

Michael Tsapatsis

List of Publications by Year in descending order

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245
papers

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13087

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259
all docs

259
docs citations

259
times ranked

11709
citing authors

#	ARTICLE	IF	CITATIONS
1	Merocyanine 540 as an optical probe of transmembrane electrical activity in the heart. <i>Science</i> , 2003, 191, 485-487.	6.0	987
2	Synthesis of Self-Pillared Zeolite Nanosheets by Repetitive Branching. <i>Science</i> , 2012, 336, 1684-1687.	6.0	655
3	Dispersible Exfoliated Zeolite Nanosheets and Their Application as a Selective Membrane. <i>Science</i> , 2011, 334, 72-75.	6.0	601
4	Hierarchical nanofabrication of microporous crystals with ordered mesoporosity. <i>Nature Materials</i> , 2008, 7, 984-991.	13.3	553
5	A titanasilicate molecular sieve with adjustable pores for size-selective adsorption of molecules. <i>Nature</i> , 2001, 412, 720-724.	13.7	546
6	Ultra-selective high-flux membranes from directly synthesized zeolite nanosheets. <i>Nature</i> , 2017, 543, 690-694.	13.7	446
7	Hydrogen Sulfide Capture: From Absorption in Polar Liquids to Oxide, Zeolite, and Metal-Organic Framework Adsorbents and Membranes. <i>Chemical Reviews</i> , 2017, 117, 9755-9803.	23.0	434
8	Mechanistic principles of nanoparticle evolution to zeolite crystals. <i>Nature Materials</i> , 2006, 5, 400-408.	13.3	416
9	Microporous Metal Organic Framework Membrane on Porous Support Using the Seeded Growth Method. <i>Chemistry of Materials</i> , 2009, 21, 4920-4924.	3.2	340
10	Zeolitic imidazolate framework membranes made by ligand-induced permselectivation. <i>Science</i> , 2018, 361, 1008-1011.	6.0	324
11	Hierarchical Nanomanufacturing: From Shaped Zeolite Nanoparticles to High-Performance Separation Membranes. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 7560-7573.	7.2	323
12	Grain Boundary Defect Elimination in a Zeolite Membrane by Rapid Thermal Processing. <i>Science</i> , 2009, 325, 590-593.	6.0	289
13	Hydrothermal Synthesis of Zeolites with Three-Dimensionally Ordered Mesoporous-Imprinted Structure. <i>Journal of the American Chemical Society</i> , 2011, 133, 12390-12393.	6.6	266
14	Preferentially oriented submicron silicalite membranes. <i>AIChE Journal</i> , 1996, 42, 3020-3029.	1.8	244
15	Layer Structure Preservation during Swelling, Pillaring, and Exfoliation of a Zeolite Precursor. <i>Journal of the American Chemical Society</i> , 2008, 130, 1507-1516.	6.6	240
16	Separation of Xylene Isomer Vapors with Oriented MFI Membranes Made by Seeded Growth. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 544-552.	1.8	227
17	Synthesis and characterization of oriented MFI membranes prepared by secondary growth. <i>AIChE Journal</i> , 1998, 44, 1903-1913.	1.8	212
18	On the Preferred Orientation and Microstructural Manipulation of Molecular Sieve Films Prepared by Secondary Growth. <i>Chemistry of Materials</i> , 1998, 10, 2497-2504.	3.2	207

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19	Oriented MFI Membranes by Gel-Less Secondary Growth of Sub-100 nm MFI-Nanosheet Seed Layers. <i>Advanced Materials</i> , 2015, 27, 3243-3249.	11.1	182
20	Transport properties of alumina-supported MFI membranes made by secondary (seeded) growth. <i>Microporous and Mesoporous Materials</i> , 2000, 38, 61-73.	2.2	173
21	One-Pot Synthesis of 5-(Ethoxymethyl)furfural from Glucose Using Sn-BEA and Amberlyst Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 5364-5366.	1.8	168
22	Structure of the Silica Phase Extracted from Silica/(TPA)OH Solutions Containing Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2003, 107, 10006-10016.	1.2	164
23	Zeolite (MFI) Crystal Morphology Control Using Organic Structure-Directing Agents. <i>Chemistry of Materials</i> , 2004, 16, 5697-5705.	3.2	164
24	Fabrication of Polymer/Selective-Flake Nanocomposite Membranes and Their Use in Gas Separation. <i>Chemistry of Materials</i> , 2004, 16, 3838-3845.	3.2	152
25	Characterization of Zeolite L Nanoclusters. <i>Chemistry of Materials</i> , 1995, 7, 1734-1741.	3.2	149
26	Uniformly Oriented MFI Zeolite Films by Secondary Growth. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 1154-1158.	7.2	138
27	Self-Pillared, Single-Unit-Cell Sn-MFI Zeolite Nanosheets and Their Use for Glucose and Lactose Isomerization. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 10848-10851.	7.2	138
28	Continuous production of 5-hydroxymethylfurfural from fructose: a design case study. <i>Energy and Environmental Science</i> , 2010, 3, 1560.	15.6	136
29	Xylene Ultra-selective Zeolite MFI Membranes Fabricated from Nanosheet Monolayers at the Air-Water Interface. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 480-485.	7.2	130
30	Synthesis of hydrogen permselective silicon dioxide, titanium dioxide, aluminum oxide, and boron oxide membranes from the chloride precursors. <i>Industrial & Engineering Chemistry Research</i> , 1991, 30, 2152-2159.	1.8	128
31	TraPPE-zeo: Transferable Potentials for Phase Equilibria Force Field for All-Silica Zeolites. <i>Journal of Physical Chemistry C</i> , 2013, 117, 24375-24387.	1.5	124
32	A highly crystalline layered silicate with three-dimensionally microporous layers. <i>Nature Materials</i> , 2003, 2, 53-58.	13.3	120
33	Renewable Xylene from 2,5-Dimethylfuran and Ethylene Using Phosphorus-Containing Zeolite Catalysts. <i>ChemCatChem</i> , 2017, 9, 398-402.	1.8	118
34	Tin-containing zeolite for the isomerization of cellulosic sugars. <i>Microporous and Mesoporous Materials</i> , 2012, 153, 55-58.	2.2	116
35	On the direct synthesis of Cu(BDC) MOF nanosheets and their performance in mixed matrix membranes. <i>Journal of Membrane Science</i> , 2018, 549, 312-320.	4.1	116
36	Finned zeolite catalysts. <i>Nature Materials</i> , 2020, 19, 1074-1080.	13.3	116

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37	Synthesis and Structure Determination of ETS-4 Single Crystals. <i>Chemistry of Materials</i> , 2001, 13, 4247-4254.	3.2	115
38	Catalytic Behavior of Brønsted Acid Sites in MWW and MFI Zeolites with Dual Meso- and Microporosity. <i>ACS Catalysis</i> , 2011, 1, 7-17.	5.5	113
39	Nanoparticles in Lysine-Silica Sols. <i>Chemistry of Materials</i> , 2006, 18, 5814-5816.	3.2	110
40	A Structural Resolution Cryo-TEM Study of the Early Stages of MFI Growth. <i>Journal of the American Chemical Society</i> , 2008, 130, 17284-17286.	6.6	110
41	Layered Silicates by Swelling of AMH and Nanocomposite Membranes. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 552-555.	7.2	107
42	Toward High-Throughput Zeolite Membranes. <i>Science</i> , 2011, 334, 767-768.	6.0	105
43	On the Synthesis and Adsorption Properties of Single-Unit-Cell Hierarchical Zeolites Made by Rotational Intergrowths. <i>Advanced Functional Materials</i> , 2014, 24, 201-208.	7.8	101
44	2D zeolites. <i>AICHE Journal</i> , 2014, 60, 2374-2381.	1.8	101
45	Open-Pore Two-Dimensional MFI Zeolite Nanosheets for the Fabrication of Hydrocarbon-Selective Membranes on Porous Polymer Supports. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 7184-7187.	7.2	100
46	Surface Structure of Zeolite (MFI) Crystals. <i>Chemistry of Materials</i> , 2004, 16, 5226-5232.	3.2	95
47	Discovery of optimal zeolites for challenging separations and chemical transformations using predictive materials modeling. <i>Nature Communications</i> , 2015, 6, 5912.	5.8	94
48	Synthesis of Porous Inorganic Membranes. <i>MRS Bulletin</i> , 1999, 24, 30-35.	1.7	92
49	Adsorption of fermentation inhibitors from lignocellulosic biomass hydrolyzates for improved ethanol yield and value-added product recovery. <i>Microporous and Mesoporous Materials</i> , 2009, 122, 143-148.	2.2	92
50	Oriented Molecular Sieve Membranes by Heteroepitaxial Growth. <i>Journal of the American Chemical Society</i> , 2002, 124, 12966-12968.	6.6	91
51	Sub-40 nm Zeolite Suspensions via Disassembly of Three-Dimensionally Ordered Mesoporous-Imprinted Silicalite-1. <i>Journal of the American Chemical Society</i> , 2011, 133, 493-502.	6.6	91
52	One-dimensional intergrowths in two-dimensional zeolite nanosheets and their effect on ultra-selective transport. <i>Nature Materials</i> , 2020, 19, 443-449.	13.3	91
53	On the Rotational Intergrowth of Hierarchical FAU/EMT Zeolites. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 9456-9461.	7.2	90
54	Challenges of and Insights into Acid-Catalyzed Transformations of Sugars. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22815-22833.	1.5	88

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55	Spontaneous formation of inorganic helices. <i>Nature</i> , 2000, 405, 38-38.	13.7	87
56	Aggregative Growth of Silicalite-1. <i>Journal of Physical Chemistry B</i> , 2007, 111, 3398-3403.	1.2	87
57	Molecular sieves in the nanotechnology era. <i>AIChE Journal</i> , 2002, 48, 654-660.	1.8	85
58	Characterization of the Pore Structure of Three-Dimensionally Ordered Mesoporous Carbons Using High Resolution Gas Sorption. <i>Langmuir</i> , 2012, 28, 12647-12654.	1.6	85
59	Biomass-Derived Butadiene by Dehydro-Decyclization of Tetrahydrofuran. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 3732-3736.	3.2	84
60	Thermal Stabilization of Metal-Organic Framework-Derived Single-Site Catalytic Clusters through Nanocasting. <i>Journal of the American Chemical Society</i> , 2016, 138, 2739-2748.	6.6	83
61	High-resolution electron microscopy study on the growth of zeolite L nanoclusters. <i>Microporous Materials</i> , 1996, 5, 381-388.	1.6	81
62	Solution-processable exfoliated zeolite nanosheets purified by density gradient centrifugation. <i>AIChE Journal</i> , 2013, 59, 3458-3467.	1.8	80
63	Interplay between hydrophilicity and surface barriers on water transport in zeolite membranes. <i>Nature Communications</i> , 2016, 7, 12762.	5.8	80
64	Silica Nanoparticle Crystals and Ordered Coatings Using Lys-Sil and a Novel Coating Device. <i>Langmuir</i> , 2007, 23, 9924-9928.	1.6	78
65	Progress in manipulating zeolite morphology and related applications. <i>Current Opinion in Colloid and Interface Science</i> , 2005, 10, 233-238.	3.4	77
66	A Chromium Hydroxide/MIL-101(Cr) MOF Composite Catalyst and Its Use for the Selective Isomerization of Glucose to Fructose. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4926-4930.	7.2	73
67	Influence of layer structure preservation on the catalytic properties of the pillared zeolite MCM-36. <i>Journal of Catalysis</i> , 2010, 272, 298-308.	3.1	72
68	Renewable Isoprene by Sequential Hydrogenation of Itaconic Acid and Dehydro-Decyclization of 3-Methyl-Tetrahydrofuran. <i>ACS Catalysis</i> , 2017, 7, 1428-1431.	5.5	72
69	H ₂ S adsorption by Ag and Cu ion exchanged faujasites. <i>Microporous and Mesoporous Materials</i> , 2011, 146, 127-133.	2.2	71
70	Multicomponent Adsorption of Alcohols onto Silicalite-1 from Aqueous Solution: Isotherms, Structural Analysis, and Assessment of Ideal Adsorbed Solution Theory. <i>Langmuir</i> , 2012, 28, 15566-15576.	1.6	71
71	Reactive Deposition of Metal Thin Films within Porous Supports from Supercritical Fluids. <i>Chemistry of Materials</i> , 2001, 13, 2023-2031.	3.2	68
72	2D Zeolite Coatings: Langmuir-Schaefer Deposition of 3-nm Thick MFI Zeolite Nanosheets. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6571-6575.	7.2	67

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73	MFI zeolite membranes from a- and randomly oriented monolayers. <i>Adsorption</i> , 2006, 12, 339-360.	1.4	64
74	Tunable Oleo-Furan Surfactants by Acylation of Renewable Furans. <i>ACS Central Science</i> , 2016, 2, 820-824.	5.3	64
75	A high-performance adsorbent for hydrogen sulfide removal. <i>Microporous and Mesoporous Materials</i> , 2014, 190, 152-155.	2.2	63
76	Rapid thermal processing and separation performance of columnar MFI membranes on porous stainless steel tubes. <i>Energy and Environmental Science</i> , 2011, 4, 3479.	15.6	62
77	Development of the Transferable Potentials for Phase Equilibria Model for Hydrogen Sulfide. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7041-7052.	1.2	59
78	On the kinetics of the isomerization of glucose to fructose using Sn-Beta. <i>Chemical Engineering Science</i> , 2014, 116, 235-242.	1.9	57
79	Controlling Dissolution and Transformation of Zeolitic Imidazolate Frameworks by using Electron-Beam-Induced Amorphization. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13592-13597.	7.2	57
80	A model for the performance of microporous mixed matrix membranes with oriented selective flakes. <i>Journal of Membrane Science</i> , 2007, 295, 50-70.	4.1	56
81	Understanding Diffusion in Hierarchical Zeolites with House-of-Cards Nanosheets. <i>ACS Nano</i> , 2016, 10, 7612-7618.	7.3	56
82	Ethanol/water mixture pervaporation performance of c-oriented silicalite-1 membranes made by gel-free secondary growth. <i>AIChE Journal</i> , 2016, 62, 556-563.	1.8	55
83	Continuous-Oriented AlPO ₄₋₅ Films by Tertiary Growth. <i>Chemistry of Materials</i> , 2007, 19, 792-797.	3.2	54
84	ZIF-8 Membrane Separation Performance Tuning by Vapor Phase Ligand Treatment. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16390-16394.	7.2	54
85	The Catalytic Mechanics of Dynamic Surfaces: Stimulating Methods for Promoting Catalytic Resonance. <i>ACS Catalysis</i> , 2020, 10, 12666-12695.	5.5	54
86	Heteroepitaxial Growth of a Zeolite. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 1069-1071.	7.2	53
87	On the performance of c-oriented MFI zeolite Membranes treated by rapid thermal processing. <i>Journal of Membrane Science</i> , 2013, 436, 79-89.	4.1	52
88	On the TEM and AFM Evidence of Zeosil Nanoslabs Present during the Synthesis of Silicalite-1. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 4558-4561.	7.2	51
89	Probing the Relationship between Silicalite-1 Defects and Polyol Adsorption Properties. <i>Langmuir</i> , 2013, 29, 6546-6555.	1.6	51
90	Simple quantification of zeolite acid site density by reactive gas chromatography. <i>Catalysis Science and Technology</i> , 2017, 7, 3831-3841.	2.1	51

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91	Nanoscale Control of Homoepitaxial Growth on a Two-Dimensional Zeolite. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 535-539.	7.2	50
92	Preparation of b-Oriented MFI Films on Porous Stainless Steel Substrates. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 9086-9095.	1.8	48
93	Structure and Colloidal Stability of Nanosized Zeolite Beta Precursors. <i>Langmuir</i> , 2010, 26, 1260-1270.	1.6	47
94	A Study of Heat-Treatment Induced Framework Contraction in Strontium-ETS-4 by Powder Neutron Diffraction and Vibrational Spectroscopy. <i>Journal of the American Chemical Society</i> , 2001, 123, 12781-12790.	6.6	46
95	Physicochemical Characterization of Silicalite-1 Surface and Its Implications on Crystal Growth. <i>Langmuir</i> , 2003, 19, 4619-4626.	1.6	44
96	Epitaxially Grown Layered MFI-Bulk MFI Hybrid Zeolitic Materials. <i>ACS Nano</i> , 2012, 6, 9978-9988.	7.3	44
97	Oxidation and Reduction under Cover: Chemistry at the Confined Space between Ultrathin Nanoporous Silicates and Ru(0001). <i>Journal of Physical Chemistry C</i> , 2016, 120, 8240-8245.	1.5	44
98	Selective adsorption of HMF on porous carbons from fructose/DMSO mixtures. <i>Microporous and Mesoporous Materials</i> , 2012, 158, 253-256.	2.2	42
99	Activity and selectivity differences of external Brønsted acid sites of single-unit-cell thick and conventional MFI and MWW zeolites. <i>Microporous and Mesoporous Materials</i> , 2014, 200, 287-290.	2.2	42
100	Nucleation of open framework materials: Navigating the voids. <i>MRS Bulletin</i> , 2016, 41, 393-398.	1.7	42
101	para-Xylene Ultra-selective Zeolite MFI Membranes Fabricated from Nanosheet Monolayers at the Air-Water Interface. <i>Angewandte Chemie</i> , 2018, 130, 489-494.	1.6	42
102	Identifying Optimal Zeolitic Sorbents for Sweetening of Highly Sour Natural Gas. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5938-5942.	7.2	41
103	Factors Governing the Formation of Hierarchically and Sequentially Intergrown MFI Zeolites by Using Simple Diquaternary Ammonium Structure-Directing Agents. <i>Chemistry of Materials</i> , 2016, 28, 8997-9007.	3.2	41
104	MCM-22/Silica Selective Flake Nanocomposite Membranes for Hydrogen Separations. <i>Journal of the American Chemical Society</i> , 2010, 132, 448-449.	6.6	40
105	Pillared Sn-MWW Prepared by a Solid-State-Exchange Method and its Use as a Lewis Acid Catalyst. <i>ChemCatChem</i> , 2016, 8, 1274-1278.	1.8	40
106	Direct Synthesis of 7 nm-Thick Zinc(II)-Benzimidazole-Acetate Metal-Organic Framework Nanosheets. <i>Chemistry of Materials</i> , 2018, 30, 69-73.	3.2	40
107	Quantification of thickness and wrinkling of exfoliated two-dimensional zeolite nanosheets. <i>Nature Communications</i> , 2015, 6, 7128.	5.8	39
108	Selective Glucose-Fructose Isomerization over Modified Zirconium UiO-66 in Alcohol Media. <i>ChemCatChem</i> , 2018, 10, 2417-2423.	1.8	39

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109	Strain of MFI crystals in membranes: An in situ synchrotron X-ray study. <i>Microporous and Mesoporous Materials</i> , 2005, 84, 332-337.	2.2	38
110	A semi-empirical approach for predicting the performance of mixed matrix membranes containing selective flakes. <i>Journal of Membrane Science</i> , 2009, 326, 595-607.	4.1	38
111	Catalysis Center for Energy Innovation for Biomass Processing: Research Strategies and Goals. <i>Catalysis Letters</i> , 2010, 140, 77-84.	1.4	38
112	Growth of zeolite crystals with graphene oxide nanosheets. <i>Chemical Communications</i> , 2012, 48, 2249.	2.2	38
113	Synthesis and Structure of Ultrafine Zeolite KL (LTL) Crystallites and their Use for Thin Film Zeolite Processing. <i>Materials Research Society Symposia Proceedings</i> , 1994, 371, 21.	0.1	37
114	Coating of Open Cell Foams. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 9250-9259.	1.8	37
115	Density Functional Theory Study on the Adsorption of H ₂ S and Other Claus Process Tail Gas Components on Copper- and Silver-Exchanged Y Zeolites. <i>Journal of Physical Chemistry C</i> , 2012, 116, 3561-3575.	1.5	37
116	Monte Carlo Simulations Probing the Adsorptive Separation of Hydrogen Sulfide/Methane Mixtures Using All-Silica Zeolites. <i>Langmuir</i> , 2015, 31, 12268-12278.	1.6	37
117	ZIF-8 Membrane Permselectivity Modification by Manganese(II) Acetylacetonate Vapor Treatment. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9316-9320.	7.2	36
118	On the nucleation and crystallization of silicalite-1 from a dilute clear sol. <i>Microporous and Mesoporous Materials</i> , 2011, 144, 74-81.	2.2	35
119	On defects in highly a-oriented MFI membranes. <i>Microporous and Mesoporous Materials</i> , 2013, 170, 1-8.	2.2	35
120	Spontaneous Formation of Inorganic Helical Fibers and Rings. <i>Journal of the American Chemical Society</i> , 2000, 122, 12158-12163.	6.6	33
121	Layer-by-Layer Deposition of Barrier and Permselective <i>c</i> -Oriented-MCM-22/Silica Composite Films. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 7096-7106.	1.8	33
122	Growth of AlPO ₄ -5 and CoAPO-5 films from amorphous seeds. <i>Microporous and Mesoporous Materials</i> , 2008, 115, 11-22.	2.2	32
123	Toward Submicrometer <i>c</i> -Oriented Nanoporous Films with Unidimensional Pore Network: AFI Film Morphology Control by Precursor Mixture Manipulation. <i>Chemistry of Materials</i> , 2010, 22, 1492-1502.	3.2	31
124	First principles Monte Carlo simulations of unary and binary adsorption: CO ₂ , N ₂ , and H ₂ O in Mg-MOF-74. <i>Chemical Communications</i> , 2018, 54, 10816-10819.	2.2	31
125	Glucose isomerization in dioxane/water with Sn-IV catalyst: improved catalyst stability and use for HMF production. <i>Chemical Communications</i> , 2019, 55, 14942-14945.	2.2	31
126	Oriented CoSAPO-5 Membranes by Microwave-Enhanced Growth on TiO ₂ -Coated Porous Alumina. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2470-2473.	7.2	30

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127	A mathematical model for zeolite membrane module performance and its use for techno-economic evaluation of improved energy efficiency hybrid membrane-distillation processes for butane isomer separations. <i>Journal of Membrane Science</i> , 2016, 520, 434-449.	4.1	30
128	Combining Pre- and Post-Nucleation Trajectories for the Synthesis of High FAU-Content Faujasite Nanocrystals from Organic-Free Sols. <i>Chemistry of Materials</i> , 2016, 28, 4204-4213.	3.2	30
129	A Chromium Hydroxide/MIL-101(Cr) MOF Composite Catalyst and Its Use for the Selective Isomerization of Glucose to Fructose. <i>Angewandte Chemie</i> , 2018, 130, 5020-5024.	1.6	30
130	Twin-free, directly synthesized MFI nanosheets with improved thickness uniformity and their use in membrane fabrication. <i>Science Advances</i> , 2022, 8, eabm8162.	4.7	30
131	Pores by Pillaring: Not Always a Maze. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 4262-4263.	7.2	29
132	On stability and performance of highly c-oriented columnar AlPO ₄ -5 and CoAPO-5 membranes. <i>Microporous and Mesoporous Materials</i> , 2012, 147, 286-294.	2.2	29
133	Elucidating structure-properties relations for the design of highly selective carbon-based HMF sorbents. <i>Microporous and Mesoporous Materials</i> , 2014, 184, 72-82.	2.2	29
134	Large-Grain, Oriented, and Thin Zeolite MFI Films from Directly Synthesized Nanosheet Coatings. <i>Chemistry of Materials</i> , 2018, 30, 3545-3551.	3.2	29
135	A quantitative study of the structure-activity relationship in hierarchical zeolites using liquid-phase reactions. <i>AIChE Journal</i> , 2019, 65, 1067-1075.	1.8	29
136	Role of ethanol in sodalite crystallization in an ethanol-Na ₂ O-Al ₂ O ₃ -SiO ₂ -H ₂ O system. <i>CrystEngComm</i> , 2011, 13, 4714.	1.3	28
137	Silica Nanoparticle Coatings by Adsorption from Lysine-Silica Nanoparticle Sols on Inorganic and Biological Surfaces. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1617-1621.	7.2	28
138	Melt Compounding of Swollen Titanosilicate JDF-L1 with Polysulfone To Obtain Mixed Matrix Membranes for H ₂ /CH ₄ Separation. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 1901-1907.	1.8	28
139	Adsorptive Separation of 1-Butanol from Aqueous Solutions Using MFI- and FER-Type Zeolite Frameworks: A Monte Carlo Study. <i>Langmuir</i> , 2016, 32, 2093-2101.	1.6	28
140	Transferable potentials for phase equilibria. Improved united-atom description of ethane and ethylene. <i>AIChE Journal</i> , 2017, 63, 5098-5110.	1.8	28
141	Dehydration-Decyclization of Tetrahydrofuran on H-ZSM5: Mechanisms, Pathways, and Transition State Entropy. <i>ACS Catalysis</i> , 2019, 9, 10279-10293.	5.5	27
142	ZIF-8 Membrane Separation Performance Tuning by Vapor Phase Ligand Treatment. <i>Angewandte Chemie</i> , 2019, 131, 16542-16546.	1.6	26
143	Steam-Induced Coarsening of Single-Cell MFI Zeolite Nanosheets and Its Effect on External Surface Brønsted Acid Catalysis. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9579-9585.	7.2	26
144	A Review of Biorefinery Separations for Bioproduct Production via Thermocatalytic Processing. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2017, 8, 115-137.	3.3	24

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145	Understanding the Unusual Adsorption Behavior in Hierarchical Zeolite Nanosheets. <i>ChemPhysChem</i> , 2014, 15, 2225-2229.	1.0	22
146	On the Economics and Process Design of Renewable Butadiene from Biomass-Derived Furfural. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 3273-3282.	3.2	22
147	Dehydra-decyclization of 2-methyltetrahydrofuran to pentadienes on boron-containing zeolites. <i>Green Chemistry</i> , 2020, 22, 4147-4160.	4.6	22
148	Long-term steam stability of MWW structure zeolites (MCM-22 and ITQ-1). <i>Microporous and Mesoporous Materials</i> , 2014, 193, 134-144.	2.2	21
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