

# Shohei Tada

## List of Publications by Year in descending order

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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	Electrochemically promoted ammonia synthesis on an Fe/BaZr <sub>0.8</sub> Y <sub>0.2</sub> O <sub>3</sub> catalyst at ambient pressure. Sustainable Energy and Fuels, 2022, 6, 458-465.	4.9	1
2	An in situ DRIFTS study on nitrogen electrochemical reduction over an Fe/BaZr <sub>0.8</sub> Y <sub>0.2</sub> O <sub>3</sub> -Ru catalyst at 220 °C in an electrolysis cell using a CsH <sub>2</sub> PO <sub>4</sub> /SiP <sub>2</sub> O <sub>7</sub> electrolyte. RSC Advances, 2022, 12, 8474-8476.	3.6	2
3	Superior catalytic performance of intermetallic CaPt <sub>2</sub> nanoparticles supported on titanium group oxides in hydrogenation of ketones to alcohols. Chemical Communications, 2022, 58, 4795-4798.	4.1	2
4	Intermetallic Yr <sub>2</sub> 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
5	Understanding the structure of Cu-doped MgAl <sub>2</sub> O <sub>4</sub> for CO <sub>2</sub> hydrogenation catalyst precursor using experimental and computational approaches. International Journal of Hydrogen Energy, 2022, 47, 21369-21374.	7.1	2
6	Active Sites on Zn <sub>x</sub> Zr <sub>1-x</sub> O <sub>2</sub> Solid Solution Catalysts for CO <sub>2</sub> -to-Methanol Hydrogenation. ACS Catalysis, 2022, 12, 7748-7759.	11.2	37
7	Influence of Si/Al ratio of MOR type zeolites for bifunctional catalysts specific to the one-pass synthesis of lower olefins via CO <sub>2</sub> hydrogenation. Catalysis Today, 2022, , .	4.4	2
8	Hydrogen Production by Steam Electrolysis in Solid Acid Electrolysis Cells. ChemSusChem, 2021, 14, 417-427.	6.8	12
9	What Are the Best Active Sites for CO <sub>2</sub> Methanation over Ni/CeO <sub>2</sub> ?. Energy & Fuels, 2021, 35, 5241-5251.	5.1	44
10	Influence of Reaction Temperature on CO <sub>2</sub> -to-methanol Hydrogenation over M <sub>1</sub> ZrO <sub>x</sub> (M = Ti, Zr, Hf) Catalysts. Journal of Physical Chemistry C, 2021, 125, 8155-8162.	1.3	10
11	Mechanochemical Effect in Mixing Sponge Copper with Amorphous ZrO <sub>2</sub> Creates Effective Active Sites for Methanol Synthesis by CO <sub>2</sub> Hydrogenation. Journal of Physical Chemistry C, 2021, 125, 8155-8162.	3.1	10
12	Low-temperature chemical synthesis of intermetallic TiFe nanoparticles for hydrogen absorption. International Journal of Hydrogen Energy, 2021, 46, 22611-22617.	7.1	17
13	Effect of Sm Doping on CO <sub>2</sub> -to-Methanol Hydrogenation of Cu/Amorphous-ZrO <sub>2</sub> Catalysts. Journal of Physical Chemistry C, 2021, 125, 15899-15909.	3.1	8
14	Search for solid acid catalysts aiming at the development of bifunctional tandem catalysts for the one-pass synthesis of lower olefins via CO <sub>2</sub> hydrogenation. International Journal of Hydrogen Energy, 2021, 46, 36721-36730.	7.1	18
15	Dimethyl Ether Steam Reforming Utilizing Cu-based Catalysts Derived from Mg <sub>1-x</sub> Cu <sub>x</sub> Al <sub>2</sub> O <sub>4</sub> and γ-Al <sub>2</sub> O <sub>3</sub> . Journal of the Japan Petroleum Institute, 2021, 64, 226-237.	0.6	0
16	Porous intermetallic Ni <sub>2</sub> XAl (X = Ti or Zr) nanoparticles prepared from oxide precursors. Nanoscale Advances, 2021, 3, 1901-1905.	4.6	11
17	Ammonia synthesis using Fe/BZY-RuO <sub>2</sub> catalysts and a caesium dihydrogen phosphate-based electrolyte at intermediate temperatures. Materials Advances, 2021, 2, 793-803.	5.4	8
18	Chemical route to prepare nickel supported on intermetallic Ti <sub>6</sub> Si <sub>7</sub> Ni <sub>16</sub> nanoparticles catalyzing CO methanation. Nanoscale, 2021, 13, 16533-16542.	5.6	4

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19	Flame spray pyrolysis makes highly loaded Cu nanoparticles on ZrO <sub>2</sub> for CO <sub>2</sub> -to-methanol hydrogenation. <i>Chemical Engineering Journal</i> , 2020, 381, 122750.	12.7	54
20	Simple chemical synthesis of intermetallic Pt <sub>2</sub> Y bulk nanopowder. <i>Materials Advances</i> , 2020, 1, 2202-2205.	5.4	14
21	Direct electrochemical synthesis of oxygenates from ethane using phosphate-based electrolysis cells. <i>Chemical Communications</i> , 2020, 56, 11199-11202.	4.1	2
22	Development of CO <sub>2</sub> -to-Methanol Hydrogenation Catalyst by Focusing on the Coordination Structure of the Cu Species in Spinel-Type Oxide Mg <sub>1-x</sub> Cu <sub>x</sub> Al <sub>2</sub> O <sub>4</sub> . <i>ACS Catalysis</i> , 2020, 10, 15186-15194.	11.2	19
23	Mesoporous Intermetallic NiAl Nanocompound Prepared in a Molten LiCl Using Calcium Species as Templates. <i>Chemistry Letters</i> , 2020, 49, 341-343.	1.3	10
24	Regeneration behavior of reforming catalysts based on perovskite oxides LaMO <sub>0.95</sub> Rh <sub>0.05</sub> O <sub>3</sub> (M: Cr, Co). <i>Journal of Catalysis</i> , 2020, 381, 122750.	8.4	10
25	Power-to-gas systems utilizing methanation reaction in solid oxide electrolysis cell cathodes: a model-based study. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2691-2706.	4.9	12
26	Ru nanoparticles supported on amorphous ZrO <sub>2</sub> for CO <sub>2</sub> methanation. <i>Catalysis Science and Technology</i> , 2020, 10, 4522-4531.	4.1	26
27	Calcium-Modified Ni-SDC Anodes in Solid Oxide Fuel Cells for Direct Dry Reforming of Methane. <i>Journal of the Electrochemical Society</i> , 2020, 167, 134512.	2.9	5
28	Effects of Porosity and Ni/Al Molar Ratio in Ni-Al Oxide Precursors on Porous Intermetallic Nickel Aluminate Nanopowders Prepared by Chemical Route. <i>Journal of Chemical Engineering of Japan</i> , 2020, 53, 562-568.	0.6	7
29	Low-temperature Synthesis of Single Phase Intermetallic NiZn Bulk Nanopowder in Molten LiCl-KCl with CaH <sub>2</sub> ; Reducing Agent. <i>Journal of the Japan Petroleum Institute</i> , 2020, 63, 380-387.	0.6	11
30	Dimethyl Ether Synthesis from CO <sub>2</sub> -H <sub>2</sub> Mixture over Cu/Amorphous-ZrO <sub>2</sub> Mixed with FER-type Zeolite. <i>Journal of the Japan Petroleum Institute</i> , 2020, 63, 388-393.	0.6	3
31	Simple Chemical Synthesis of Ternary Intermetallic RENi <sub>2</sub> Si <sub>2</sub> (RE = Y, La) Nanoparticles in Molten LiCl-KCl-CaH <sub>2</sub> System. <i>Materials Transactions</i> , 2020, 61, 1037-1040.	1.2	16
32	Low Ni-Containing Cermet Anodes of Solid Oxide Fuel Cells with Size-Controlled Samarium-Doped Ceria Particles. <i>Journal of the Electrochemical Society</i> , 2019, 166, F716-F723.	2.9	4
33	Influences of particle size and crystallinity of highly loaded CuO/ZrO <sub>2</sub> on CO <sub>2</sub> hydrogenation to methanol. <i>AIChE Journal</i> , 2019, 65, e16717.	3.6	22
34	Zr(IV) surface sites determine CH <sub>3</sub> OH formation rate on Cu/ZrO <sub>2</sub> /SiO <sub>2</sub> - CO <sub>2</sub> hydrogenation catalysts. <i>Chinese Journal of Catalysis</i> , 2019, 40, 1741-1748.	14.0	22
35	Hydrogen Oxidation Activity of SOFC Anodes with Metal Oxide Addition. <i>ECS Transactions</i> , 2019, 91, 1837-1844.	0.5	1
36	Effects of Cu Precursor Types on the Catalytic Activity of Cu/ZrO <sub>2</sub> toward Methanol Synthesis via CO <sub>2</sub> Hydrogenation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 19434-19445.	3.7	30

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37	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
38	Cu Species Incorporated into Amorphous ZrO <sub>2</sub> with High Activity and Selectivity in CO <sub>2</sub> -to-Methanol Hydrogenation. Journal of Physical Chemistry C, 2018, 122, 5430-5442.	3.1	83
39	Methanol synthesis <i>via</i> CO <sub>2</sub> hydrogenation over CuO@ZrO <sub>2</sub> prepared by two-nozzle flame spray pyrolysis. Catalysis Science and Technology, 2018, 8, 2056-2060.	4.1	45
40	Effect of Ag loading on CO <sub>2</sub> -to-methanol hydrogenation over Ag/CuO/ZrO <sub>2</sub> . Catalysis Communications, 2018, 113, 41-45.	3.3	42
41	Degradation Factors of Ni/TiO <sub>2</sub> 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
42	Design of Interfacial Sites between Cu and Amorphous ZrO <sub>2</sub> Dedicated to CO <sub>2</sub> -to-Methanol Hydrogenation. ACS Catalysis, 2018, 8, 7809-7819.	11.2	159
43	Isolated Zr Surface Sites on Silica Promote Hydrogenation of CO <sub>2</sub> to CH <sub>3</sub> OH in Supported Cu Catalysts. Journal of the American Chemical Society, 2018, 140, 10530-10535.	13.7	170
44	CO <sub>2</sub> -to-Methanol Hydrogenation on Zirconia-Supported Copper Nanoparticles: Reaction Intermediates and the Role of the Metal-Support Interface. Angewandte Chemie - International Edition, 2017, 56, 2318-2323.	13.8	435
45	Ag addition to CuO-ZrO <sub>2</sub> catalysts promotes methanol synthesis via CO <sub>2</sub> hydrogenation. Journal of Catalysis, 2017, 351, 107-118.	6.2	93
46	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
47	Sponge Ni catalyst with high activity in CO <sub>2</sub> methanation. International Journal of Hydrogen Energy, 2017, 42, 30126-30134.	7.1	69
48	Steam Reforming of Dimethyl Ether over Composite Catalysts of Supported Transition Metal Oxides and Cu/ZnO/Al <sub>2</sub> O <sub>3</sub> . Journal of the Japan Petroleum Institute, 2016, 59, 293-298.	0.6	0
49	Physical mixing of TiO <sub>2</sub> with sponge nickel creates new active sites for selective CO methanation. Catalysis Science and Technology, 2016, 6, 3713-3717.	4.1	13
50	Surface Sites in Cu-Nanoparticles: Chemical Reactivity or Microscopy?. Journal of Physical Chemistry Letters, 2016, 7, 3259-3263.	4.6	30
51	CO <sub>2</sub> Hydrogenation: Supported Nanoparticles vs. Immobilized Catalysts. Chimia, 2015, 69, 759.	0.6	10
52	Mechanistic study and catalyst development for selective carbon monoxide methanation. Catalysis Science and Technology, 2015, 5, 3061-3070.	4.1	102
53	Long-term durability of Ni/TiO <sub>2</sub> and Ru@Ni/TiO <sub>2</sub> catalysts for selective CO methanation. Journal of Power Sources, 2014, 264, 59-66.	7.8	73
54	Preparation of Ru nanoparticles on TiO <sub>2</sub> using selective deposition method and their application to selective CO methanation. Catalysis Science and Technology, 2014, 4, 26-29.	4.1	18

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55	Effect of metal addition to Ru/TiO <sub>2</sub> catalyst on selective CO methanation. <i>Catalysis Today</i> , 2014, 232, 16-21.	4.4	54
56	Promotion of CO <sub>2</sub> methanation activity and CH <sub>4</sub> selectivity at low temperatures over Ru/CeO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> catalysts. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 10090-10100.	7.1	152
57	Effect of Ru and Ni ratio on selective CO methanation over Ru-Ni/TiO <sub>2</sub> . <i>Fuel</i> , 2014, 129, 219-224.	6.4	43
58	Novel Nickel Catalysts Based on Spinel-Type Mixed Oxides for Methane and Propane Steam Reforming. <i>Journal of Chemical Engineering of Japan</i> , 2014, 47, 530-535.	0.6	12
59	Study of Ru Ni/TiO <sub>2</sub> catalysts for selective CO methanation. <i>Applied Catalysis B: Environmental</i> , 2013, 140-141, 258-264.	20.2	82
60	N <sub>2</sub> O Pulse Titration of Ni $\gamma$ -Al <sub>2</sub> O <sub>3</sub> Catalysts: A New Technique Applicable to Nickel Surface-Area Determination of Nickel-Based Catalysts. <i>Journal of Physical Chemistry C</i> , 2013, 117, 14652-14658.	3.1	50
61	Preparation and thermoelectric properties of Mg <sub>2</sub> Si <sub>0.9-x</sub> Sn <sub>x</sub> Ge <sub>0.1</sub> . <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 1704-1707.	0.8	4
62	Ni/CeO <sub>2</sub> catalysts with high CO <sub>2</sub> methanation activity and high CH <sub>4</sub> selectivity at low temperatures. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 5527-5531.	7.1	478
63	Effect of reduction pretreatment and support materials on selective CO methanation over supported Ru catalysts. <i>Applied Catalysis A: General</i> , 2011, 404, 149-154.	4.3	70