11
105	Redox Processes in Polynary Copper Oxides and Copper Oxide / Mesoporous Silica Composites. Materials Research Society Symposia Proceedings, 1998, 547, 75.	0.1	3
106	Iron (III) Oxide within Mesoporous MCM-48 Silica Phases: Synthesis and Characterization. Materials Research Society Symposia Proceedings, 1998, 547, 81.	0.1	4
107	Synthesis and Al K-Edge Xanes Investigation of Mesostructured Aluminophosphates. Materials Research Society Symposia Proceedings, 1998, 547, 87.	0.1	0
108	The â€œRealstrukturâ€•of the System La2-xSrxCu1-yRuyO4-Î´Studied by Rietveld and Extended X-ray Absorption Fine Structure Spectroscopyâ€. Journal of Physical Chemistry B, 1997, 101, 9909-9915.	1.2	18

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109	The application of omega scans for the characterization of graphite intercalation compounds. Carbon, 1991, 29, 909-913.	5.4	2
110	Network Topology. , 0, , 5-40.		8