Aritomo Yamaguchi

List of Publications by Year
in descending order

118	2,784	159358	205818
papers	citations	30 h-index	48 g-index

120	120	120	3135
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modifying Carbon Particles with Polypyrrole for Adsorption of Cobalt Ions as Electrocatatytic Site for Oxygen Reduction. Chemistry of Materials, 2005, 17, 4278-4281.	3.2	226
2	Sorbitol dehydration in high temperature liquid water. Green Chemistry, 2011, 13, 873.	4.6	129
3	Reversible Release Control of an Oily Substance Using Photoresponsive Micelles. Langmuir, 2001, 17, 6072-6076.	1.6	116
4	Time Scale and Elementary Steps of CO-Induced Disintegration of Surface Rhodium Clusters. Angewandte Chemie - International Edition, 2003, 42, 4795-4799.	7.2	116
5	Catalytic activation and reforming of methane on supported palladium clusters. Journal of Catalysis, 2010, 274, 52-63.	3.1	106
6	Hydrogen production from woody biomass over supported metal catalysts in supercritical water. Catalysis Today, 2009, 146, 192-195.	2.2	100
7	Micellar Cobaltporphyrin Nanorods in Alcohols. Journal of the American Chemical Society, 2004, 126, 11128-11129.	6.6	69
8	Enhancement of cyclic ether formation from polyalcohol compounds in high temperature liquid water by high pressure carbon dioxide. Green Chemistry, 2009, 11, 48-52.	4.6	64
9	Electrochemical Control of Vesicle Formation with a Double-Tailed Cationic Surfactant Bearing Ferrocenyl Moieties. Langmuir, 2001, 17, 8044-8048.	1.6	63
10	Catalytic production of sugar alcohols from lignocellulosic biomass. Catalysis Today, 2016, 265, 199-202.	2.2	57
11	Lignin Gasification over Supported Ruthenium Trivalent Salts in Supercritical Water. Energy & Fuels, 2008, 22, 1485-1492.	2.5	56
12	Gasification of Sugarcane Bagasse over Supported Ruthenium Catalysts in Supercritical Water. Energy & Fuels, 2012, 26, 3179-3186.	2.5	52
13	Combined in situ QXAFS and FTIR analysis of a Ni phosphide catalyst under hydrodesulfurization conditions. Journal of Catalysis, 2012, 286, 165-171.	3.1	52
14	Deactivation of ZSM-5 zeolite during catalytic steam cracking of n-hexane. Fuel Processing Technology, 2014, 126, 343-349.	3.7	49
15	Conversion of cellulose into lactic acid using zirconium oxide catalysts. RSC Advances, 2017, 7, 18561-18568.	1.7	49
16	Time-resolved DXAFS study on the reduction processes of Cu cations in ZSM-5. Catalysis Letters, 2000, 68, 139-145.	1.4	48
17	Liquid phase hydrogenation of methyl levulinate over the mixture of supported ruthenium catalyst and zeolite in water. Applied Catalysis A: General, 2014, 470, 215-220.	2.2	45
18	Electrochemical sensor for superoxide anion radical using polymeric iron porphyrin complexes containing axial 1-methylimidazole ligand as cytochromec mimics. Polymers for Advanced Technologies, 2005, 16, 287-292.	1.6	44

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19	Cascade Utilization of Biomass: Strategy for Conversion of Cellulose, Hemicellulose, and Lignin into Useful Chemicals. ACS Sustainable Chemistry and Engineering, 2019, 7, 10445-10451.	3.2	43
20	Direct production of sugar alcohols from wood chips using supported platinum catalysts in water. Catalysis Communications, 2014, 54, 22-26.	1.6	40
21	Bond cleavage of lignin model compounds into aromatic monomers using supported metal catalysts in supercritical water. Scientific Reports, 2017, 7, 46172.	1.6	40
22	Effect of carbon number on the production of propylene and ethylene by catalytic cracking of straight-chain alkanes over phosphorus-modified ZSM-5. Fuel Processing Technology, 2020, 202, 106367.	3.7	39
23	In Situ Time-Resolved Energy-Dispersive XAFS Study on the Reduction Processes of Cuâ€“ZSM-5 Catalysts. Bulletin of the Chemical Society of Japan, 2001, 74, 801-808.	2.0	38
24	Acetophenone hydrogenation over a Pd catalyst in the presence of H2O and CO2. Chemical Communications, 2011, 47, 11546.	2.2	38
25	EXAFS Study on Structural Change of Charcoal-supported Ruthenium Catalysts during Lignin Gasification in Supercritical Water. Catalysis Letters, 2008, 122, 188-195.	1.4	34
26	In Situ Time-Resolved Energy-Dispersive X-ray Absorption Fine Structure Study on the Decarbonylation Processes of Mo(CO)6 Entrapped in NaY and HY Zeolites. Journal of Physical Chemistry B, 2002, 106, 2415-2422.	1.2	33
27	One-pot conversion of cellulose to isosorbide using supported metal catalysts and ion-exchange resin. Catalysis Communications, 2015, 67, 59-63.	1.6	33
28	Time-Scale and Sequence of Dynamic Structural Changes in a MgO-Attached Ruthenium Cluster Catalyst Observed by in Situ Time-Resolved DXAFS. Journal of Physical Chemistry B, 2004, 108, 5609-5616.	1.2	32
29	Active sites in modified copper catalysts for selective liquid phase dehydration of aqueous glycerol to acetol. RSC Advances, 2013, 3, 16499.	1.7	32
30	Liposomal Surface-Loading of Water-Soluble Cationic Iron(III) Porphyrins as Anticancer Drugs. Molecular Pharmaceutics, 2004, 1, 387-389.	2.3	31
31	Structure and redox properties of electropolymerized film obtained from ironmeso-tetrakis(3-thienyl)porphyrin. Polymers for Advanced Technologies, 2005, 16, 616-621.	1.6	31
32	Electrochemical Synthesis of a Polypyrrole Thin Film with Supercritical Carbon Dioxide as a Solvent. Langmuir, 2005, 21, 12303-12308.	1.6	28
33	Intramolecular dehydration of biomass-derived sugar alcohols in high-temperature water. Physical Chemistry Chemical Physics, 2017, 19, 2714-2722.	1.3	27
34	Enhancement of Glycerol Conversion to Acetol in High-temperature Liquid Water by High-pressure Carbon Dioxide. Chemistry Letters, 2008, 37, 926-927.	0.7	26
35	Gasification of Organosolv-lignin Over Charcoal Supported Noble Metal Salt Catalysts in Supercritical Water. Topics in Catalysis, 2012, 55, 889-896.	1.3	26
36	Conversion of Cellulose to Lactic Acid by Using ZrO2â€“Al2O3 Catalysts. Catalysts, 2017, 7, 221.	1.6	25

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37	Effect of steam during catalytic cracking of n-hexane using P-ZSM-5 catalyst. Catalysis Communications, 2015, 69, 20-24.	1.6	24
38	Intramolecular dehydration of mannitol in high-temperature liquid water without acid catalysts. RSC Advances, 2014, 4, 45575-45578.	1.7	23
39	Surface catalytic reactions assisted by gas phase molecules: activation of reaction intermediates. Journal of Molecular Catalysis A, 2000, 163, 67-77.	4.8	22
40	Stereoselective Intramolecular Dehydration of 2,5-Hexanediol in High-Temperature Liquid Water with High-Pressure Carbon Dioxide. ACS Catalysis, 2011, 1, 67-69.	5.5	22
41	Effect of extraction on furfural production by solid acid-catalyzed xylose dehydration in water. Journal of Supercritical Fluids, 2019, 144, 14-18.	1.6	22
42	Energy-dispersive XAFS study on the decarbonylation process of Mo(CO)6 in NaY zeolite. Catalysis Letters, 2001, 71, 203-208.	1.4	21
43	Dehydration of Triol Compounds in High-Temperature Liquid Water Under High-Pressure Carbon Dioxide. Topics in Catalysis, 2010, 53, 487-491.	1.3	20
44	P-ZSM-5 Pretreated by High-Temperature Calcination as Durable Catalysts for Steam Cracking of n-Hexane. Catalysis Letters, 2014, 144, 44-49.	1.4	20
45	5â€Hydroxymethylfurfural Production from Glucose, Fructose, Cellulose, or Celluloseâ€“based Waste Material by Using a Calcium Phosphate Catalyst and Water as a Green Solvent. ChemistrySelect, 2017, 2, 1305-1310.	0.7	20
46	Gaseous Fuel Production from Nonrecyclable Paper Wastes by Using Supported Metal Catalysts in Highâ€Temperature Liquid Water. ChemSusChem, 2010, 3, 737-741.	3.6	19
47	Furfuryl Alcohol and Furfural Hydrogenation over Activated Carbonâ€“supported Palladium Catalyst in Presence of Water and Carbon Dioxide. ChemistrySelect, 2017, 2, 2471-2475.	0.7	18
48	Characterization of clay intercalated cobalt-salen catalysts for the oxidation of p-cresol. Applied Catalysis A: General, 2009, 370, 16-23.	2.2	17
49	Kinetic analysis of 4-isopropylphenol hydrogenation over activated carbon-supported rhodium catalysts in supercritical carbon dioxide solvent. Green Chemistry, 2012, 14, 633.	4.6	16
50	Enzyme Immobilization in Mesoporous Silica for Enhancement of Thermostability. Journal of Nanoscience and Nanotechnology, 2018, 18, 104-109.	0.9	16
51	A new aspect of catalysis at designed surfaces: the role of gas phase molecules in surface catalytic reactions. Journal of Molecular Catalysis A, 1999, 146, 65-76.	4.8	15
52	Cobaltporphyrin-adsorbed carbon black: highly efficient electrocatalysts for oxygen reduction. Polymers for Advanced Technologies, 2005, 16, 702-705.	1.6	15
53	Furfural production from xylose and bamboo powder over chabazite-type zeolite prepared by interzeolite conversion method. Journal of the Taiwan Institute of Chemical Engineers, 2017, 79, 55-59.	2.7	15
54	Continuous Catalytic Oxidation of Glycerol to Carboxylic Acids Using Nanosized Gold/Alumina Catalysts and a Liquid-Phase Flow Reactor. ACS Omega, 2018, 3, 13862-13868.	1.6	15

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55	Continuous dehydration of 1,4-butanediol in flowing liquid water with carbon dioxide. Catalysis Communications, 2015, 68, 6-10.	1.6	14
56	Surface modification of H-ZSM-5 with organo-disilane compound for propylene production from dimethyl ether. Microporous and Mesoporous Materials, 2019, 280, 219-226.	2.2	14
57	Continuous production of glyceric acid and lactic acid by catalytic oxidation of glycerol over an Auâ€“Pt/Al2O3 bimetallic catalyst using a liquid-phase flow reactor. Catalysis Today, 2021, 375, 191-196.	2.2	14
58	Stereoselective hydrogenation of 4-alkylphenols over carbon-supported rhodium catalyst in supercritical carbon dioxide solvent. Catalysis Communications, 2009, 10, 1702-1705.	1.6	13
59	Depolymerization of Poly(ethylene terephthalate) to Terephthalic Acid and Ethylene Glycol in High-temperature Liquid Water. Chemistry Letters, 2009, 38, 268-269.	0.7	13
60	Lignin Gasification over Charcoal-supported Palladium and Nickel Bimetal Catalysts in Supercritical Water. Chemistry Letters, 2010, 39, 1251-1253.	0.7	13
61	pH-sensitive liposome retaining Fe-porphyrin as SOD mimic for novel anticancer drug delivery system. Polymers for Advanced Technologies, 2007, 18, 82-87.	1.6	12
62	Supercritical Water Gasification of Organosolv Lignin over a Graphite-supported Ruthenium Metal Catalyst. Chemistry Letters, 2012, 41, 1453-1455.	0.7	12
63	Cyclization of alkanediols in high-temperature liquid water with high-pressure carbon dioxide. Catalysis Today, 2012, 185, 302-305.	2.2	12
64	Catalytic Activity of Molecular Rhenium Sulfide Clusters [Re6S8(OH)6â^'n (H2O) n](4â^'n)â^' (nÂ=Â0, 2, 4, 6) with Retention of the Octahedral Metal Frameworks: Dehydrogenation and Dehydration of 1,4-Butanediol. Journal of Cluster Science, 2014, 25, 1203-1224.	1.7	12
65	Supercritical water gasification of ethanol production waste over graphite supported ruthenium catalyst. Journal of Molecular Catalysis A, 2014, 388-389, 148-153.	4.8	12
66	Dispersive XAFS Study on Cu and Mo Species in Zeolites During the Catalyst Preparation. Topics in Catalysis, 2002, 18, 53-58.	1.3	11
67	Graphite-supported rhodium catalysts for naphthalene hydrogenation in supercritical carbon dioxide solvent. Catalysis Communications, 2009, 10, 1681-1684.	1.6	11
68	Lignin Depolymerization into Aromatic Monomers Using Supported Metal Catalysts in Supercritical Water. Journal of the Japan Petroleum Institute, 2020, 63, 221-227.	0.4	11
69	Surface-Modified Mesoporous Silicas as Recyclable Adsorbents of an Endocrine Disrupter, Bisphenol A. Journal of Nanoscience and Nanotechnology, 2006, 6, 1689-1694.	0.9	10
70	Particle-size Effects of Activated Carbon-supported Rhodium Catalysts on Hydrogenation of Naphthalene in Supercritical Carbon Dioxide Solvent. Chemistry Letters, 2008, 37, 734-735.	0.7	10
71	Thermodynamic Equilibria between Polyalcohols and Cyclic Ethers in High-Temperature Liquid Water. Journal of Chemical & Engineering Data, 2009, 54, 2666-2668.	1.0	10
72	Enhancement of reaction rates for catalytic benzaldehyde hydrogenation and sorbitol dehydration in water solvent by addition of carbon dioxide. Journal of Chemical Sciences, 2014, 126, 395-401.	0.7	10

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73	Synthesis of Reconstituted Hemoglobins Containing Metalloporphyrin Derivatives and SOD Activity.. Journal of Oleo Science, 2003, 52, 149-157.	0.6	10
74	Time-resolved energy-dispersive XAFS study on the reduction process of Cu-ZSM-5 catalysts. Journal of Synchrotron Radiation, 2001, 8, 654-656.	1.0	9
75	Controlled Oxidation of Dextran for Evolution of Polyether Segment Bearing Pendant Carboxyl Groups for Corrosion Inhibition Applications. Polymer Journal, 2006, 38, 343-348.	1.3	9
76	Purification of hydrocarbons from aromatic sulfur compounds by supercritical carbon dioxide extraction. Journal of Supercritical Fluids, 2010, 55, 122-127.	1.6	9
77	One-pot Conversion from Lignocellulosic Biomass to Isosorbide. Journal of the Japan Petroleum Institute, 2016, 59, 155-159.	0.4	9
78	Effect of Metal Catalysts on Bond Cleavage Reactions of Lignin Model Compounds in Supercritical Water. Waste and Biomass Valorization, 2020, 11, 669-674.	1.8	9
79	Biomass Valorization in High-temperature Liquid Water. Journal of the Japan Petroleum Institute, 2014, 57, 155-163.	0.4	9
80	Non-Cyanide Electroless Gold Plating Using Polyphenols as Reducing Agents. Journal of the Electrochemical Society, 2006, 153, C63.	1.3	8
81	Direct conversion of lignocellulosic biomass into aromatic monomers over supported metal catalysts in supercritical water. Molecular Catalysis, 2019, 477, 110557.	1.0	8
82	Characterization and catalytic performance of designed surfaces. Journal of Molecular Catalysis A, 2000, 158, 67-83.	4.8	6
83	Chemical Recycling Process of Poly(Ethylene Terephthalate) in High-Temperature Liquid Water. Journal of Chemical Engineering of Japan, 2010, 43, 313-317.	0.3	6
84	Transfer Hydrogenation of 4-Propylphenol Using Ethanol and Water over Charcoal-supported Palladium Catalyst. Chemistry Letters, 2016, 45, 643-645.	0.7	6
85	Hydrogenolysis of Furfuryl Alcohol to 1,2â€Pentanediol Over Supported Ruthenium Catalysts. ChemistryOpen, 2021, 10, 731-736.	0.9	6
86	Surface Modification of Reconstituted Hemoglobins Containing SOD-Active Metalloporphyrins. Journal of Oleo Science, 2005, 54, 115-123.	0.6	6
87	Studies of the Surface Deuterioxyl Group and Adsorbed D2O on Î³-Al2O3 Using Picosecond Infrared Pumpâ^'Probe Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 11456-11461.	1.2	5
88	DXAFS study on the decarbonylation process of Mo(CO)6in NaY supercages. Journal of Synchrotron Radiation, 2001, 8, 628-630.	1.0	5
89	Solvolysis of benzyl phenyl ether in high-temperature aqueous methanol solution under high-pressure carbon dioxide. Green Chemistry, 2021, 23, 1658-1664.	4.6	5
90	Synthesis of Polymeric Reconstituted Hemoglobins as Superoxide Dismutase Mimics Designed for Long-term Circulation Maintenance. Journal of Oleo Science, 2005, 54, 413-418.	0.6	5

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91	Emulsifying Potency of New Amino Acid-Type Surfactant (II): Stable Water-in-Oil (W/O) Emulsions Containing 85 wt% Inner Water Phase.. Chemical and Pharmaceutical Bulletin, 2001, 49, 1331-1335.	0.6	4
92	Novel Electrocatalysts for Oxygen Reduction Using Cobaltporphyrins That Undergo Facile Electropolymerization. Kobunshi Ronbunshu, 2006, 63, 182-188.	0.2	4
93	Liquid Phase Hydrogenation of Methyl Levulinate over Supported Ruthenium Metal Catalyst. Journal of the Japan Petroleum Institute, 2012, 55, 376-379.	0.4	4
94	Supercritical Water Gasification of Residue from Ethanol Production from Japanese Cedar. Energy & Fuels, 2013, 27, 3861-3866.	2.5	4
95	Utilization of Supercritical Fluid for Catalytic Thermochemical Conversions of Woody-Biomass Related Compounds. , 2015, , 437-453.		4
96	Formation of Active Sites for the NO + CO Reaction over Palladium Catalysts Supported on Mesoporous Silica. Bulletin of the Chemical Society of Japan, 2005, 78, 192-194.	2.0	3
97	Preparation of Novel Conductive Polymer Ligand-Coated Carbon Particles by Electropolymerization of Pyridylthiophene and Application as Metal Complex Catalysts for Oxygen Reduction. Kobunshi Ronbunshu, 2006, 63, 189-195.	0.2	3
98	Depolymerization of Poly(butylene terephthalate) into Terephthalic Acid and Tetrahydrofuran in High-temperature Liquid Water. Chemistry Letters, 2015, 44, 1312-1314.	0.7	3
99	Dehydration of erythritol in high-temperature carbonated water. Molecular Catalysis, 2019, 477, 110519.	1.0	3
100	Kinetic analyses of intramolecular dehydration of hexitols in high-temperature water. Carbohydrate Research, 2020, 487, 107880.	1.1	3
101	Efficient Conversion of Glycerol into High Valueâ€Added Chemicals by Partial Oxidation. JAOCS, Journal of the American Oil Chemists' Society, 2020, 97, 1365-1370.	0.8	3
102	Magnesium Oxideâ€Catalyzed Conversion of Chitin to Lactic Acid. ChemistryOpen, 2021, 10, 308-315.	0.9	3
103	Hydrogenation of 4-Propylphenol over Carbon-supported Palladium Catalyst without External Hydrogen: Effect of Carbon Support and Palladium Loading. Chemistry Letters, 2021, 50, 431-434.	0.7	3
104	Aromatic Monomer Production from Lignin Depolymerization Predicted from Bond Cleavage Data for Lignin Model Compounds. Journal of the Japan Petroleum Institute, 2019, 62, 228-233.	0.4	3
105	Highly Precise and Sensitive Polymerase Chain Reaction Using Mesoporous Silica-Immobilized Enzymes. ACS Applied Materials & Interfaces, 2022, 14, 29483-29490.	4.0	3
106	Phase Behavior of Hydrogenation of 2-tert-Butylphenol over a Charcoal-Supported Rhodium Catalyst in Carbon Dioxide Solvent. Journal of Chemical & Engineering Data, 2009, 54, 1610-1612.	1.0	2
107	Stability of Copper Nitride Nanoparticles under High Humidity and in Solutions with Different Acidity. Chemistry Letters, 2015, 44, 755-757.	0.7	2
108	Effect of Catalyst Support on Aromatic Monomer Production from Lignocellulosic Biomass Over Pt-Based Catalysts. Waste and Biomass Valorization, 2021, 12, 6081-6089.	1.8	2

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109	Novel Approach for the Preparation of Metal Containing Mesoporous Silica Using Solubilization of Fatty Acid Salt. Chemistry Letters, 2005, 34, 346-347.	0.7	1
110	Benzyl methyl ether production from benzyl alcohol and methanol in carbonic water. Catalysis Today, 2018, 309, 31-34.	2.2	1
111	Environmentally Benign Chemicals Production from Unused Resources using Water Solvent. Current Environmental Engineering, 2018, 5, 13-19.	0.6	1
112	Hydrogenolysis of benzofuran using aqueous ethanol solution over graphite-supported platinum catalyst. Journal of the Indian Chemical Society, 2021, 98, 100021.	1.3	1
113	4-Propylphenol Hydrogenation over Pt-Pd Bimetallic Catalyst in Aqueous Ethanol Solution without External Hydrogen. Chemistry Letters, 2021, 50, 1968-1971.	0.7	1
114	Effect of Carbon Dioxide Pressure on 4-t-Butylphenol Hydrogenation Activity of Supported Rhodium Catalyst. Journal of the Japan Petroleum Institute, 2013, 56, 165-170.	0.4	1
115	Assemblies of two multimeric enzymes using mesoporous silica microspheres toward cascade reaction fields. Biochemical Engineering Journal, 2022, 182, 108416.	1.8	1
116	Functionalization of Mesoporous Materials by Modification of Surface Hydroxyl Groups. Journal of the Japan Society of Colour Material, 2004, 77, 133-137.	0.0	0
117	Magnesium Oxideâ€Catalyzed Conversion of Chitin to Lactic Acid. ChemistryOpen, 2021, 10, 307-307.	0.9	0
118	Plastics Obtained from Woody Biomass. Seikei-Kakou, 2018, 30, 573-576.	0.0	0