## Taka-aki Hanaoka

List of Publications by Year in descending order

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93 2,768 papers citations

33 48
h-index g-index

95 95 all docs citations

95 times ranked 2545 citing authors

#	Article	IF	CITATIONS
1	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
2	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
3	Optical Nanoscale Poolâ€onâ€6urface Design for Control Sensing Recognition of Multiple Cations. Advanced Functional Materials, 2008, 18, 1485-1500.	14.9	84
4	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
5	Effect of transition metals on oxygenates formation from syngas over Co/SiO2. Applied Catalysis A: General, 1993, 105, 159-184.	4.3	72
6	Alcohol synthesis from syngas over cobalt catalysts prepared from Co2(CO)8. Journal of Molecular Catalysis, 1989, 55, 361-370.	1.2	68
7	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
8	Design of Highly Stable, Ordered Cage Mesostructured Monoliths with Controllable Pore Geometries and Sizes. Chemistry of Materials, 2005, 17, 3137-3145.	6.7	67
9	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
10	Monolithic Nanostructured Silicate Family Templated by Lyotropic Liquid-Crystalline Nonionic Surfactant Mesophases. Chemistry of Materials, 2003, 15, 2892-2902.	6.7	60
11	Direct hydroxylation of aromatic compounds by a palladium membrane reactor. Catalysis Today, 2005, 104, 260-266.	4.4	58
12	Synthesis of new microporous layered organic–inorganic hybrid nanocomposites by alkoxysilylation of a crystalline layered silicate, ilerite. Journal of Materials Chemistry, 2006, 16, 4035-4043.	6.7	55
13	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
14	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
15	Encapsulation of Myoglobin with a Mesoporous Silicate Results in New Capabilities. Bioconjugate Chemistry, 2006, 17, 236-240.	3.6	54
16	Increased enantioselectivity in the presence of benzylamine in the heterogeneous hydrogenation of $\hat{l}\pm,\hat{l}^2\hat{l}\pm,\hat{l}^2$ -unsaturated carboxylic acids. Journal of Catalysis, 2005, 231, 480-483.	6.2	53
17	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
18	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

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19	Oxygenates from syngas over highly dispersed cobalt catalysts. Catalysis Today, 1997, 36, 311-324.	4.4	50
20	Deactivation of ZSM-5 zeolite during catalytic steam cracking of n-hexane. Fuel Processing Technology, 2014, 126, 343-349.	7.2	49
21	Synthesis of C2-oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths. Applied Catalysis, 1989, 48, 149-157.	0.8	46
22	Immobilization of enzyme-encapsulated nanoporous material in a microreactor and reaction analysis. Chemical Engineering Journal, 2011, 167, 744-749.	12.7	46
23	Niobic acid as a solid acid catalyst for ring-opening reactions of phenyloxirane. Catalysis Today, 1990, 8, 123-132.	4.4	44
24	Zeolite Catalyzed Alkylation of Biphenyl. Where Does Shape-Selective Catalysis Occur?. Catalysis Surveys From Asia, 2001, 5, 43-56.	1.2	42
25	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
26	Preparation of Copper Nitride (Cu <sub>3</sub> N) Nanoparticles in Long-Chain Alcohols at 130–200 °C and Nitridation Mechanism. Inorganic Chemistry, 2014, 53, 710-715.	4.0	36
27	Enantioselective hydrogenation of $\hat{l}\pm,\hat{l}^2$ -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
28	Transparent cubic Fd3m mesoporous silica monoliths with highly controllable pore architectures. Journal of Materials Chemistry, 2005, 15, 2590.	6.7	35
29	Structural changes of a Pd-based membrane during direct hydroxylation of benzene to phenol. Catalysis Today, 2006, 118, 57-62.	4.4	34
30	Catalase encapsulated in mesoporous silica and its performance. Biochemical Engineering Journal, 2009, 44, 167-173.	3.6	34
31	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
32	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
33	Encapsulation of catalase into nanochannels of an inorganic composite membrane. Journal of Molecular Catalysis B: Enzymatic, 2009, 57, 183-187.	1.8	30
34	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
35	Effective immobilization of subunit protein in mesoporous silica modified with ethanol. Biotechnology and Bioengineering, 2007, 97, 200-205.	3.3	29
36	Direct visualization of hetero-enzyme co-encapsulated in mesoporous silicas. Microporous and Mesoporous Materials, 2010, 127, 61-66.	4.4	29

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37	Effect of Rh Dispersion on Vapor Phase and Pressurized Hydroformylation of Ethylene over Rh/SiO2Catalyst. Chemistry Letters, 1988, 17, 1917-1918.	1.3	26
38	Heterogeneous catalytic activity of NiO-silica composites designated with cubic Pm3n cage nanostructures. Applied Catalysis B: Environmental, 2008, 82, 169-179.	20.2	26
39	The effect of propylene pressure on shape-selective isopropylation of biphenyl over H-mordenite. Catalysis Today, 1996, 31, 3-10.	4.4	25
40	Three-Dimensional Assemblies of Gold Colloids in Nanoporous Alumina Membranesast;. European Journal of Inorganic Chemistry, 1998, 1998, 807-812.	2.0	25
41	Electrochemical enzymatic biosensor with long-term stability using hybrid mesoporous membrane. Analyst, The, 2014, 139, 4654-4660.	3.5	25
42	Effect of steam during catalytic cracking of n-hexane using P-ZSM-5 catalyst. Catalysis Communications, 2015, 69, 20-24.	3.3	24
43	An Efficient Synthesis of Aryl Esters by Palladium-Catalyzed Carbonylation of 4-Bromobiphenyl. Synlett, 1994, 1994, 515-517.	1.8	23
44	CO2Hydrogenation to Alcohols over Highly Dispersed Co/SiO2Catalysts Derived from Acetate. Chemistry Letters, 2001, 30, 904-905.	1.3	23
45	An Electrochemical Biosensor for the Determination of Lactic Acid in Expiration. Procedia Chemistry, 2012, 6, 46-51.	0.7	23
46	Semiconductor-catalyzed photocycloreversion, valence isomerization and [1,3]-sigmatropic rearrangement. Tetrahedron Letters, 1984, 25, 5311-5314.	1.4	21
47	Selective vapor phase hydroformylation of ethylene over cluster-derived cobalt catalyst. Catalysis Letters, 1991, 8, 253-261.	2.6	21
48	Direct Hydroxylation of Methyl Benzoate to Methyl Salicylate by Using New Pd Membrane Reactor. Catalysis Letters, 2004, 96, 107-112.	2.6	20
49	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
50	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
51	Stability of highly ordered nanostructures with uniformly cylindrical mesochannels. Acta Materialia, 2006, 54, 899-908.	7.9	18
52	Enzyme encapsulation using highly ordered mesoporous silica monoliths. Materials Letters, 2012, 89, 184-187.	2.6	18
53	A novel, disposable, screen-printed amperometric biosensor for ketone 3-β-hydroxybutyrate fabricated using a 3-β-hydroxybutyrate dehydrogenase–mesoporous silica conjugate. Analytical and Bioanalytical Chemistry, 2013, 405, 297-305.	3.7	18
54	Syntheses and Properties of Dipyridylnorbornadienes. Bulletin of the Chemical Society of Japan, 1988, 61, 2451-2458.	3.2	17

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55	Synthetic investigation of CIT-5 catalyst. Microporous and Mesoporous Materials, 2000, 37, 291-301.	4.4	17
56	An enzyme-encapsulated microreactor for efficient theanine synthesis. Chemical Communications, 2012, 48, 7058.	4.1	17
57	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
58	Thin palladium membrane microreactors with oxidized porous silicon support and their application. Journal of Micromechanics and Microengineering, 2005, 15, 2011-2018.	2.6	15
59	Cationic surfactant templates for newly developed cubic Fd3m silica mesocage structures. Materials Letters, 2008, 62, 2950-2953.	2.6	15
60	The Ensemble of Hetero-Proteins in Inorganic Nanochannels. Bioconjugate Chemistry, 2008, 19, 10-14.	3.6	15
61	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
62	Synthesis of l-theanine using enzyme/mesoporous silica conjugates under high pH conditions. Materials Letters, 2011, 65, 67-69.	2.6	15
63	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
64	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
65	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
66	Microporous Organic-inorganic Nanocomposites as the Receptor in the QCM Sensing of Toluene Vapors. Analytical Sciences, 2013, 29, 283-289.	1.6	12
67	Preparation and Photoreactions of Bispyridylnorbornadienes. Chemistry Letters, 1986, 15, 1279-1282.	1.3	11
68	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
69	Palladium catalyzed vinylation of 4-bromo-4′-hydroxybiphenyl. Journal of Molecular Catalysis, 1994, 88, L113-L116.	1.2	10
70	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
71	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
72	On-chip encapsulation of lipase using mesoporous silica: A new route to enzyme microreactors. Materials Letters, 2009, 63, 2445-2448.	2.6	10

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73	Palladium-catalyzed carbonylation of aryl bromides and iodides with potassium phenoxides. Journal of Molecular Catalysis A, 1996, 111, L187-L192.	4.8	9
74	The synthesis of polyesters with a biphenyl skeleton by palladium catalyzed carbonylation-polycondensation. Catalysis Today, 1996, 31, 27-43.	4.4	9
75	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
76	Adsorption of aniline onto hexagonal mesoporous silicate monoliths (HOM-2). International Journal of Environment and Pollution, 2008, 34, 97.	0.2	7
77	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
78	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
79	Colloidal rhodium catalyzed photo transfer hydrogenation of 1,5-cyclooctadiene. Journal of Molecular Catalysis A, 1995, 98, 157-160.	4.8	6
80	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
81	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
82	Detection of hetero-proteins–mesoporous silica assembly by BRET. Chemical Communications, 2010, 46, 2941.	4.1	5
83	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
84	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 ETQq0 0	0 r <b>gB</b> T /0	verłock 10 Tf
85	Direct O2 Epoxidation of Propylene by the Membrane Reactor Loaded with Ag–Sr Catalyst. Chemistry Letters, 2007, 36, 1170-1171.	1.3	4
86	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
87	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
88	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
89	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
90	Structural changes in –LIT zeolites related to cation-exchange treatments under aqueous and non-aqueous conditions. Microporous and Mesoporous Materials, 2014, 190, 92-98.	4.4	3

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91	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
92	Electrochemical biosensor for the detection of formaldehyde based on encapsulation of an enzyme, into the nanoporous-walled silica nanotube-inorganic composite membrane. , 2010, , .		0
93	Preparation and Properties of a Hollow Fiber Consisting Mainly of Natural Mordenite. Chemistry Letters, 2011, 40, 52-53.	1.3	0