Watcharop Chaikittisilp

List of Publications by Year
in descending order

70 papers	4,970 citations	117625 34 h-index	95266 68 g-index
76 all docs	76 docs citations	76 times ranked	6163 citing authors

#	Article	IF	Citations
1	A new family of carbon materials: synthesis of MOF-derived nanoporous carbons and their promising applications. Journal of Materials Chemistry A, 2013, 1, 14-19.	10.3	739
2	Nanoporous carbons through direct carbonization of a zeolitic imidazolate framework for supercapacitor electrodes. Chemical Communications, 2012, 48, 7259.	4.1	624
3	Synthesis of Nanoporous Carbonâ€“Cobaltâ€“Oxide Hybrid Electrocatalysts by Thermal Conversion of Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2014, 20, 4217-4221.	3.3	253
4	Mesoporous Alumina-Supported Amines as Potential Steam-Stable Adsorbents for Capturing CO₂ from Simulated Flue Gas and Ambient Air. Energy & Fuels, 2011, 25, 5528-5537.	5.1	252
5	Amineâ€“Oxide Hybrid Materials for CO₂ Capture from Ambient Air. Accounts of Chemical Research, 2015, 48, 2680-2687.	15.6	222
6	Poly(allylamine)â€“Mesoporous Silica Composite Materials for CO₂ Capture from Simulated Flue Gas or Ambient Air. Industrial & Engineering Chemistry Research, 2011, 50, 14203-14210.	3.7	175
7	MOF-derived Nanoporous Carbon as Intracellular Drug Delivery Carriers. Chemistry Letters, 2014, 43, 717-719.	1.3	165
8	Critical Factors in the Seedâ€Assisted Synthesis of Zeolite Beta and â€œGreen Betaâ€•from OSDAâ€Free Na⁺â€“Aluminosilicate Gels. Chemistry - an Asian Journal, 2010, 5, 2182-2191.	3.3	158
9	Structure-Directing Behaviors of Tetraethylammonium Cations toward Zeolite Beta Revealed by the Evolution of Aluminosilicate Species Formed during the Crystallization Process. Journal of the American Chemical Society, 2015, 137, 14533-14544.	13.7	140
10	Formation of Hierarchically Organized Zeolites by Sequential Intergrowth. Angewandte Chemie - International Edition, 2013, 52, 3355-3359.	13.8	124
11	Widening Synthesis Bottlenecks: Realization of Ultrafast and Continuousâ€Flow Synthesis of Highâ€Silica Zeolite SSZâ€13 for NO_x Removal. Angewandte Chemie - International Edition, 2015, 54, 5683-5687.	13.8	121
12	Porous Siloxaneâ€“Organic Hybrid with Ultrahigh Surface Area through Simultaneous Polymerizationâ€“Destruction of Functionalized Cubic Siloxane Cages. Journal of the American Chemical Society, 2011, 133, 13832-13835.	13.7	115
13	Silica Sodalite without Occluded Organic Matters by Topotactic Conversion of Lamellar Precursor. Journal of the American Chemical Society, 2008, 130, 15780-15781.	13.7	94
14	Hybrid Porous Materials with High Surface Area Derived from Bromophenylethenylâ€Functionalized Cubic Siloxaneâ€Based Building Units. Chemistry - A European Journal, 2010, 16, 6006-6014.	3.3	94
15	Oxidative Stability of Amino Polymerâ€“Alumina Hybrid Adsorbents for Carbon Dioxide Capture. Energy & Fuels, 2013, 27, 1547-1554.	5.1	92
16	Poly(<scp>L</scp>â€lysine) Brushâ€“Mesoporous Silica Hybrid Material as a Biomoleculeâ€Based Adsorbent for CO₂ Capture from Simulated Flue Gas and Air. Chemistry - A European Journal, 2011, 17, 10556-10561.	3.3	89
17	Energy Analysis of Aluminosilicate Zeolites with Comprehensive Ranges of Framework Topologies, Chemical Compositions, and Aluminum Distributions. Journal of the American Chemical Society, 2016, 138, 6184-6193.	13.7	84
18	Material Evolution with Nanotechnology, Nanoarchitectonics, and Materials Informatics: What will be the Next Paradigm Shift in Nanoporous Materials?. Advanced Materials, 2022, 34, e2107212.	21.0	81

#	Article	IF	Citations
19	Microporous Hybrid Polymer with a Certain Crystallinity Built from Functionalized Cubic Siloxane Cages as a Singular Building Unit. Chemistry of Materials, 2010, 22, 4841-4843.	6.7	80
20	Linking synthesis and structure descriptors from a large collection of synthetic records of zeolite materials. Nature Communications, 2019, 10, 4459.	12.8	74
21	Organicâ€Free Synthesis of a Highly Siliceous Faujasite Zeolite with Spatially Biased Q⁴(nAl) Si Speciation. Angewandte Chemie - International Edition, 2017, 56, 13366-13371.	13.8	62
22	TPA⁺-Mediated Conversion of Silicon Wafer into Preferentially-Oriented MFI Zeolite Film under Steaming. Chemistry of Materials, 2007, 19, 4120-4122.	6.7	58
23	Directing Aluminum Atoms into Energetically Favorable Tetrahedral Sites in a Zeolite Framework by Using Organic Structureâ€Directing Agents. Angewandte Chemie - International Edition, 2018, 57, 3742-3746.	13.8	55
24	Tracking the rearrangement of atomic configurations during the conversion of FAU zeolite to CHA zeolite. Chemical Science, 2019, 10, 8533-8540.	7.4	52
25	Vapor-Phase Transport as A Novel Route to Hyperbranched Polyamine-Oxide Hybrid Materials. Chemistry of Materials, 2013, 25, 613-622.	6.7	51
26	Porous inorganicâ€“organic hybrid polymers derived from cyclic siloxane building blocks: Effects of substituting groups on mesoporous structures. Microporous and Mesoporous Materials, 2019, 278, 212-218.	4.4	46
27	Characterization of a Mixture of CO₂ Adsorption Products in Hyperbranched Aminosilica Adsorbents by ¹³C Solid-State NMR. Environmental Science & Technology, 2015, 49, 13684-13691.	10.0	45
28	Analysis of solid particle mixing in inclined fluidized beds using DEM simulation. Chemical Engineering Journal, 2006, 122, 21-29.	12.7	43
29	Incorporation process of Ti species into the framework of MFI type zeolite. Microporous and Mesoporous Materials, 2008, 112, 202-210.	4.4	42
30	Factors Governing the Formation of Hierarchically and Sequentially Intergrown MFI Zeolites by Using Simple Diquaternary Ammonium Structure-Directing Agents. Chemistry of Materials, 2016, 28, 8997-9007.	6.7	41
31	Role of Acidic Pretreatment of Layered Silicate RUB-15 in Its Topotactic Conversion into Pure Silica Sodalite. Chemistry of Materials, 2011, 23, 3564-3570.	6.7	39
32	Mesoporous trimetallic PtPdAu alloy films toward enhanced electrocatalytic activity in methanol oxidation: unexpected chemical compositions discovered by Bayesian optimization. Journal of Materials Chemistry A, 2020, 8, 13532-13540.	10.3	39
33	Aziridine-Functionalized Mesoporous Silica Membranes on Polymeric Hollow Fibers: Synthesis and Single-Component CO₂ and N₂ Permeation Properties. Industrial & Engineering Chemistry Research, 2015, 54, 4407-4413.	3.7	38
34	Crystallization behavior of zeolite beta with balanced incorporation of silicon and aluminum synthesized from alkali metal cation-free mixture. Microporous and Mesoporous Materials, 2008, 116, 188-195.	4.4	33
35	Oriented Films of Porous Coordination Polymer Prepared by Repeated in Situ Crystallization. Chemistry of Materials, 2008, 20, 2887-2889.	6.7	33
36	Materials informatics-guided superior electrocatalyst: A case of pyrolysis-free single-atom coordinated with N-graphene nanomesh. Nano Energy, 2022, 94, 106868.	16.0	31

#	Article	IF	Citations
37	Fabrication of hierarchical Lewis acid Sn-BEA with tunable hydrophobicity for cellulosic sugar isomerization. Microporous and Mesoporous Materials, 2019, 278, 387-396.	4.4	30
38	Broadening the Applicable Scope of Seed-Directed, Organic Structure-Directing Agent-Free Synthesis of Zeolite to Zincosilicate Components: A Case of VET-Type Zincosilicate Zeolites. Chemistry of Materials, 2014, 26, 1957-1966.	6.7	29
39	Organicâ€Free Synthesis of a Highly Siliceous Faujasite Zeolite with Spatially Biased Q 4 (n Al) Si Speciation. Angewandte Chemie, 2017, 129, 13551-13556.	2.0	27
40	Mesoporous architectures with highly crystallized frameworks. Journal of Materials Chemistry A, 2014, 2, 12096-12103.	10.3	26
41	Organic structure-directing agent-free synthesis of NES-type zeolites using EU-1 seed crystals. Microporous and Mesoporous Materials, 2015, 215, 191-198.	4.4	22
42	Multi-objectivede novomolecular design of organic structure-directing agents for zeolites using nature-inspired ant colony optimization. Chemical Science, 2020, 11, 8214-8223.	7.4	22
43	Phenyl-Modified Carbon Nitride Quantum Nanoflakes for Ultra-Highly Selective Sensing of Formic Acid: A Combined Experimental by QCM and Density Functional Theory Study. ACS Applied Materials & Interfaces, 2021, 13, 48595-48610.	8.0	22
44	Template- and etching-free fabrication of two-dimensional hollow bimetallic metal-organic framework hexagonal nanoplates for ammonia sensing. Chemical Engineering Journal, 2022, 450, 138065.	12.7	22
45	Ultrafast synthesis of AFX-Type zeolite with enhanced activity in the selective catalytic reduction of NOx and hydrothermal stability. RSC Advances, 2019, 9, 16790-16796.	3.6	19
46	Surfactant-free synthesis of hollow mesoporous organosilica nanoparticles with controllable particle sizes and diversified organic moieties. RSC Advances, 2016, 6, 90435-90445.	3.6	18
47	Organic-free synthesis of zincoaluminosilicate zeolites from homogeneous gels prepared by a co-precipitation method. Dalton Transactions, 2017, 46, 10837-10846.	3.3	16
48	Interrogating the Carbon and Oxygen K-Edge NEXAFS of a CO₂-Dosed Hyperbranched Aminosilica. Journal of Physical Chemistry Letters, 2015, 6, 148-152.	4.6	15
49	Synthesis of New Microporous Zincosilicates with CHA Zeolite Topology as Efficient Platforms for Ionâ€Exchange of Divalent Cations. Chemistry - A European Journal, 2018, 24, 808-812.	3.3	15
50	A general method to synthesize a family of mesoporous silica nanoparticles less than 100Ânm and their applications in anti-reflective/fogging coating. Journal of Materials Science, 2016, 51, 6192-6206.	3.7	14
51	Resolving the Framework Position of Organic Structure-Directing Agents in Hierarchical Zeolites via Polarized Stimulated Raman Scattering. Journal of Physical Chemistry Letters, 2018, 9, 1778-1782.	4.6	14
52	Directing Aluminum Atoms into Energetically Favorable Tetrahedral Sites in a Zeolite Framework by Using Organic Structureâ€Directing Agents. Angewandte Chemie, 2018, 130, 3804-3808.	2.0	14
53	Insights into the ion-exchange properties of Zn(<scp>ii</scp>)-incorporated MOR zeolites for the capture of multivalent cations. Physical Chemistry Chemical Physics, 2019, 21, 4015-4021.	2.8	14
54	Azobenzeneâ€“siloxane hybrids with lamellar structures from bridge-type alkoxysilyl precursors. RSC Advances, 2014, 4, 25319-25325.	3.6	13

#	Article	IF	Citations
55	Crystallization of a Novel Germanosilicate ECNUâ€16 Provides Insights into the Spaceâ€Filling Effect on Zeolite Crystal Symmetry. Chemistry - A European Journal, 2018, 24, 9247-9253.	3.3	11
56	Increasing the ion-exchange capacity of MFI zeolites by introducing Zn to aluminosilicate frameworks. Dalton Transactions, 2018, 47, 9546-9553.	3.3	7
57	Crucial Factors for Seed-Directed Synthesis of CON-type Aluminoborosilicate Zeolites Using Tetraethylammonium. Crystal Growth and Design, 2019, 19, 5283-5291.	3.0	6
58	No more trial and error for zeolites. Science, 2021, 374, 257-258.	12.6	6
59	Bridging the Gap between Structurally Distinct 2D Lamellar Zeolitic Precursors through a 3D Germanosilicate Intermediate. Angewandte Chemie - International Edition, 2019, 58, 14529-14533.	13.8	5
60	Optimized ultrafast flow synthesis of CON-type zeolite and improvement of its catalytic properties. Reaction Chemistry and Engineering, 2020, 5, 2260-2266.	3.7	5
61	Two-Stage Crystallization of Meso- and Macroporous MFI and MEL Zeolites Using Tributylamine-Derived Diquaternary Ammonium Cations as Organic Structure-Directing Agents. Bulletin of the Chemical Society of Japan, 2017, 90, 586-594.	3.2	4
62	Rational Manipulation of Stacking Arrangements in Threeâ€Dimensional Zeolites Built from Twoâ€Dimensional Zeolitic Nanosheets. Angewandte Chemie - International Edition, 2020, 59, 19934-19939.	13.8	4
63	Highly nanoporous silicas with pore apertures near the boundary between micro- and mesopores through an orthogonal self-assembly approach. Chemical Communications, 2015, 51, 10718-10721.	4.1	3
64	Bridging the Gap between Structurally Distinct 2D Lamellar Zeolitic Precursors through a 3D Germanosilicate Intermediate. Angewandte Chemie, 2019, 131, 14671-14675.	2.0	2
65	Hierarchically Porous ZSM-5 Synthesized by Nonionic- and Cationic-Templating Routes and Their Catalytic Activity in Liquid-Phase Esterification. ITB Journal of Science, 2011, 43, 59-72.	0.1	1
66	Synthesis of (Silico)aluminophosphate Molecular Sieves Using an Alkanolamine as a Novel Organic Structure-directing Agent. Chemistry Letters, 2015, 44, 1300-1302.	1.3	1
67	Synthesis of Microporous Zincosilicate *BEA Molecular Sieves from Zincosilicate Gels Co-precipitated in the Presence of an Organic Structure-directing Agent. Chemistry Letters, 2018, 47, 897-900.	1.3	1
68	RÃ¼cktitelbild: Organicâ€Free Synthesis of a Highly Siliceous Faujasite Zeolite with Spatially Biased Q⁴(nAl) Si Speciation (Angew. Chem. 43/2017). Angewandte Chemie, 2017, 129, 13718-13718.	2.0	0
69	Innentitelbild: Directing Aluminum Atoms into Energetically Favorable Tetrahedral Sites in a Zeolite Framework by Using Organic Structureâ€Directing Agents (Angew. Chem. 14/2018). Angewandte Chemie, 2018, 130, 3582-3582.	2.0	0
70	Rational Manipulation of Stacking Arrangements in Threeâ€Dimensional Zeolites Built from Twoâ€Dimensional Zeolitic Nanosheets. Angewandte Chemie, 2020, 132, 20106-20111.	2.0	0