Shohei Tada

List of Publications by Year
in descending order

63 papers	2,756 citations	279798 23 h-index	175258 52 g-index
64 all docs	64 docs citations	64 times ranked	2732 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	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
4	Design of Interfacial Sites between Cu and Amorphous ZrO₂ Dedicated to CO₂-to-Methanol Hydrogenation. ACS Catalysis, 2018, 8, 7809-7819.	11.2	159
5	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
6	Mechanistic study and catalyst development for selective carbon monoxide methanation. Catalysis Science and Technology, 2015, 5, 3061-3070.	4.1	102
7	Ag addition to CuO-ZrO 2 catalysts promotes methanol synthesis via CO 2 hydrogenation. Journal of Catalysis, 2017, 351, 107-118.	6.2	93
8	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
9	Study of Ru Ni/TiO2 catalysts for selective CO methanation. Applied Catalysis B: Environmental, 2013, 140-141, 258-264.	20.2	82
10	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
11	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
12	Sponge Ni catalyst with high activity in CO2 methanation. International Journal of Hydrogen Energy, 2017, 42, 30126-30134.	7.1	69
13	Effect of metal addition to Ru/TiO2 catalyst on selective CO methanation. Catalysis Today, 2014, 232, 16-21.	4.4	54
14	Flame spray pyrolysis makes highly loaded Cu nanoparticles on ZrO2 for CO2-to-methanol hydrogenation. Chemical Engineering Journal, 2020, 381, 122750.	12.7	54
15	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
16	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
17	What Are the Best Active Sites for CO₂ Methanation over Ni/CeO₂?. Energy & Fuels, 2021, 35, 5241-5251.	5.1	44
18	Effect of Ru and Ni ratio on selective CO methanation over Ruâ€“Ni/TiO2. Fuel, 2014, 129, 219-224.	6.4	43

#	Article	IF	Citations
19	Effect of Ag loading on CO2-to-methanol hydrogenation over Ag/CuO/ZrO2. Catalysis Communications, 2018, 113, 41-45.	3.3	42
20	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
21	Surface Sites in Cu-Nanoparticles: Chemical Reactivity or Microscopy?. Journal of Physical Chemistry Letters, 2016, 7, 3259-3263.	4.6	30
22	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
23	Ru nanoparticles supported on amorphous ZrO₂for CO₂methanation. Catalysis Science and Technology, 2020, 10, 4522-4531.	4.1	26
24	Influences of particle size and crystallinity of highly loaded CuO/ZrO₂ on CO₂ hydrogenation to methanol. AIChE Journal, 2019, 65, e16717.	3.6	22
25	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
26	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
27	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
28	Search for solid acid catalysts aiming at the development of bifunctional tandem catalysts for the one-pass synthesis of lower olefins via CO2 hydrogenation. International Journal of Hydrogen Energy, 2021, 46, 36721-36730.	7.1	18
29	Low-temperature chemical synthesis of intermetallic TiFe nanoparticles for hydrogen absorption. International Journal of Hydrogen Energy, 2021, 46, 22611-22617.	7.1	17
30	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
31	Simple chemical synthesis of intermetallic Pt₂Y bulk nanopowder. Materials Advances, 2020, 1, 2202-2205.	5.4	14
32	Physical mixing of TiO₂ with sponge nickel creates new active sites for selective CO methanation. Catalysis Science and Technology, 2016, 6, 3713-3717.	4.1	13
33	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
34	Power-to-gas systems utilizing methanation reaction in solid oxide electrolysis cell cathodes: a model-based study. Sustainable Energy and Fuels, 2020, 4, 2691-2706.	4.9	12
35	Hydrogen Production by Steam Electrolysis in Solid Acid Electrolysis Cells. ChemSusChem, 2021, 14, 417-427.	6.8	12
36	Porous intermetallic Ni₂XAl (X = Ti or Zr) nanoparticles prepared from oxide precursors. Nanoscale Advances, 2021, 3, 1901-1905.	4.6	11

#	Article	IF	Citations
37	Low-temperature Synthesis of Single Phase Intermetallic NiZn Bulk Nanopowder in Molten LiClâ€“KCl with CaH₂ Reducing Agent. Journal of the Japan Petroleum Institute, 2020, 63, 380-387.	0.6	11
38	CO2 Hydrogenation: Supported Nanoparticles vs. Immobilized Catalysts. Chimia, 2015, 69, 759.	0.6	10
39	Mesoporous Intermetallic NiAl Nanocompound Prepared in a Molten LiCl Using Calcium Species as Templates. Chemistry Letters, 2020, 49, 341-343.	1.3	10
40	Regeneration behavior of reforming catalysts based on perovskite oxides LaM0.95Rh0.05O3 (M: Cr, Co,) Tj ETQq0 0 0 rgBT /Overlock 10	6.4	10
41	Influence of Reaction Temperature on CO2-to-methanol Hydrogenation over <i>M</i>ZrOx (<i>M</i> =) Tj ETQq1 1 0.784314 rgBT /Ov	1.3	10
42	Mechanochemical Effect in Mixing Sponge Copper with Amorphous ZrO₂Creates Effective Active Sites for Methanol Synthesis by CO₂Hydrogenation. Journal of Physical Chemistry C, 2021, 125, 8155-8162.	3.1	10
43	Effect of Sm Doping on CO₂-to-Methanol Hydrogenation of Cu/Amorphous-ZrO₂ Catalysts. Journal of Physical Chemistry C, 2021, 125, 15899-15909.	3.1	8
44	Ammonia synthesis using Fe/BZYâ€“RuO₂ catalysts and a caesium dihydrogen phosphate-based electrolyte at intermediate temperatures. Materials Advances, 2021, 2, 793-803.	5.4	8
45	High-performance anode for solid acid fuel cells prepared by mixing carbon substances with anode catalysts. International Journal of Hydrogen Energy, 2019, 44, 26545-26553.	7.1	7
46	Effects of Porosity and Ni/Al Molar Ratio in Niâ€“Al Oxide Precursors on Porous Intermetallic Nickel Aluminide Nanopowders Prepared by Chemical Route. Journal of Chemical Engineering of Japan, 2020, 53, 562-568.	0.6	7
47	Calcium-Modified Ni-SDC Anodes in Solid Oxide Fuel Cells for Direct Dry Reforming of Methane. Journal of the Electrochemical Society, 2020, 167, 134512.	2.9	5
48	Preparation and thermoelectric properties of Mg2Si0.9-xSnxGe0.1. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1704-1707.	0.8	4
49	Gas Diffusion Electrode With Large Amounts of Gas Diffusion Channel Using Hydrophobic Carbon Fiber: For Oxygen Reduction Reaction at Gas/Liquid Interfaces. Journal of Electrochemical Energy Conversion and Storage, 2017, 14, .	2.1	4
50	Low Ni-Containing Cermet Anodes of Solid Oxide Fuel Cells with Size-Controlled Samarium-Doped Ceria Particles. Journal of the Electrochemical Society, 2019, 166, F716-F723.	2.9	4
51	Chemical route to prepare nickel supported on intermetallic Ti₆Si₇Ni₁₆ nanoparticles catalyzing CO methanation. Nanoscale, 2021, 13, 16533-16542.	5.6	4
52	Dimethyl Ether Synthesis from CO₂â€“H₂ Mixture over Cu/Amorphous-ZrO₂ Mixed with FER-type Zeolite. Journal of the Japan Petroleum Institute, 2020, 63, 388-393.	0.6	3
53	Direct electrochemical synthesis of oxygenates from ethane using phosphate-based electrolysis cells. Chemical Communications, 2020, 56, 11199-11202.	4.1	2
54	An <i>in situ</i> DRIFTS study on nitrogen electrochemical reduction over an Fe/BaZr_{0.8}Y_{0.2}O_{3âˆ’<i>Î´</i>}-Ru catalyst at 220 Â°C in an electrolysis cell using a CsH₂PO₄/SiP₂O₇ electrolyte. RSC Advances, 2022, 12, 8474-8476.	3.6	2

#	Article	IF	Citations
55	Superior catalytic performance of intermetallic CaPt₂ nanoparticles supported on titanium group oxides in hydrogenation of ketones to alcohols. Chemical Communications, 2022, 58, 4795-4798.	4.1	2
56	Intermetallic YIr₂ nanoparticles with negatively charged Ir active sites for catalytic hydrogenation of cyclohexanone to cyclohexanol. Catalysis Science and Technology, 2022, 12, 3088-3093.	4.1	2
57	Understanding the structure of Cu-doped MgAl2O4 for CO2 hydrogenation catalyst precursor using experimental and computational approaches. International Journal of Hydrogen Energy, 2022, 47, 21369-21374.	7.1	2
58	Influence of Si/Al ratio of MOR type zeolites for bifunctional catalysts specific to the one-pass synthesis of lower olefins via CO2 hydrogenation. Catalysis Today, 2022, , .	4.4	2
59	Hydrogen Oxidation Activity of SOFC Anodes with Metal Oxide Addition. ECS Transactions, 2019, 91, 1837-1844.	0.5	1
60	Electrochemically promoted ammonia synthesis on an Fe/BaZr_{0.8}Y_{0.2}O_{3â˜’<i>Î´</i>} catalyst at ambient pressure. Sustainable Energy and Fuels, 2022, 6, 458-465.	4.9	1
61	Steam Reforming of Dimethyl Ether over Composite Catalysts of Supported Transition Metal Oxides and Cu/ZnO/Al₂O₃. Journal of the Japan Petroleum Institute, 2016, 59, 293-298.	0.6	0
62	Degradation Factors of Ni/TiO₂ Catalysts for Selective CO Methanation: Effect of Loss of Residual Cl on Catalyst. Journal of the Japan Petroleum Institute, 2018, 61, 80-86.	0.6	0
63	Dimethyl Ether Steam Reforming Utilizing Cu-based Catalysts Derived from Mg_{1â€“<i>x</i>}Cu_{<i>x</i>}Al₂O₄ and Î³-Al₂O₃. Journal of the Japan Petroleum Institute, 2021, 64, 226-237.	0.6	0