Taka-aki Hanaoka

List of Publications by Year
in descending order

93 papers	2,768 citations	126907 33 h-index	206112 48 g-index
95 all docs	95 docs citations	95 times ranked	2545 citing authors

#	Article	IF	Citations
1	High-performance bioelectrocatalysts created by immobilization of an enzyme into carbon-coated composite membranes with nano-tailored structures. Journal of Materials Chemistry A, 2017, 5, 20244-20251.	10.3	15
2	High-Performance Bio-Sensor with Enzymes Immobilized on Mesoporous Membranes: Nanosized Pores Just Corresponding to the Size of an Enzyme Improve the Stability of the Sensor Drastically. Advanced Porous Materials, 2016, 4, 157-165.	0.3	6
3	Effect of steam during catalytic cracking of n-hexane using P-ZSM-5 catalyst. Catalysis Communications, 2015, 69, 20-24.	3.3	24
4	Structural changes in â€“LIT zeolites related to cation-exchange treatments under aqueous and non-aqueous conditions. Microporous and Mesoporous Materials, 2014, 190, 92-98.	4.4	3
5	P-ZSM-5 Pretreated by High-Temperature Calcination as Durable Catalysts for Steam Cracking of n-Hexane. Catalysis Letters, 2014, 144, 44-49.	2.6	20
6	Preparation of Copper Nitride (Cu₃N) Nanoparticles in Long-Chain Alcohols at 130â€“200 Â°C and Nitridation Mechanism. Inorganic Chemistry, 2014, 53, 710-715.	4.0	36
7	Electrochemical enzymatic biosensor with long-term stability using hybrid mesoporous membrane. Analyst, The, 2014, 139, 4654-4660.	3.5	25
8	Deactivation of ZSM-5 zeolite during catalytic steam cracking of n-hexane. Fuel Processing Technology, 2014, 126, 343-349.	7.2	49
9	A novel, disposable, screen-printed amperometric biosensor for ketone 3-Î²-hydroxybutyrate fabricated using a 3-Î²-hydroxybutyrate dehydrogenaseâ€“mesoporous silica conjugate. Analytical and Bioanalytical Chemistry, 2013, 405, 297-305.	3.7	18
10	Microporous Organic-inorganic Nanocomposites as the Receptor in the QCM Sensing of Toluene Vapors. Analytical Sciences, 2013, 29, 283-289.	1.6	12
11	An Electrochemical Biosensor for the Determination of Lactic Acid in Expiration. Procedia Chemistry, 2012, 6, 46-51.	0.7	23
12	An enzyme-encapsulated microreactor for efficient theanine synthesis. Chemical Communications, 2012, 48, 7058.	4.1	17
13	Amperometric l-lactate biosensor based on screen-printed carbon electrode containing cobalt phthalocyanine, coated with lactate oxidase-mesoporous silica conjugate layer. Analytica Chimica Acta, 2012, 714, 114-120.	5.4	55
14	Preparation of mesoporous silicas using food grade emulsifiers and its application for enzyme supports. Journal of Non-Crystalline Solids, 2012, 358, 1673-1680.	3.1	4
15	Production of l-theanine using glutaminase encapsulated in carbon-coated mesoporous silica with high pH stability. Biochemical Engineering Journal, 2012, 68, 207-214.	3.6	30
16	Enzyme encapsulation using highly ordered mesoporous silica monoliths. Materials Letters, 2012, 89, 184-187.	2.6	18
17	Preparation and Properties of a Hollow Fiber Consisting Mainly of Natural Mordenite. Chemistry Letters, 2011, 40, 52-53.	1.3	0
18	Synthesis of l-theanine using enzyme/mesoporous silica conjugates under high pH conditions. Materials Letters, 2011, 65, 67-69.	2.6	15

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19	Immobilization of enzyme-encapsulated nanoporous material in a microreactor and reaction analysis. Chemical Engineering Journal, 2011, 167, 744-749.	12.7	46
20	Highly ordered, thermally/hydrothermally stable cubic Ia3d aluminosilica monoliths with low silica in frameworks. Microporous and Mesoporous Materials, 2011, 138, 51-62.	4.4	33
21	Amperometric detection of phenolic compounds with enzyme immobilized in mesoporous silica prepared by electrophoretic deposition. Sensors and Actuators B: Chemical, 2011, 153, 361-368.	7.8	52
22	Heat Resistant Transparent Flexible Film Obtained from Two Tetraphenylphosphonium Modified Smectites with Different Particle Size. Japanese Journal of Applied Physics, 2011, 50, 121601.	1.5	3
23	Direct visualization of hetero-enzyme co-encapsulated in mesoporous silicas. Microporous and Mesoporous Materials, 2010, 127, 61-66.	4.4	29
24	Encapsulation of fluorescent proteins in folded-sheet mesoporous materials: Effect of pore size on energy-transfer efficiency. Microporous and Mesoporous Materials, 2010, 131, 245-251.	4.4	15
25	Enhancement in thermal stability and resistance to denaturants of lipase encapsulated in mesoporous silica with alkyltrimethylammonium (CTAB). Colloids and Surfaces B: Biointerfaces, 2010, 75, 478-482.	5.0	33
26	Investigation of Si Atom Migration in the Framework of MSE-Type Zeolite YNU-2. Journal of Physical Chemistry C, 2010, 114, 19641-19648.	3.1	38
27	Detection of hetero-proteinsâ€“mesoporous silica assembly by BRET. Chemical Communications, 2010, 46, 2941.	4.1	5
28	Electrochemical biosensor for the detection of formaldehyde based on encapsulation of an enzyme, into the nanoporous-walled silica nanotube-inorganic composite membrane. , 2010, , .		0
29	On-chip encapsulation of lipase using mesoporous silica: A new route to enzyme microreactors. Materials Letters, 2009, 63, 2445-2448.	2.6	10
30	Encapsulation of catalase into nanochannels of an inorganic composite membrane. Journal of Molecular Catalysis B: Enzymatic, 2009, 57, 183-187.	1.8	30
31	Catalase encapsulated in mesoporous silica and its performance. Biochemical Engineering Journal, 2009, 44, 167-173.	3.6	34
32	Crystal Structure of Tubular Naâ^'LTA Zeolite Membrane Used for a Vapor Permeation Process: Unusual Distribution of Adsorbed Water Molecules. Industrial & Engineering Chemistry Research, 2009, 48, 10870-10876.	3.7	14
33	Optical Nanoscale Poolâ€onâ€Surface Design for Control Sensing Recognition of Multiple Cations. Advanced Functional Materials, 2008, 18, 1485-1500.	14.9	84
34	Nanosized NiO particles wrapped into uniformly mesocaged silica frameworks as effective catalysts of organic amines. Applied Catalysis A: General, 2008, 337, 121-129.	4.3	51
35	Heterogeneous catalytic activity of NiO-silica composites designated with cubic Pm3n cage nanostructures. Applied Catalysis B: Environmental, 2008, 82, 169-179.	20.2	26
36	The ethylation of biphenyl over H-mordenite: Reactivities of the intermediates in the catalysis. Journal of Molecular Catalysis A, 2008, 285, 101-110.	4.8	4

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37	Cationic surfactant templates for newly developed cubic Fd3m silica mesocage structures. Materials Letters, 2008, 62, 2950-2953.	2.6	15
38	Controlled Design of Ordered and Disordered Pore Architectures, Geometries, and Dimensions of HOM-Type Mesostructured Monoliths and Their Hydrothermal Stabilities. Journal of Physical Chemistry C, 2008, 112, 5476-5489.	3.1	55
39	The Ensemble of Hetero-Proteins in Inorganic Nanochannels. Bioconjugate Chemistry, 2008, 19, 10-14.	3.6	15
40	Adsorption of aniline onto hexagonal mesoporous silicate monoliths (HOM-2). International Journal of Environment and Pollution, 2008, 34, 97.	0.2	7
41	Direct O2 Epoxidation of Propylene by the Membrane Reactor Loaded with Agâ€“Sr Catalyst. Chemistry Letters, 2007, 36, 1170-1171.	1.3	4
42	Effective immobilization of subunit protein in mesoporous silica modified with ethanol. Biotechnology and Bioengineering, 2007, 97, 200-205.	3.3	29
43	Encapsulation of Myoglobin with a Mesoporous Silicate Results in New Capabilities. Bioconjugate Chemistry, 2006, 17, 236-240.	3.6	54
44	Synthesis of new microporous layered organicâ€“inorganic hybrid nanocomposites by alkoxysilylation of a crystalline layered silicate, ilerite. Journal of Materials Chemistry, 2006, 16, 4035-4043.	6.7	55
45	Adsorption and desorption behaviors of flavor molecules into a microporous pillared clay mineral and the application to flavor capsule composites. Applied Clay Science, 2006, 33, 99-108.	5.2	18
46	Effects of Micro Channel Size in a Pd Membrane Reactor on Dehydrogenation of Cyclohexane to Benzene in Gaseous Phase. Chemistry Letters, 2006, 35, 284-285.	1.3	9
47	Stability of highly ordered nanostructures with uniformly cylindrical mesochannels. Acta Materialia, 2006, 54, 899-908.	7.9	18
48	Structural changes of a Pd-based membrane during direct hydroxylation of benzene to phenol. Catalysis Today, 2006, 118, 57-62.	4.4	34
49	Optical Sensors Based on Nanostructured Cage Materials for the Detection of Toxic Metal Ions. Angewandte Chemie - International Edition, 2006, 45, 7202-7208.	13.8	219
50	Direct hydroxylation of aromatic compounds by a palladium membrane reactor. Catalysis Today, 2005, 104, 260-266.	4.4	58
51	Increased enantioselectivity in the presence of benzylamine in the heterogeneous hydrogenation of Î±,Î²Î±,Î²-unsaturated carboxylic acids. Journal of Catalysis, 2005, 231, 480-483.	6.2	53
52	Large-Scale Design of Cubicla3d Mesoporous Silica Monoliths with High Order, Controlled Pores, and Hydrothermal Stability. Advanced Materials, 2005, 17, 47-53.	21.0	82
53	Enantioselective hydrogenation of Î±,Î²-unsaturated carboxylic acids over cinchonidine-modified Pd catalysts: effect of substrate structure on the adsorption mode. Journal of Molecular Catalysis A, 2005, 230, 91-95.	4.8	35
54	Thin palladium membrane microreactors with oxidized porous silicon support and their application. Journal of Micromechanics and Microengineering, 2005, 15, 2011-2018.	2.6	15

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55	Transparent cubic Fd3m mesoporous silica monoliths with highly controllable pore architectures. Journal of Materials Chemistry, 2005, 15, 2590.	6.7	35
56	Design of Highly Stable, Ordered Cage Mesostructured Monoliths with Controllable Pore Geometries and Sizes. Chemistry of Materials, 2005, 17, 3137-3145.	6.7	67
57	General and Simple Approach for Control Cage and Cylindrical Mesopores, and Thermal/Hydrothermal Stable Frameworks. Journal of Physical Chemistry B, 2005, 109, 9255-9264.	2.6	63
58	Direct Hydroxylation of Methyl Benzoate to Methyl Salicylate by Using New Pd Membrane Reactor. Catalysis Letters, 2004, 96, 107-112.	2.6	20
59	Microemulsion Liquid Crystal Templates for Highly Ordered Three-Dimensional Mesoporous Silica Monoliths with Controllable Mesopore Structures. Chemistry of Materials, 2004, 16, 384-400.	6.7	99
60	Fabrication of Crystalline, Highly Ordered Three-Dimensional Silica Monoliths (HOM-n) with Large, Morphological Mesopore Structures. Advanced Materials, 2003, 15, 1893-1899.	21.0	68
61	Monolithic Nanostructured Silicate Family Templated by Lyotropic Liquid-Crystalline Nonionic Surfactant Mesophases. Chemistry of Materials, 2003, 15, 2892-2902.	6.7	60
62	Synthesis of monolithic nanostructured silicate family materials through the lyotropic liquid crystalline mesophases of non-ionic surfactant. Studies in Surface Science and Catalysis, 2003, 146, 173-176.	1.5	5
63	CO2Hydrogenation to Alcohols over Highly Dispersed Co/SiO2Catalysts Derived from Acetate. Chemistry Letters, 2001, 30, 904-905.	1.3	23
64	Zeolite Catalyzed Alkylation of Biphenyl. Where Does Shape-Selective Catalysis Occur?. Catalysis Surveys From Asia, 2001, 5, 43-56.	1.2	42
65	Synthetic investigation of CIT-5 catalyst. Microporous and Mesoporous Materials, 2000, 37, 291-301.	4.4	17
66	Selective photocatalytic transfer-hydrogenation to 1,5-cyclooctadiene with light transition metal modified rhodium colloid catalyst. Journal of Molecular Catalysis A, 1999, 149, 161-167.	4.8	10
67	Deactivation of External Acid Sites of H-Mordenite with Ceria Modification in the Isopropylation of Biphenyl. Chemistry Letters, 1999, 28, 215-216.	1.3	3
68	Three-Dimensional Assemblies of Gold Colloids in Nanoporous Alumina Membranesast;. European Journal of Inorganic Chemistry, 1998, 1998, 807-812.	2.0	25
69	Oxygenates from syngas over highly dispersed cobalt catalysts. Catalysis Today, 1997, 36, 311-324.	4.4	50
70	Palladium-catalyzed carbonylation of aryl bromides and iodides with potassium phenoxides. Journal of Molecular Catalysis A, 1996, 111, L187-L192.	4.8	9
71	The effect of propylene pressure on shape-selective isopropylation of biphenyl over H-mordenite. Catalysis Today, 1996, 31, 3-10.	4.4	25
72	The synthesis of polyesters with a biphenyl skeleton by palladium catalyzed carbonylation-polycondensation. Catalysis Today, 1996, 31, 27-43.	4.4	9

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73	Colloidal rhodium catalyzed photo transfer hydrogenation of 1,5-cyclooctadiene. Journal of Molecular Catalysis A, 1995, 98, 157-160.	4.8	6
74	Ethoxycarbonylation of 4,4'-Dihalobiphenyl Derivatives Catalyzed by Palladium-phosphine Complexes.. Sekiyu Gakkaishi (Journal of the Japan Petroleum Institute), 1994, 37, 70-76.	0.1	4
75	Coke deposition, product encapsulation, and propylene oligomerization during the isopropylation of biphenyl over a highly dealuminated H-mordenite.. Sekiyu Gakkaishi (Journal of the Japan Petroleum) Tj ETQq1 1 0.784314 rgBT /Over	0.1	8
76	An Efficient Synthesis of Aryl Esters by Palladium-Catalyzed Carbonylation of 4-Bromobiphenyl. Synlett, 1994, 1994, 515-517.	1.8	23
77	Vapor phase hydroformylation of ethene over Co/SiO2 promoted by noble metals: dynamic in situ diffuse reflectance FT-IR study of surface species. Catalysis Today, 1994, 20, 423-435.	4.4	15
78	Palladium catalyzed vinylation of 4-bromo-4â€²-hydroxybiphenyl. Journal of Molecular Catalysis, 1994, 88, L113-L116.	1.2	10
79	An efficient synthesis of 2,6-di-tert-butylphenyl esters by palladium-catalysed carbonylation of 4-bromobiphenyl. Journal of the Chemical Society Chemical Communications, 1994, , 1553.	2.0	10
80	Synthesis of Heat-Resistant Polyester Containing Rigid Biphenyl Moiety by Palladium-Catalyzed Carbonylation-Polycondensation. Bulletin of the Chemical Society of Japan, 1994, 67, 563-571.	3.2	13
81	Characterization of Co-Re-Sr/SiO2 Catalyst Prepared from Cobalt Acetate as a Cobalt Precursor for CO Hydrogenation.. Sekiyu Gakkaishi (Journal of the Japan Petroleum Institute), 1994, 37, 179-186.	0.1	7
82	Effect of transition metals on oxygenates formation from syngas over Co/SiO2. Applied Catalysis A: General, 1993, 105, 159-184.	4.3	72
83	Dealkylation of N, N-dialkylanilines over transition metal catalysts in the presence of ammonia, water and hydrogen. Applied Catalysis A: General, 1993, 103, 43-53.	4.3	1
84	Vapor Phase Hydroformylation of Ethene over Co/SiO2 Modified with Ir.. Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal, 1993, 1993, 901-903.	0.1	6
85	Promoting effects of alkaline earth oxides on the vapor phase carbonylation of ethene over cluster-derived cobalt catalysts. Applied Catalysis, 1991, 73, 281-287.	0.8	11
86	Selective vapor phase hydroformylation of ethylene over cluster-derived cobalt catalyst. Catalysis Letters, 1991, 8, 253-261.	2.6	21
87	Niobic acid as a solid acid catalyst for ring-opening reactions of phenyloxirane. Catalysis Today, 1990, 8, 123-132.	4.4	44
88	Alcohol synthesis from syngas over cobalt catalysts prepared from Co2(CO)8. Journal of Molecular Catalysis, 1989, 55, 361-370.	1.2	68
89	Synthesis of C2-oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths. Applied Catalysis, 1989, 48, 149-157.	0.8	46
90	Effect of Rh Dispersion on Vapor Phase and Pressurized Hydroformylation of Ethylene over Rh/SiO2Catalyst. Chemistry Letters, 1988, 17, 1917-1918.	1.3	26

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91	Syntheses and Properties of Dipyridylnorbornadienes. Bulletin of the Chemical Society of Japan, 1988, 61, 2451-2458.	3.2	17
92	Preparation and Photoreactions of Bispyridylnorbornadienes. Chemistry Letters, 1986, 15, 1279-1282.	1.3	11
93	Semiconductor-catalyzed photocycloreversion, valence isomerization and [1,3]-sigmatropic rearrangement. Tetrahedron Letters, 1984, 25, 5311-5314.	1.4	21