Manabu Miyamoto

List of Publications by Year
in descending order

73 papers	1,864 citations	304743 22 h-index	276875 41 g-index
73 all docs	73 docs citations	73 times ranked	2166 citing authors

#	Article	IF	Citations
1	Adsorption and Diffusion Phenomena in Crystal Size Engineered ZIF-8 MOF. Journal of Physical Chemistry C, 2015, 119, 28430-28439.	3.1	204
2	Selective formation of para-xylene over H-ZSM-5 coated with polycrystalline silicalite crystals. Journal of Catalysis, 2006, 243, 389-394.	6.2	132
3	Single Crystals of ZSM-5/Silicalite Composites. Advanced Materials, 2005, 17, 1985-1988.	21.0	116
4	Pure silica CHA type zeolite for CO2 separation using pressure swing adsorption at high pressure. Journal of Materials Chemistry, 2012, 22, 20186.	6.7	100
5	Catalytic activities and structures of silicalite-1/H-ZSM-5 zeolite composites. Microporous and Mesoporous Materials, 2008, 115, 106-112.	4.4	91
6	Light Olefins Synthesis from Methanol and Dimethylether over SAPO-34 Nanocrystals. Catalysis Letters, 2010, 140, 22-26.	2.6	90
7	Zeolite membrane on catalyst particles for selective formation of p-xylene in the disproportionation of toluene. Chemical Communications, 2001, , 1746-1747.	4.1	58
8	In situ solvothermal growth of highly oriented Zr-based metal organic framework UiO-66 film with monocrystalline layer. CrystEngComm, 2015, 17, 3422-3425.	2.6	55
9	An Organoselective Zirconiumâ€Based Metalâ€“Organicâ€Framework UiOâ€66 Membrane for Pervaporation. European Journal of Inorganic Chemistry, 2017, 2017, 2094-2099.	2.0	53
10	Surface modification of soft-templated ordered mesoporous carbon for electrochemical supercapacitors. Microporous and Mesoporous Materials, 2015, 217, 141-149.	4.4	50
11	Effect of pore size, aminosilane density and aminosilane molecular length on CO 2 adsorption performance in aminosilane modified mesoporous silica. Microporous and Mesoporous Materials, 2017, 246, 158-165.	4.4	43
12	Morphology Control of Silicalite/HZSM-5 Composite Catalysts for the Formation of Para-Xylene. Catalysis Letters, 2009, 127, 233-238.	2.6	42
13	para-Selectivity of silicalite-1 coated MFI type galloaluminosilicate in aromatization of light alkanes. Journal of Porous Materials, 2015, 22, 769-778.	2.6	38
14	High-performance silicalite-1 membranes on porous tubular silica supports for separation of ethanol/water mixtures. Separation and Purification Technology, 2017, 187, 343-354.	7.9	38
15	Synthesis of MFI type ferrisilicate zeolite (Fe-MFI) nanocrystals by a dry gel conversion (DGC) method and their application to methanol to olefin (MTO) reactions. New Journal of Chemistry, 2017, 41, 2235-2240.	2.8	35
16	Hydrogen-permeable membranes composed of zeolite nano-blocks. Journal of Membrane Science, 2007, 306, 349-354.	8.2	34
17	Separator Decoration with Cobalt/Nitrogen Codoped Carbon for Highly Efficient Polysulfide Confinement in Lithiumâ€“Sulfur Batteries. ChemSusChem, 2017, 10, 3557-3564.	6.8	33
18	Effect of basicity of metal doped ZrO2 supports on hydrogen production reactions. International Journal of Hydrogen Energy, 2018, 43, 730-738.	7.1	33

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19	Verified synthesis of pure silica CHA-type zeolite in fluoride media. Microporous and Mesoporous Materials, 2015, 206, 67-74.	4.4	32
20	Solvent/OSDA-free interzeolite transformation of FAU into CHA zeolite with quantitative yield. Microporous and Mesoporous Materials, 2019, 278, 219-224.	4.4	31
21	High Water Tolerance of a Coreâ€“Shellâ€Structured Zeolite for CO₂ Adsorptive Separation under Wet Conditions. ChemSusChem, 2018, 11, 1756-1760.	6.8	26
22	Improving hydrothermal stability of acid sites in MFI type aluminosilicate zeolite (ZSM-5) by coating MFI type all silica zeolite (silicalite-1) shell layer. Microporous and Mesoporous Materials, 2019, 288, 109523.	4.4	25
23	Silicalite-1 coating on Pt/TiO2 particles by a two-step hydrothermal synthesis. Microporous and Mesoporous Materials, 2005, 83, 244-250.	4.4	23
24	Influence of the pre-reformer in steam reforming of dodecane using a Pd alloy membrane reactor. International Journal of Hydrogen Energy, 2011, 36, 7771-7775.	7.1	23
25	A simple secondary growth method for the preparation of silicalite-1 membrane on a tubular silica support via gel-free steam-assisted conversion. Journal of Membrane Science, 2017, 542, 150-158.	8.2	23
26	Dehydrogenation of propane over high silica *BEA type gallosilicate (Ga-Beta). Catalysis Science and Technology, 2019, 9, 6234-6239.	4.1	23
27	Effect of core-shell structuring of chabazite zeolite with a siliceous zeolite thin layer on the separation of acetone-butanol-ethanol vapor in humid vapor conditions. Chemical Engineering Journal, 2019, 363, 292-299.	12.7	22
28	Effect of deposition seed crystal amount on the Î±-Al2O3 support and separation performance of silicalite-1 membranes for acetic acid/water mixtures. Separation and Purification Technology, 2017, 174, 57-65.	7.9	21
29	Influence of metal cation doping on Ru/CeO2/Al2O3 catalyst for steam reforming of desulfurized kerosene. International Journal of Hydrogen Energy, 2015, 40, 2657-2662.	7.1	20
30	Fabrication of high-performance silicalite-1 membrane by a novel seeding method using zeolite-dispersed polymer film. Microporous and Mesoporous Materials, 2018, 261, 58-62.	4.4	20
31	Fabrication of Pt nanoparticles encapsulated in single crystal like silicalite-1 zeolite as a catalyst for shape-selective hydrogenation of C6 olefins. Microporous and Mesoporous Materials, 2018, 271, 156-159.	4.4	20
32	Hydrogen separation from mixed gas (H2, N2) using Pd/Al2O3 membrane under forced unsteady state operations. International Journal of Hydrogen Energy, 2020, 45, 9821-9835.	7.1	19
33	Synthesis of high silica *BEA type ferrisilicate (Fe-Beta) by dry gel conversion method using dealuminated zeolites and its catalytic performance on acetone to olefins (ATO) reaction. Microporous and Mesoporous Materials, 2019, 273, 189-195.	4.4	18
34	Effects of seed crystal type on the growth and microstructures of silicalite-1 membranes on tubular silica supports via gel-free steam-assisted conversion. Microporous and Mesoporous Materials, 2019, 289, 109645.	4.4	18
35	Aminosilanes grafted nanocrystalline cellulose from oil palm empty fruit bunch aerogel for carbon dioxide capture. Journal of Materials Research and Technology, 2021, 13, 2287-2296.	5.8	18
36	Development of AEI type germanoaluminophosphate (GeAPO-18) with ultra-weak acid sites and its catalytic properties for the methanol to olefin (MTO) reaction. Catalysis Science and Technology, 2017, 7, 4622-4628.	4.1	17

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37	Effect of Si/Al ratio and amount of deposited MFI-type seed crystals on the separation performance of silicalite-1 membranes for ethanol/water mixtures in the presence of succinic acid. Microporous and Mesoporous Materials, 2018, 267, 1-8.	4.4	17
38	Nanoporous ZSM-5 Crystals Coated with Silicalite-1 for Enhanced p-Xylene Separation. ACS Applied Nano Materials, 2019, 2, 2642-2650.	5.0	16
39	Effects of Silica-Particle Coating on a Silica Support for the Fabrication of High-Performance Silicalite-1 Membranes by Gel-Free Steam-Assisted Conversion. Membranes, 2019, 9, 46.	3.0	14
40	Synthesis of high silica SSZ-13 in fluoride-free media by dry gel conversion method. Microporous and Mesoporous Materials, 2019, 278, 322-326.	4.4	13
41	CO2 methanation combined with NH3 decomposition by in situ H2 separation using a Pd membrane reactor. International Journal of Hydrogen Energy, 2014, 39, 10154-10160.	7.1	12
42	Organosilica Membrane with Ionic Liquid Properties for Separation of Toluene/H2 Mixture. Materials, 2017, 10, 901.	2.9	12
43	Promoting dry reforming of methane via bifunctional NiO/dolomite catalysts for production of hydrogen-rich syngas. RSC Advances, 2021, 11, 6667-6681.	3.6	11
44	Stable dehydroaromatization of ethane over Zn ion exchanged MFI type galloaluminosilicate zeolite. Fuel, 2021, 305, 121487.	6.4	11
45	Effect of adhesion of metals on deterioration of Pd and Pd alloy membranes. Journal of Alloys and Compounds, 2013, 577, 445-450.	5.5	10
46	Hydrophobic *BEA-Type Zeolite Membranes on Tubular Silica Supports for Alcohol/Water Separation by Pervaporation. Membranes, 2019, 9, 86.	3.0	10
47	Solvent/OSDA-free transformation of unseeded aluminosilicate into various zeolites via mechanochemical and vapor treatments. Microporous and Mesoporous Materials, 2019, 273, 273-275.	4.4	9
48	Fabrication of pure-silica *BEA-type zeolite membranes on tubular silica supports coated with dilute synthesis gel via steam-assisted conversion. Separation and Purification Technology, 2020, 247, 116934.	7.9	9
49	Gas permeation properties of amine loaded mesoporous silica membranes for CO₂separation. Desalination and Water Treatment, 2011, 34, 266-271.	1.0	8
50	Measurement of extra-cellular fluid change in salivary gland using an impedance method.. The Japanese Journal of Physiology, 1986, 36, 565-583.	0.9	7
51	Effect of Crystal Size on Acetone Conversion over SAPO-34 Crystals. Catalysis Letters, 2012, 142, 464-468.	2.6	6
52	Selective Formation of p-xylene over single crystal-like zeolite composite. Studies in Surface Science and Catalysis, 2006, 162, 275-282.	1.5	5
53	Preparation of Pore-fill-type Palladiumâ€“Porous Alumina Composite Membrane for Hydrogen Separation. Chemistry Letters, 2011, 40, 19-21.	1.3	5
54	Highly permeable mesoporous silica membranes synthesized by vapor infiltration of tetraethoxysilane into non-ionic alkyl poly(oxyethylene) surfactant films. Journal of Membrane Science, 2008, 325, 698-703.	8.2	4

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55	Study of Gas Adsorption Properties of Amidoamine-Loaded Mesoporous Silica for Examing Its Use in CO₂ Separation. Journal of Chemical Engineering of Japan, 2012, 45, 395-400.	0.6	4
56	Synthesis and crystal structures of a novel layered silicate SSA-1 and its microporous derivatives by topotactic transformation. Dalton Transactions, 2016, 45, 16335-16344.	3.3	4
57	Preparation of novel hydrophilic microporous material PML-1 membrane by topotactic transformation of layered silicate SSA-1 and applicability to the dehydration of aqueous acetic acid. Microporous and Mesoporous Materials, 2019, 285, 241-246.	4.4	4
58	Hydrogen separation membrane encapsulating Pd nanoparticles in a silica layer. Desalination and Water Treatment, 2010, 17, 233-241.	1.0	3
59	Life and Mental Health of Medical Students after the Great East Japan Earthquake. Tohoku Journal of Experimental Medicine, 2015, 235, 311-325.	1.2	3
60	Solvent- and OSDA-Free Synthesis of ZSM-5 Assisted by Mechanochemical and Vapor Treatments. ChemistrySelect, 2017, 2, 7651-7653.	1.5	3
61	Continuous measurements of tissue impedance during secretion in dog submandibular gland.. The Japanese Journal of Physiology, 1988, 38, 699-712.	0.9	3
62	Selective Formation of <i>p</i>-Xylene in Aromatization of Propane over Silicalite-1-coated GaAlMFI. Journal of the Japan Petroleum Institute, 2011, 54, 275-276.	0.6	2
63	Effects of Catalysts and Membranes on the Performance of Membrane Reactors in Steam Reforming of Ethanol at Moderate Temperature. Processes, 2016, 4, 18.	2.8	2
64	Effect of Co-products on Pd Membrane Performance in Membrane Reforming of Desulfurized Kerosene. Journal of Chemical Engineering of Japan, 2017, 50, 15-20.	0.6	2
65	Dynamic operation of water gas shift reaction over Fe₂O₃/Cr₂O₃/CuO catalyst in Pd/Al₂O₃ membrane reactor. IOP Conference Series: Earth and Environmental Science, 2018, 105, 012020.	0.3	2
66	Observation of electro-kinetic phenomena by imposing oscillating pressure and voltage gradients across some epithelial membranes.. The Japanese Journal of Physiology, 1986, 36, 397-402.	0.9	2
67	Effect of Silicalite-1 Coating on Product Selectivity Over MFI Type Galloaluminosilicate in Aromatization of Light Alkenes. Advanced Porous Materials, 2016, 4, 102-109.	0.3	2
68	Design of Zr- and Al-Doped *BEA-Type Zeolite to Boost LDPE Cracking. ACS Omega, 2022, 7, 12971-12977.	3.5	2
69	Preparation of thin and dense electroless-plated Pd membrane by controlling Pd deposition behavior. Transactions of the Materials Research Society of Japan, 2011, 36, 229-232.	0.2	1
70	Decrease of extracellular fluid in dog submandibular glands during secretion under arterial clamping conditions.. The Japanese Journal of Physiology, 1985, 35, 1085-1090.	0.9	1
71	A Novel Strategy to Enhance Acid Strength of Zeolites by Incorporating Ge into Zeolite Framework. ChemistrySelect, 2022, 7, .	1.5	1
72	Single Crystals of ZSM-5/Silicalite Composites.. ChemInform, 2005, 36, no.	0.0	0

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73	Integrated Reaction and Separation Process Using Metallic Membrane. Membrane, 2021, 46, 131-137.	0.0	0