Anthony Shiaw-Tseh Chiang

List of Publications by Year
in descending order

87 papers	2,586 citations	172457 29 h-index	206112 48 g-index
88 all docs	88 docs citations	88 times ranked	2652 citing authors

#	Article	IF	Citations
1	Replication of Mesoporous Aluminosilicate Molecular Sieves (RMMs) with Zeolite Framework from Mesoporous Carbons (CMKs). Chemistry of Materials, 2004, 16, 3168-3175.	6.7	175
2	The initiation and growth of filamentous carbon from $alpha;-iron in H2, CH4, H2O, CO2, and CO gas mixtures. Journal of Catalysis, 1984, 85, 224-236.	6.2	127
3	Synthesis of Zeolitic Mesoporous Materials by Dry Gel Conversion under Controlled Humidity. Journal of Physical Chemistry B, 2003, 107, 7006-7014.	2.6	104
4	Formation of Silicalite-1 Hollow Spheres by the Self-assembly of Nanocrystals. Chemistry of Materials, 2003, 15, 787-792.	6.7	97
5	The determination of zeolite crystal diffusivity by gas chromatographyâ€"II. Experimental. Chemical Engineering Science, 1984, 39, 1461-1468.	3.8	91
6	Rapid Synthesis of MFI Zeolite Nanocrystals. Journal of Physical Chemistry B, 2005, 109, 18804-18814.	2.6	91
7	Membranes and films of zeolite and zeolite-like materials. Journal of Physics and Chemistry of Solids, 2001, 62, 1899-1910.	4.0	86
8	Title is missing!. Topics in Catalysis, 2002, 20, 97-105.	2.8	82
9	Heterogenization of Organometallic Molybdenum Complexes with Siloxane Functional Groups and their Catalytic Application. Advanced Synthesis and Catalysis, 2005, 347, 473-483.	4.3	74
10	Scratch-resistant zeolite anti-reflective coating on glass for solar applications. Solar Energy Materials and Solar Cells, 2011, 95, 1694-1700.	6.2	70
11	Heterogenization of chiral molybdenum(VI) dioxo complexes on mesoporous materials and their application in catalysis. Applied Catalysis A: General, 2005, 281, 267-273.	4.3	68
12	ZrO2/epoxy nanocomposite for LED encapsulation. Materials Chemistry and Physics, 2012, 136, 868-876.	4.0	63
13	Dye adsorption in ZIF-8: The importance of external surface area. Microporous and Mesoporous Materials, 2019, 277, 149-153.	4.4	62
14	Adsorption of aromatic compounds in large MFI zeolite crystals. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 3445.	1.7	61
15	A simple one-pot route to mesoporous silicas SBA-15 functionalized with exceptionally high loadings of pendant carboxylic acid groups. Chemical Communications, 2009, , 5018.	4.1	60
16	Adsorption of Aromatics in Zeolites ZSM-5:â€‰ A Thermodynamicâ^'Calorimetric Study Based on the Model of Adsorption on Heterogeneous Adsorption Sites. Langmuir, 1997, 13, 1095-1103.	3.5	53
17	The synthesis of colloidal zeolite TPAâ€“silicalite-1. Microporous and Mesoporous Materials, 1998, 26, 89-99.	4.4	53
18	Mesoporous silica with short-range MFI structure. Microporous and Mesoporous Materials, 2003, 60, 213-224.	4.4	52

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19	Grafting of a tetrahydro-salen copper(II) complex on surface modified mesoporous materials and its catalytic behaviour. Catalysis Communications, 2006, 7, 302-307.	3.3	52
20	Adsorption and diffusion of aromatics in AlPO4-5. Zeolites, 1991, 11, 380-386.	0.5	46
21	Synthesis of silicalite nanocrystals via the steaming of surfactant protected precursors. Microporous and Mesoporous Materials, 2002, 54, 293-303.	4.4	45
22	A simple mechano-thermal coating process for improved lithium battery cathode materials. Journal of Power Sources, 2004, 132, 172-180.	7.8	44
23	The determination of zeolite crystal diffusivity by gas chromatographyâ€"I. Theoretical. Chemical Engineering Science, 1984, 39, 1451-1459.	3.8	43
24	Direct synthesis of vinyl-functionalized cubic mesoporous silica SBA-1. Microporous and Mesoporous Materials, 2006, 88, 319-328.	4.4	40
25	Continuous chromatographic process based on SMB technology. AICHE Journal, 1998, 44, 1930-1932.	3.6	35
26	Preparation and Evaluation of a Zirconia/Oligosiloxane Nanocomposite for LED Encapsulation. ACS Applied Materials & Interfaces, 2016, 8, 9986-9993.	8.0	35
27	Direct synthesis, characterization and solid-state NMR spectroscopy of large-pore vinyl-functionalized cubic mesoporous silica FDU-12. Microporous and Mesoporous Materials, 2006, 97, 9-20.	4.4	32
28	Grafting of Î·5-Cp(COOMe)MoCl(CO)3 on the surface of mesoporous MCM-41 and MCM-48 materials. Journal of Organometallic Chemistry, 2006, 691, 1007-1011.	1.8	31
29	Lattice model for the adsorption of benzene in silicalite I. AICHE Journal, 1992, 38, 128-135.	3.6	30
30	Rapid temperature-assisted sonochemical synthesis of mesoporous silica SBA-15. Microporous and Mesoporous Materials, 2010, 131, 385-392.	4.4	29
31	Hansen solubility parameter analysis on the dispersion of zirconia nanocrystals. Journal of Colloid and Interface Science, 2013, 407, 140-147.	9.4	29
32	Supported zeolite membrane by vapor-phase regrowth. AICHE Journal, 2000, 46, 616-625.	3.6	28
33	Facile synthesis of stable cubic mesoporous silica SBA-1 over a broad temperature range with the aid of d-fructose. Chemical Communications, 2005, , 1058.	4.1	28
34	Natural zwitterionic organosulfurs as surface ligands for antifouling and responsive properties. Biointerphases, 2014, 9, 029010.	1.6	25
35	Anti-corrosion zeolite film by the dry-gel-conversion process. Thin Solid Films, 2013, 529, 327-332.	1.8	24
36	Complete separation conditions for a local equilibrium TCC adsorption unit. AICHE Journal, 1998, 44, 332-340.	3.6	23

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37	Heterogenization of [Cu(NCCH3)6][B(C6F5)4]2 and its application in catalytic olefin aziridination. Applied Catalysis A: General, 2005, 294, 161-167.	4.3	23
38	Mesoporous silica powders and filmsâ€"Pore size characterization by krypton adsorption. Microporous and Mesoporous Materials, 2006, 91, 244-253.	4.4	23
39	The fractal and percolation analysis of a polymeric Al2O3 gel. Chemical Physics Letters, 1997, 278, 83-90.	2.6	22
40	Arithmetic of PSA process scheduling. AICHE Journal, 1988, 34, 1910-1912.	3.6	21
41	An analytical solution to equilibrium PSA cycles. Chemical Engineering Science, 1996, 51, 207-216.	3.8	20
42	Equilibrium theory for simulated moving bed adsorption processes. AICHE Journal, 1998, 44, 2431-2441.	3.6	20
43	Preformed Boehmite Nanoparticles As Coating Materials for Long-Cycling LiCoO2. Journal of Applied Electrochemistry, 2004, 34, 715-722.	2.9	20
44	Carboxylic Acid-Directed Clustering and Dispersion of ZrO₂ Nanoparticles in Organic Solvents: A Study by Small-Angle X-ray/Neutron Scattering and NMR. Journal of Physical Chemistry C, 2011, 115, 11941-11950.	3.1	20
45	Transparent Zeolite Films with Regular Surface Patterns. Advanced Materials, 2006, 18, 185-189.	21.0	18
46	Heterogeneous Three-Site Lattice Model for Adsorption of Aromatics in ZSM-5 Zeolites:Â Temperature Dependence of Adsorption Isothermsâ€. Langmuir, 1999, 15, 6091-6102.	3.5	17
47	Preparation of TiO2B2O3 coating by the sol-gel method. Journal of Non-Crystalline Solids, 1992, 144, 53-62.	3.1	16
48	Direct Synthesis and Solid-State NMR Characterization of Cubic Mesoporous Silica SBA-1 Functionalized with Phenyl Groups. Chemistry of Materials, 2008, 20, 2412-2422.	6.7	16
49	Synthesis and characterization of cubic periodic mesoporous organosilicas with a high loading of disulfide groups. New Journal of Chemistry, 2011, 35, 489.	2.8	16
50	A solâ€"gel titaniumâ€"silicon oxide/organic hybrid dielectric for low-voltage organic thin film transistors. Journal of Materials Chemistry C, 2015, 3, 968-972.	5.5	15
51	An aqueous process for the production of fully dispersible t-ZrO2 nanocrystals. Journal of the Taiwan Institute of Chemical Engineers, 2009, 40, 296-301.	5.3	14
52	Growth of MFI zeolite film as corrosion protection layer of aluminum alloy. Microporous and Mesoporous Materials, 2015, 217, 71-80.	4.4	14
53	Modeling the transient behavior of continuous emulsion polymer reactors. AICHE Journal, 1979, 25, 552-554.	3.6	13
54	Zeolite anti-reflection coating for transparent substrates. Studies in Surface Science and Catalysis, 2007, 170, 1583-1589.	1.5	13

#	Article	IF	Citations
55	Grafting of cyclopentadienyl ruthenium complexes on aminosilane linker modified mesoporous SBA-15 silicates. Dalton Transactions, 2007, , 320-326.	3.3	12
56	Increasing the Productivity of Colloidal Zeolite Beta by Posthydrolysis Evaporation. Industrial & Engineering Chemistry Research, 2010, 49, 12191-12196.	3.7	12
57	Experimental study on a four-bed PSA air separation process. AICHE Journal, 1994, 40, 1976-1982.	3.6	11
58	Preparation of Zirconia Nanocrystals from Concentrated Zirconium Aqueous Solutions. Journal of Nanoparticle Research, 2001, 3, 119-126.	1.9	11
59	Mechano-thermal nanoparticulate coatings for enhancing the cycle stability of LiCoO2. Journal of Physics and Chemistry of Solids, 2006, 67, 2337-2344.	4.0	11
60	Facile synthesis and morphology control of highly ordered cubic mesoporous silica SBA-1 using short chain dodecyltrimethylammonium chloride as the structure-directing agent. Microporous and Mesoporous Materials, 2008, 116, 323-329.	4.4	11
61	Flexible and transparent moisture getter film containing zeolite. Adsorption, 2010, 16, 69-74.	3.0	11
62	Radial flow rapid pressure swing adsorption. Adsorption, 1995, 1, 153-164.	3.0	10
63	Aluminosilicate MCM-48 mesostructures assembled from dried zeolite precursors and Gemini surfactant. Microporous and Mesoporous Materials, 2005, 86, 256-267.	4.4	10
64	Fabrication of Hierarchical Zeolitic Material from Zeolite Nanoprecursors and Macromolecular Template. Chemistry Letters, 2005, 34, 982-983.	1.3	9
65	Low-voltage-driven organic phototransistors based on a solution-processed organic semiconductor channel and high k hybrid gate dielectric. Journal of Materials Chemistry C, 2017, 5, 9838-9842.	5.5	9
66	Fully Solutionâ€Processed Lowâ€Voltage Driven Transparent Oxide Thin Film Transistors. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800192.	1.8	8
67	A complementary pressure swing adsorption process configuration for air separation. Separation and Purification Technology, 1994, 4, 93-103.	0.7	7
68	THE AGE DISTRIBUTION FROM CONTINUOUS SELF-SEEDED PARTICULATE SYSTEMS. Chemical Engineering Communications, 1980, 4, 737-747.	2.6	5
69	Vapor-liquid equilibrium measurements and data analysis of isoprene and n-pentane mixture. Fluid Phase Equilibria, 1994, 102, 257-273.	2.5	5
70	Experiment and simulation of the recirculation flow in a CVD reactor for monolithic materials. Experimental Thermal and Fluid Science, 1996, 12, 45-51.	2.7	5
71	Simulation of breakthrough curves by a moving zone collocation method. Computers and Chemical Engineering, 1989, 13, 281-290.	3.8	4
72	Some Observations on the Synthesis of Colloidal Beta Zeolite from a Clear Precursor Sol. Science of Advanced Materials, 2011, 3, 1011-1018.	0.7	4

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73	Stability of continuous emulsion polymer reactors. Journal of Applied Polymer Science, 1979, 24, 1935-1955.	2.6	3
74	Oxygen enrichment by pressure swing adsorption. Industrial & Engineering Chemistry Research, 1988, 27, 81-85.	3.7	3
75	Some Observations on the Synthesis of Fully-Dispersible Nanocrystalline Zeolite ZSM-5. Journal of Nanoscience and Nanotechnology, 2014, 14, 7351-7359.	0.9	3
76	The Production of Dispersible Zirconia Nanocrystals: A Recent Patent Review. Recent Innovations in Chemical Engineering, 2015, 7, 76-95.	0.4	3
77	Adsorption of Multicomponent Aromatics on Y Zeolite and Silicalite. Studies in Surface Science and Catalysis, 1993, , 81-88.	1.5	2
78	Theory of adsorbed solutions: Analysis of one-dimensional systems. AICHE Journal, 1996, 42, 2155-2161.	3.6	2
79	Fabrication of Aluminum Nitride Thermal Substrate and Low-Temperature Die-Bonding Process for High Power LED. Journal of Electronic Materials, 2019, 48, 194-200.	2.2	2
80	Stability of continuous emulsion polymer reactors. Journal of Applied Polymer Science, 1979, 24, 1925-1934.	2.6	1
81	The age distribution from continuous biochemical reactors with cell reproduction by mitosis. Journal of Theoretical Biology, 1981, 89, 321-333.	1.7	1
82	Separation of Diethylbenzene Isomers on Silicalite in the Presence of High Pressure Carbon Dioxide and Propane. Adsorption Science and Technology, 1991, 8, 226-234.	3.2	1
83	Heterogenization of (Î·5-C5Me5)Ru(PPh3)2Cl and Its Catalytic Application for Cyclopropanation of Styrene Using Ethyl Diazoacetate. Synthesis, 2006, 2006, 1682-1688.	2.3	1
84	Author's reply to comments by J. Caro et al.. Chemical Engineering Science, 1985, 40, 2171.	3.8	0
85	Multiple coating of titanium-boron oxide sol-gel on glass. Materials Research Bulletin, 1992, 27, 715-722.	5.2	0
86	CONFINED COAXIAL JET FLOWS INTO A COLD MODEL OF CVD CHAMBER. Chemical Engineering Communications, 1995, 135, 213-227.	2.6	0
87	Zirconia/Acrylate Nanocomposite Hard-Coat. Recent Innovations in Chemical Engineering, 2019, 11, 160-171.	0.4	0