Ryuji Kikuchi

List of Publications by Year
in descending order

240 papers	10,099 citations	34105 52 h-index	46799 89 g-index
244 all docs	244 docs citations	244 times ranked	8508 citing authors

#	Article	IF	Citations
1	Ni/CeO2 catalysts with high CO2 methanation activity and high CH4 selectivity at low temperatures. International Journal of Hydrogen Energy, 2012, 37, 5527-5531.	7.1	478
2	CO₂â€toâ€Methanol Hydrogenation on Zirconiaâ€Supported Copper Nanoparticles: Reaction Intermediates and the Role of the Metalâ€“Support Interface. Angewandte Chemie - International Edition, 2017, 56, 2318-2323.	13.8	435
3	Impedance Analysis of Internal Resistance Affecting the Photoelectrochemical Performance of Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2005, 152, E68.	2.9	307
4	Study on steam reforming of CH4 and C2 hydrocarbons and carbon deposition on Ni-YSZ cermets. Journal of Power Sources, 2002, 112, 588-595.	7.8	275
5	Catalytic autothermal reforming of methane and propane over supported metal catalysts. Applied Catalysis A: General, 2003, 241, 261-269.	4.3	262
6	Fuel flexibility in power generation by solid oxide fuel cells. Solid State Ionics, 2002, 152-153, 411-416.	2.7	215
7	Isolated Zr Surface Sites on Silica Promote Hydrogenation of CO₂ to CH₃OH in Supported Cu Catalysts. Journal of the American Chemical Society, 2018, 140, 10530-10535.	13.7	170
8	Hydrogen production from dimethyl ether steam reforming over composite catalysts of copper ferrite spinel and alumina. Applied Catalysis B: Environmental, 2007, 74, 144-151.	20.2	166
9	Design of Interfacial Sites between Cu and Amorphous ZrO₂ Dedicated to CO₂-to-Methanol Hydrogenation. ACS Catalysis, 2018, 8, 7809-7819.	11.2	159
10	Steam reforming of dimethyl ether over composite catalysts of Î³-Al2O3 and Cu-based spinel. Applied Catalysis B: Environmental, 2005, 57, 211-222.	20.2	156
11	Promotion of CO2 methanation activity and CH4 selectivity at low temperatures over Ru/CeO2/Al2O3 catalysts. International Journal of Hydrogen Energy, 2014, 39, 10090-10100.	7.1	152
12	Water gas shift reaction for the reformed fuels over Cu/MnO catalysts prepared via spinel-type oxide. Journal of Catalysis, 2003, 215, 271-278.	6.2	148
13	Upgrading of pyrolysis bio-oil using nickel phosphide catalysts. Journal of Catalysis, 2016, 333, 115-126.	6.2	147
14	Determination of dispersion of precious metals on CeO2-containing supports. Applied Catalysis A: General, 2005, 293, 91-96.	4.3	145
15	Thermodynamic evaluation of methanol steam reforming for hydrogen production. Journal of Power Sources, 2006, 161, 87-94.	7.8	134
16	Effects of electrolyte in dye-sensitized solar cells and evaluation by impedance spectroscopy. Electrochimica Acta, 2006, 51, 5286-5294.	5.2	119
17	Cu-based spinel catalysts CuB2O4 (B=Fe, Mn, Cr, Ga, Al, Fe0.75Mn0.25) for steam reforming of dimethyl ether. Applied Catalysis A: General, 2008, 341, 139-145.	4.3	115
18	Effect of precious metal addition to Ni-YSZ cermet on reforming of CH4 and electrochemical activity as SOFC anode. Catalysis Today, 2003, 84, 217-222.	4.4	113

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19	Low-temperature methane oxidation over oxide-supported Pd catalysts: inhibitory effect of water vapor. Applied Catalysis A: General, 2002, 232, 23-28.	4.3	112
20	Kinetic studies of hydrodeoxygenation of 2-methyltetrahydrofuran on a Ni2P/SiO2 catalyst at medium pressure. Journal of Catalysis, 2014, 311, 17-27.	6.2	112
21	Influence of preparation method and additive for Cuâ€"Mn spinel oxide catalyst on water gas shift reaction of reformed fuels. Applied Catalysis A: General, 2005, 279, 59-66.	4.3	105
22	Influence of solidâ€"acid catalysts on steam reforming and hydrolysis of dimethyl ether for hydrogen production. Applied Catalysis A: General, 2006, 304, 40-48.	4.3	104
23	Mechanistic study and catalyst development for selective carbon monoxide methanation. Catalysis Science and Technology, 2015, 5, 3061-3070.	4.1	102
24	Water gas shift reaction over Cu-based mixed oxides for CO removal from the reformed fuels. Applied Catalysis A: General, 2003, 242, 287-295.	4.3	101
25	CO removal from reformed fuel over Cu/ZnO/Al2O3 catalysts prepared by impregnation and coprecipitation methods. Applied Catalysis A: General, 2003, 238, 11-18.	4.3	94
26	Ag addition to CuO-ZrO 2 catalysts promotes methanol synthesis via CO 2 hydrogenation. Journal of Catalysis, 2017, 351, 107-118.	6.2	93
27	Chemical interaction between Pt and SnO and influence on adsorptive properties of carbon monoxide. Applied Catalysis A: General, 2006, 298, 181-187.	4.3	89
28	Support effect on complete oxidation of volatile organic compounds over Ru catalysts. Applied Catalysis B: Environmental, 2008, 81, 56-63.	20.2	87
29	Internal Reforming of SOFCs. Journal of the Electrochemical Society, 2007, 154, B234.	2.9	86
30	Water gas shift reaction of reformed fuel over supported Ru catalysts. Applied Catalysis A: General, 2003, 245, 343-351.	4.3	84
31	Cu Species Incorporated into Amorphous ZrO₂ with High Activity and Selectivity in CO₂-to-Methanol Hydrogenation. Journal of Physical Chemistry C, 2018, 122, 5430-5442.	3.1	83
32	Crystal structure and surface species of CuFe2O4 spinel catalysts in steam reforming of dimethyl ether. Applied Catalysis B: Environmental, 2009, 92, 341-350.	20.2	82
33	Study of Ru Ni/TiO2 catalysts for selective CO methanation. Applied Catalysis B: Environmental, 2013, 140-141, 258-264.	20.2	82
34	Electrochemical oxidation of CO over tin oxide supported platinum catalysts. Journal of Power Sources, 2006, 155, 152-156.	7.8	80
35	Intermediate-Temperature Fuel Cell Employing CsH[sub 2]PO[sub 4]âˆ•SiP[sub 2]O[sub 7]-Based Composite Electrolytes. Journal of the Electrochemical Society, 2006, 153, A339.	2.9	80
36	A comparative study of solid acids in hydrolysis and steam reforming of dimethyl ether. Applied Catalysis A: General, 2007, 333, 114-121.	4.3	80

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37	Impedance analysis for dye-sensitized solar cells with a three-electrode system. Journal of Electroanalytical Chemistry, 2005, 577, 339-348.	3.8	74
38	Strong chemical interaction between PdO and SnO2 and the influence on catalytic combustion of methane. Applied Catalysis A: General, 2003, 252, 205-214.	4.3	73
39	Long-term durability of Ni/TiO2 and Ruâ€“Ni/TiO2 catalysts for selective CO methanation. Journal of Power Sources, 2014, 264, 59-66.	7.8	73
40	Impedance analysis for dye-sensitized solar cells with a reference electrode. Journal of Electroanalytical Chemistry, 2006, 588, 59-67.	3.8	70
41	Deactivation and regeneration behaviors of copper spinelâ€“alumina composite catalysts in steam reforming of dimethyl ether. Journal of Catalysis, 2008, 256, 37-44.	6.2	70
42	Effect of reduction pretreatment and support materials on selective CO methanation over supported Ru catalysts. Applied Catalysis A: General, 2011, 404, 149-154.	4.3	70
43	Diagnosis of chaotic dynamics of bubble motion in a bubble column. Chemical Engineering Science, 1997, 52, 3741-3745.	3.8	69
44	Sponge Ni catalyst with high activity in CO2 methanation. International Journal of Hydrogen Energy, 2017, 42, 30126-30134.	7.1	69
45	Dehydrogenation of Methylcyclohexane To Produce High-Purity Hydrogen Using Membrane Reactors with Amorphous Silica Membranes. Industrial & Engineering Chemistry Research, 2010, 49, 11287-11293.	3.7	65
46	Current-Voltage Characteristics and Impedance Analysis of Solid Oxide Fuel Cells for Mixed H[sub 2] and CO Gases. Journal of the Electrochemical Society, 2002, 149, A227.	2.9	64
47	Review on Mechanisms of Gas Permeation through Inorganic Membranes. Journal of the Japan Petroleum Institute, 2011, 54, 298-309.	0.6	64
48	An Intermediate Temperature Proton-Conducting Electrolyte Based on a CsH2PO4 / SiP2O7 Composite. Electrochemical and Solid-State Letters, 2005, 8, A256-A258.	2.2	61
49	Thermodynamic analysis of carbon formation boundary and reforming performance for steam reforming of dimethyl ether. Journal of Power Sources, 2007, 164, 73-79.	7.8	61
50	Production of Phenol and Cresol from Guaiacol on Nickel Phosphide Catalysts Supported on Acidic Supports. Topics in Catalysis, 2015, 58, 201-210.	2.8	56
51	Effect of Thermal Treatment on Activity and Durability of CuFe₂O₄â€“Al₂O₃ Composite Catalysts for Steam Reforming of Dimethyl Ether. Angewandte Chemie - International Edition, 2008, 47, 9314-9317.	13.8	54
52	Effect of metal addition to Ru/TiO2 catalyst on selective CO methanation. Catalysis Today, 2014, 232, 16-21.	4.4	54
53	Role of trace chlorine in Ni/TiO2 catalyst for CO selective methanation in reformate gas. Applied Catalysis B: Environmental, 2015, 174-175, 486-495.	20.2	54
54	Utilization of hexagonal boron nitride as a solid acidâ€“base bifunctional catalyst. Journal of Catalysis, 2017, 355, 176-184.	6.2	54

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55	Flame spray pyrolysis makes highly loaded Cu nanoparticles on ZrO2 for CO2-to-methanol hydrogenation. Chemical Engineering Journal, 2020, 381, 122750.	12.7	54
56	CO removal from reformed fuels over Cu and precious metal catalysts. Applied Catalysis A: General, 2003, 246, 117-124.	4.3	51
57	CO₂â€toâ€Methanol Hydrogenation on Zirconiaâ€Supported Copper Nanoparticles: Reaction Intermediates and the Role of the Metalâ€"Support Interface. Angewandte Chemie, 2017, 129, 2358-2363.	2.0	51
58	Effects of preparation conditions of Ni/TiO2 catalysts for selective CO methanation in the reformate gas. Applied Catalysis A: General, 2013, 452, 174-178.	4.3	50
59	N₂O Pulse Titration of Ni/Î±-Al₂O₃ Catalysts: A New Technique Applicable to Nickel Surface-Area Determination of Nickel-Based Catalysts. Journal of Physical Chemistry C, 2013, 117, 14652-14658.	3.1	50
60	Catalytic hydrogen production from dimethyl ether over CuFe2O4 spinel-based composites: Hydrogen reduction and metal dopant effects. Catalysis Today, 2008, 138, 157-161.	4.4	49
61	Catalytic abatement of acetaldehyde over oxide-supported precious metal catalysts. Applied Catalysis B: Environmental, 2008, 78, 158-165.	20.2	48
62	Low-Temperature Complete Oxidation of Ethyl Acetate Over CeO2-Supported Precious Metal Catalysts. Topics in Catalysis, 2009, 52, 464-469.	2.8	48
63	Preparation of Monodisperse Chitosan Microcapsules with Hollow Structures Using the SPG Membrane Emulsification Technique. Langmuir, 2010, 26, 14854-14860.	3.5	48
64	Activation of Pt/SnO2 catalyst for catalytic oxidation of volatile organic compounds. Catalysis Today, 2010, 157, 415-419.	4.4	46
65	Methanol synthesis <i>via</i> CO₂ hydrogenation over CuOâ€"ZrO₂ prepared by two-nozzle flame spray pyrolysis. Catalysis Science and Technology, 2018, 8, 2056-2060.	4.1	45
66	Partial oxidation of CH4 and C3H8 over hexaaluminate-type oxides. Applied Catalysis A: General, 2005, 281, 61-67.	4.3	44
67	Electrochemical properties of MH2PO4/SiP2O7-based electrolytes (M=alkaline metal) for use in intermediate-temperature fuel cells. Solid State Ionics, 2007, 178, 1512-1516.	2.7	44
68	Ligand and Ensemble Effects in Bimetallic NiFe Phosphide Catalysts for the Hydrodeoxygenation of 2-Methyltetrahydrofuran. Topics in Catalysis, 2012, 55, 969-980.	2.8	44
69	What Are the Best Active Sites for CO₂ Methanation over Ni/CeO₂?. Energy & Fuels, 2021, 35, 5241-5251.	5.1	44
70	Catalytic Combustion of Volatile Organic Compounds on Supported Precious Metal Catalysts. Topics in Catalysis, 2003, 23, 159-162.	2.8	43
71	Partial oxidation of methane over Ni catalysts based on hexaaliminate- or perovskite-type oxides. Applied Catalysis A: General, 2003, 247, 125-131.	4.3	43
72	Effect of reductionâ€"oxidation treatment on the catalytic activity over tin oxide supported platinum catalysts. Science and Technology of Advanced Materials, 2006, 7, 524-530.	6.1	43

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73	Sintering and redispersion of platinum catalysts supported on tin oxide. Applied Catalysis B: Environmental, 2009, 89, 65-72.	20.2	43
74	Limiting mechanisms in catalytic steam reforming of dimethyl ether. Applied Catalysis B: Environmental, 2010, 97, 21-27.	20.2	43
75	Effect of Ru and Ni ratio on selective CO methanation over Ruâ€“Ni/TiO2. Fuel, 2014, 129, 219-224.	6.4	43
76	Effect of Ag loading on CO2-to-methanol hydrogenation over Ag/CuO/ZrO2. Catalysis Communications, 2018, 113, 41-45.	3.3	42
77	Effects of ball-milling treatment on physicochemical properties and solid base activity of hexagonal boron nitrides. Catalysis Science and Technology, 2019, 9, 302-309.	4.1	42
78	Nanoscopic Observation of Strong Chemical Interaction between Pt and Tin Oxide. Journal of Physical Chemistry C, 2007, 111, 16470-16476.	3.1	41
79	A role of components in Pt-ZrO2/Al2O3 as a sorbent for removal of NO and NO2. Applied Catalysis A: General, 2002, 226, 23-30.	4.3	40
80	Composite effects of silicon pyrophosphate as a supporting matrix for CsH5(PO4)2 electrolytes at intermediate temperatures. Electrochimica Acta, 2006, 51, 3719-3723.	5.2	40
81	Effect of Support Materials on the Selective Methanation of CO over Ru Catalysts. Topics in Catalysis, 2010, 53, 707-711.	2.8	39
82	Degradation and regeneration of copper-iron spinel and zeolite composite catalysts in steam reforming of dimethyl ether. Applied Catalysis A: General, 2010, 378, 234-242.	4.3	39
83	Permeation properties of silica-zirconia composite membranes supported on porous alumina substrates. Journal of Membrane Science, 2017, 526, 409-416.	8.2	39
84	Hydrodeoxygenation of gamma-valerolactone on transition metal phosphide catalysts. Catalysis Science and Technology, 2017, 7, 281-292.	4.1	39
85	CsH₂PO₄/Polyvinylidene Fluoride Composite Electrolytes for Intermediate Temperature Fuel Cells. Journal of the Electrochemical Society, 2014, 161, F451-F457.	2.9	38
86	Temperature and humidity dependence of the electrode polarization in intermediate-temperature fuel cells employing CsH2PO4/SiP2O7-based composite electrolytes. Journal of Power Sources, 2008, 179, 497-503.	7.8	37
87	Transmission electron microscopic observation on reduction process of copperâ€“iron spinel catalyst for steam reforming of dimethyl ether. Applied Catalysis B: Environmental, 2008, 80, 156-167.	20.2	37
88	Active Sites on Zn_{<i>x</i>}Zr_{1â€“<i>x</i>}O_{2â€“<i>x</i>} Solid Solution Catalysts for CO₂-to-Methanol Hydrogenation. ACS Catalysis, 2022, 12, 7748-7759.	11.2	37
89	Alkylamineâ€“silica hybrid membranes for carbon dioxide/methane separation. Journal of Membrane Science, 2015, 477, 161-171.	8.2	36
90	Proton conductivity and stability of CsHPWO electrolyte at intermediate temperatures. Solid State Ionics, 2005, 176, 1845-1848.	2.7	35

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91	Intercalationâ€Controlled Cyclodehydration of Sorbitol in Water over Layeredâ€Niobiumâ€Molybdate Solid Acid. ChemSusChem, 2014, 7, 748-752.	6.8	35
92	Kinetic and Infrared Spectroscopy Study of Hydrodeoxygenation of 2-Methyltetrahydrofuran on a Nickel Phosphide Catalyst at Atmospheric Pressure. ACS Catalysis, 2016, 6, 7701-7709.	11.2	35
93	A study of various zeolites and CuFe2O4 spinel composite catalysts in steam reforming and hydrolysis of dimethyl ether. International Journal of Hydrogen Energy, 2011, 36, 1433-1441.	7.1	34
94	CsH2PO4/Epoxy Composite Electrolytes for Intermediate Temperature Fuel Cells. Electrochimica Acta, 2015, 169, 219-226.	5.2	34
95	Catalytic performance enhancement by heat treatment of CuFe2O4 spinel and Î³-alumina composite catalysts for steam reforming of dimethyl ether. Applied Catalysis A: General, 2009, 365, 71-78.	4.3	33
96	Catalytic combustion of ethyl acetate and nano-structural changes of ruthenium catalysts supported on tin oxide. Applied Catalysis B: Environmental, 2010, 97, 120-126.	20.2	33
97	Preparation and Characterization of CO-Tolerant Pt and Pd Anodes Modified with SnO[sub 2] Nanoparticles for PEFC. Journal of the Electrochemical Society, 2007, 154, B1132.	2.9	32
98	Preparation of silica-modified TiO2 and application to dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 184, 78-85.	3.9	31
99	Reforming activity and carbon deposition on cermet catalysts for fuel electrodes of solid oxide fuel cells. Catalysis Today, 2009, 146, 154-159.	4.4	31
100	Mixed matrix membranes using SAPO-34/polyetherimide for carbon dioxide/methane separation. Separation and Purification Technology, 2015, 148, 38-48.	7.9	31
101	Ammonia synthesis at intermediate temperatures in solid-state electrochemical cells using cesium hydrogen phosphate based electrolytes and noble metal catalysts. International Journal of Hydrogen Energy, 2017, 42, 26843-26854.	7.1	31
102	Surface Sites in Cu-Nanoparticles: Chemical Reactivity or Microscopy?. Journal of Physical Chemistry Letters, 2016, 7, 3259-3263.	4.6	30
103	Hydrodeoxygenation of Î³-valerolactone on bimetallic NiMo phosphide catalysts. Journal of Catalysis, 2017, 353, 141-151.	6.2	30
104	Effects of Cu Precursor Types on the Catalytic Activity of Cu/ZrO₂ toward Methanol Synthesis via CO₂ Hydrogenation. Industrial & Engineering Chemistry Research, 2019, 58, 19434-19445.	3.7	30
105	Catalytic activity of oxide-supported Pd catalysts on a honeycomb for low-temperature methane oxidation. Applied Catalysis A: General, 2003, 239, 169-179.	4.3	29
106	Selective Methanation of CO in Reformate Gas over Ni/TiO2 Catalyst. Chemistry Letters, 2010, 39, 972-973.	1.3	29
107	Impedance Analysis of Electronic Transport in Dye-sensitized Solar Cells. Electrochemistry, 2002, 70, 675-680.	1.4	28
108	Three Preparation Methods for Monodispersed Chitosan Microspheres Using the Shirasu Porous Glass Membrane Emulsification Technique and Mechanisms of Microsphere Formation. Industrial & Engineering Chemistry Research, 2010, 49, 3236-3241.	3.7	28

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109	Development of inorganicâ€"organic hybrid membranes for carbon dioxide/methane separation. Journal of Membrane Science, 2014, 471, 402-411.	8.2	28
110	Development of NO sorbents tolerant to sulfur oxides. Journal of Catalysis, 2006, 238, 449-457.	6.2	27
111	Development of Novel Proton Conductors Consisting of Solid Acid/pyrophosphate Composite for Intermediate-temperature Fuel Cells. Journal of the Japan Petroleum Institute, 2010, 53, 1-11.	0.6	27
112	Preparation of silver nanoparticles using the SPG membrane emulsification technique. Journal of Membrane Science, 2010, 354, 1-5.	8.2	27
113	Synthesis and characterization of hydrogen selective silica membranes prepared by chemical vapor deposition of vinyltriethoxysilane. Journal of Membrane Science, 2018, 550, 1-8.	8.2	26
114	Oxidative Dehydrogenation of Ethane Using Ball-milled Hexagonal Boron Nitride. Chemistry Letters, 2018, 47, 1090-1093.	1.3	26
115	Ru nanoparticles supported on amorphous ZrO₂for CO₂methanation. Catalysis Science and Technology, 2020, 10, 4522-4531.	4.1	26
116	Stability Enhancement in Ni-Promoted Cuâˆ'Fe Spinel Catalysts for Dimethyl Ether Steam Reforming. Journal of Physical Chemistry C, 2009, 113, 18455-18458.	3.1	25
117	Dimethyl ether steam reforming under daily start-up and shut-down (DSS)-like operation over CuFe2O4 spinel and alumina composite catalysts. Applied Catalysis A: General, 2011, 409-410, 91-98.	4.3	25
118	Fractal aspect of hydrodynamics in a three-phase fluidized bed. Chemical Engineering Science, 1996, 51, 2865-2870.	3.8	24
119	Direct-Alcohol/Hydrocarbon SOFCs : Comparison of Power Generation Characteristics for Various Fuels. Electrochemistry, 2002, 70, 18-22.	1.4	24
120	Efficient Epimerization of Aldoses Using Layered Niobium Molybdates. ChemSusChem, 2015, 8, 3769-3772.	6.8	24
121	Ammonia Synthesis by N₂and Steam Electrolysis in Solid-State Cells at 220Â°C and Atmospheric Pressure. Journal of the Electrochemical Society, 2016, 163, E282-E287.	2.9	24
122	Effects of pressure, contact time, permeance, and selectivity in membrane reactors: The case of the dehydrogenation of ethane. Separation and Purification Technology, 2018, 194, 197-206.	7.9	24
123	Influence of the Supporting Matrix on the Electrochemical Properties of CsH₅(PO₄)₂ Composites at Intermediate Temperatures. Journal of Physical Chemistry C, 2008, 112, 15532-15536.	3.1	23
124	Synthesis and characterization of a silica-alumina composite membrane and its application in a membrane reactor. Separation and Purification Technology, 2018, 195, 437-445.	7.9	23
125	Development of zirconia-based oxide sorbents for removal of NO and NO2. Applied Catalysis B: Environmental, 2002, 37, 107-115.	20.2	22
126	Nano-structural changes of SnO2-supported palladium catalysts by redox treatments. Applied Catalysis A: General, 2010, 379, 148-154.	4.3	22

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127	Mechanochemical Decomposition of Crystalline Cellulose in the Presence of Protonated Layered Niobium Molybdate Solid Acid Catalyst. ChemSusChem, 2018, 11, 888-896.	6.8	22
128	Influences of particle size and crystallinity of highly loaded CuO/ZrO₂ on CO₂ hydrogenation to methanol. AIChE Journal, 2019, 65, e16717.	3.6	22
129	Zr(IV) surface sites determine CH3OH formation rate on Cu/ZrO2/SiO2 - CO2 hydrogenation catalysts. Chinese Journal of Catalysis, 2019, 40, 1741-1748.	14.0	22
130	Direct Internal Steam Reforming at SOFC Anodes Composed of NiOâ€“SDC Composite Particles. Journal of the Electrochemical Society, 2007, 154, B460.	2.9	21
131	Stable equilibrium shift of methane steam reforming in membrane reactors with hydrogen-selective silica membranes. AIChE Journal, 2011, 57, 1882-1888.	3.6	21
132	Composite Effect on the Structure and Proton Conductivity for CsHSO[sub 4] Electrolytes at Intermediate Temperatures. Journal of the Electrochemical Society, 2006, 153, A1077.	2.9	20
133	Active Sites in Ni2P/USY Catalysts for the Hydrodeoxygenation of 2-Methyltetrahydrofuran. Topics in Catalysis, 2015, 58, 219-231.	2.8	20
134	Characterization of nonlinear dynamics in a circulating fluidized bed by rescaled range analysis and short-term predictability analysis. Chemical Engineering Science, 2001, 56, 6545-6552.	3.8	19
135	Characteristics of anodic polarization of solid oxide fuel cells under pressurized conditions. Solid State Ionics, 2004, 174, 111-117.	2.7	19
136	Activation of LSM Electrode Related to the Potential Oscillation under Cathodic Polarization. Journal of the Electrochemical Society, 2010, 157, B880.	2.9	19
137	Development of CO₂-to-Methanol Hydrogenation Catalyst by Focusing on the Coordination Structure of the Cu Species in Spinel-Type Oxide Mg_{1â€“<i>x</i>}Cu_{<i>x</i>}Al₂O₄. ACS Catalysis, 2020, 10, 15186-15194.	11.2	19
138	Degradation Behavior of Niâ€“ScSZ Cermet Anode under Various Humidified Conditions for Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2007, 154, B1237.	2.9	18
139	Preparation of Ru nanoparticles on TiO₂using selective deposition method and their application to selective CO methanation. Catalysis Science and Technology, 2014, 4, 26-29.	4.1	18
140	Correlation Between Conduction Behavior of CsH[sub 5](PO[sub 4])[sub 2] and Thermal History. Journal of the Electrochemical Society, 2008, 155, B958.	2.9	17
141	Perfluorocarbon-based supported liquid membranes for O2/N2 separation. Separation and Purification Technology, 2013, 116, 19-24.	7.9	17
142	Hydrogenation of 2,5-dimethylfuran on hexagonal-boron nitride- and silica-supported platinum catalysts. Applied Catalysis A: General, 2017, 548, 122-127.	4.3	17
143	Low-temperature chemical synthesis of intermetallic TiFe nanoparticles for hydrogen absorption. International Journal of Hydrogen Energy, 2021, 46, 22611-22617.	7.1	17
144	Silica-supported chromia-titania catalysts for selective formation of lactic acid from a triose in water. Applied Catalysis A: General, 2019, 570, 200-208.	4.3	16

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145	Simple Chemical Synthesis of Ternary Intermetallic RENi₂Si₂ (RE = Y, La) Nanoparticles in Molten LiClâ€“CaH₂ System. Materials Transactions, 2020, 61, 1037-1040.	1.2	16
146	Solid Oxide Fuel Cell as a Multi-fuel Applicable Power Generation Device. Journal of the Japan Petroleum Institute, 2004, 47, 225-238.	0.6	15
147	Carbon Deposition over Niâ€“ScSZ Anodes Subjected to Various Heat-Treatments for Internal Reforming of Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2008, 155, B1136.	2.9	15
148	Stability of CsH5(PO4)2-based composites at fixed temperatures and during heatingâ€“cooling cycles for solid-state intermediate temperature fuel cells. Journal of Power Sources, 2016, 306, 578-586.	7.8	15
149	Infrared spectroscopic studies of the hydrodeoxygenation of Î³-valerolactone on Ni2P/MCM-41. Catalysis Today, 2019, 323, 54-61.	4.4	15
150	Thick-film coating of hexaaluminate catalyst on ceramic substrates and its catalytic activity for high-temperature methane combustion. Applied Catalysis A: General, 2001, 218, 101-111.	4.3	14
151	High temperature catalytic combustion of methane and propane over hexaaluminate catalysts: NOx emission characteristics. Catalysis Today, 2003, 83, 223-231.	4.4	14
152	Comparison of phosphide catalysts prepared by temperature-programmed reduction and liquid-phase methods in the hydrodeoxygenation of 2-methylfuran. Applied Catalysis A: General, 2017, 548, 39-46.	4.3	14
153	Simple chemical synthesis of intermetallic Pt₂Y bulk nanopowder. Materials Advances, 2020, 1, 2202-2205.	5.4	14
154	How to scrutinize adsorbed intermediates observed by in situ spectroscopy: Analysis of Coverage Transients (ACT). Journal of Catalysis, 2021, 394, 273-283.	6.2	14
155	SOx sorptionâ€“desorption characteristics by ZrO2-based mixed oxides. Applied Catalysis A: General, 2004, 259, 191-197.	4.3	13
156	Novel anode materials for multi-fuel applicable solid oxide fuel cells. Journal of Alloys and Compounds, 2006, 408-412, 622-627.	5.5	13
157	Behavior of Carbon Deposition on Fuel Electrode and Subsequent Deterioration of Cell Performance During Internal Reforming Operation of SOFCs. ECS Transactions, 2007, 7, 1437-1445.	0.5	13
158	The optimal point within the Robeson upper boundary. Chemical Engineering Research and Design, 2015, 97, 109-119.	5.6	13
159	Nonlinear Modeling of Chaotic Dynamics in a Circulating Fluidized Bed by an Artificial Neural Network.. Journal of Chemical Engineering of Japan, 2001, 34, 107-113.	0.6	13
160	Sudden Deterioration in Performance During Discharge of Anode-supported Solid Oxide Fuel Cells. Electrochemistry, 2009, 77, 123-126.	1.4	12
161	CsH5(PO4)2 doped glass membranes for intermediate temperature fuel cells. Journal of Power Sources, 2014, 272, 1018-1029.	7.8	12
162	Novel Nickel Catalysts Based on Spinel-Type Mixed Oxides for Methane and Propane Steam Reforming. Journal of Chemical Engineering of Japan, 2014, 47, 530-535.	0.6	12

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164	Gas Separation Silica Membranes Prepared by Chemical Vapor Deposition of Methyl-Substituted Silanes. Membranes, 2019, 9, 144.	3.0	12
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