

# Tetsuo Umegaki

## List of Publications by Year in descending order

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90  
papers

1,872  
citations

430442

18  
h-index

276539

41  
g-index

91  
all docs

91  
docs citations

91  
times ranked

1764  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of colored calcium carbonate and its color. Journal of the Ceramic Society of Japan, 2022, 130, 94-99.	0.5	0
2	The porous composite BN@SHS made of boron nitride, silica hollow spheres and SiO <sub>2</sub> /B interface. Journal of Porous Materials, 2022, 29, 651-662.	1.3	1
3	Influence of the Pore Structure of Molybdcic Acid Immobilized Silica-alumina Hollow Spheres on Acid-promoted Hydrogen Evolution from Ammonia Borane. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2022, 101, 76-82.	0.2	0
4	Fabrication of copper supported porous silica-alumina hollow spheres for catalytic decomposition of nitrous oxide. New Journal of Chemistry, 2022, 46, 11166-11173.	1.4	4
5	Immobilized molybdcic acid on porous silica-alumina hollow sphere particles for acid-promoted hydrolytic hydrogen evolution from ammonia borane. International Journal of Hydrogen Energy, 2021, 46, 6659-6668.	3.8	3
6	Influence of Pore Structure of Silica Coated on Copper-Zinc Oxide-Based Catalyst for Carbon Dioxide into Methanol. Topics in Catalysis, 2021, 64, 576-581.	1.3	3
7	Control of aragonite formation and its crystal shape in CaCl <sub>2</sub> -Na <sub>2</sub> CO <sub>3</sub> -H <sub>2</sub> O reaction system. Journal of Crystal Growth, 2021, 559, 125964.	0.7	4
8	Synthesis of mesoporous silica-zirconia composite hollow spheres with enhanced activity toward hydrolysis of ammonia borane. Microporous and Mesoporous Materials, 2020, 294, 109839.	2.2	2
9	<i>In situ</i> synthesized hollow spheres of a silica-ruthenium-nickel composite catalyst for the hydrolytic dehydrogenation of ammonia borane. New Journal of Chemistry, 2020, 44, 450-455.	1.4	16
10	Influence of swelling agents on pore size distributions of porous silica-alumina hollow sphere particles in acid-promoted hydrolytic generation of hydrogen from ammonia borane. International Journal of Hydrogen Energy, 2020, 45, 19531-19538.	3.8	5
11	Fabrication of Hollow Spheres of Copper-Cerium Composite Oxide for Catalytic Decomposition of Nitrous Oxide. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2020, 99, 52-56.	0.2	2
12	Control of pore size in shell of hollow silica-alumina composite spheres for hydrolytic dehydrogenation of ammonia borane. Journal of Porous Materials, 2019, 26, 611-617.	1.3	9
13	Fabrication of copper supported on hollow silica-alumina composite spheres for catalytic decomposition of nitrous oxide. Journal of Sol-Gel Science and Technology, 2019, 92, 715-722.	1.1	6
14	Effect of pH on formation of single-phase vaterite. Journal of Crystal Growth, 2019, 517, 35-38.	0.7	19
15	The Coordination Structure and Activity of Hollow Silica-alumina Composite Spheres for Hydrogen Evolution from Aqueous Ammonia Borane Solution. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2019, 98, 312-317.	0.2	0
16	SYNTHESIS OF ULTRAFINE HYDROXYAPATITE IN A Ca(OH) <sub>2</sub> -H <sub>3</sub> PO <sub>4</sub> -H <sub>2</sub> O REACTION SYSTEM USING ULTRASOUND IRRADIATION. Phosphorus Research Bulletin, 2019, 35, 42-47.	0.1	1
17	Preparation of Spherical Molybdosilicic Acid-silica Composite Particles for Acid Promoted Hydrolytic Dehydrogenation of Ammonia Borane. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2018, 97, 240-244.	0.2	0
18	Influence of the Water/Titanium Alkoxide Ratio on the Morphology and Catalytic Activity of Titania-Nickel Composite Particles for the Hydrolysis of Ammonia Borane. ChemistryOpen, 2018, 7, 611-616.	0.9	5

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19	Fabrication of porous nickel-silica composite particles through catalytic hydrogen evolution reaction from aqueous ammonia borane solution. <i>Functional Materials Letters</i> , 2018, 11, 1850078.	0.7	0
20	Influence of Nitrilotriacetic Acid (NTA) Addition on the Activity of Spherical Silica-nickel Particles for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2018, 97, 330-335.	0.2	0
21	Development of Plasmonic Cu <sub>2</sub> O/Cu Composite Arrays as Visible- and Near-Infrared-Light-Driven Plasmonic Photocatalysts. <i>Langmuir</i> , 2017, 33, 5685-5695.	1.6	40
22	Influence of preparation conditions on morphology of in-situ synthesized hollow ruthenium-silica composite spheres for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 81, 711-716.	1.1	4
23	Fabrication of hollow silica-nickel particles for the hydrolytic dehydrogenation of ammonia borane using rape pollen templates. <i>New Journal of Chemistry</i> , 2017, 41, 992-996.	1.4	11
24	Influence of aluminum precursors on structure and acidic properties of hollow silica-alumina composite spheres, and their activity for hydrolytic dehydrogenation of ammonia borane. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 22318-22324.	3.8	14
25	The influence of the pore structure of hollow silica-alumina composite spheres on their activity for hydrolytic dehydrogenation of ammonia borane. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 1568-1574.	3.0	14
26	Influence of alcohol solvents on morphology of hollow silica-alumina composite spheres and their activity for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 82, 92-100.	1.1	7
27	Influence of morphology of hollow silica-alumina composite spheres on their activity for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Advanced Ceramics</i> , 2017, 6, 368-375.	8.9	6
28	Fabrication of Spherical Silica Particles from Sodium Silicate and Their Application as Support Materials for Ruthenium-based Catalysts for the Hydrogenation of Supercritical Carbon Dioxide into Formic Acid. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2017, 96, 332-338.	0.2	4
29	Catalytic Properties of Palladium Nanoparticles for Hydrogenation of Carbon Dioxide into Formic Acid. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2017, 96, 487-492.	0.2	2
30	Influence of Morphology of Silica-Alumina Composites on Their Activity for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2016, 95, 480-486.	0.2	16
31	Fabrication of hollow spheres of Co <sub>3</sub> O <sub>4</sub> for catalytic oxidation of carbon monoxide. <i>Journal of Alloys and Compounds</i> , 2016, 663, 68-76.	2.8	14
32	Preparation of hollow mesoporous silica spheres with immobilized silicomolybdic acid and their catalytic activity for the hydrolytic dehydrogenation of ammonia borane. <i>Microporous and Mesoporous Materials</i> , 2016, 223, 152-156.	2.2	12
33	Metallic ruthenium nanoparticles for hydrogenation of supercritical carbon dioxide. <i>Catalysis Science and Technology</i> , 2016, 6, 409-412.	2.1	41
34	Influence Of Hollow Silica-Alumina Composite Spheres Prepared Using Various Amount Of L(+)-Arginine On Their Activity For Hydrolytic Dehydrogenation Of Ammonia Borane. <i>Advanced Materials Letters</i> , 2016, 7, 339-343.	0.3	4
35	Influence of pH on immobilization of molybdosilicic acid on hollow silica spheres and promotion of hydrolytic dehydrogenation of ammonia borane. <i>Transactions of the Materials Research Society of Japan</i> , 2015, 40, 179-182.	0.2	2
36	Porous Materials for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Materials</i> , 2015, 8, 4512-4534.	1.3	22

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37	Effect of Oxide Coating on Performance of Copper-Zinc Oxide-Based Catalyst for Methanol Synthesis via Hydrogenation of Carbon Dioxide. <i>Materials</i> , 2015, 8, 7738-7744.	1.3	11
38	Influence of Si/Al molar ratio of hollow silica-alumina composite spheres on their activity for hydrolytic dehydrogenation of ammonia borane. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 6151-6157.	3.8	12
39	Effect Of Silica Coating On Performance Of Copper-zinc Oxide Based Catalyst For Methanol Synthesis. <i>Advanced Materials Letters</i> , 2015, 6, 1026-1030.	0.3	4
40	Control of Particle Size of Hollow Silica-alumina Composite Spheres and Their Activity for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2014, 93, 511-516.	0.2	12
41	Effect of RE <sup>3+</sup> Codopant on Afterglow Time of SrS:Eu <sup>2+</sup> , RE <sup>3+</sup> . <i>Key Engineering Materials</i> , 2014, 617, 131-134.	0.4	0
42	Control of Shell Thickness of Hollow Silica-Alumina Composite Spheres and their Activity for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Key Engineering Materials</i> , 2014, 617, 166-169.	0.4	5
43	Decontamination of Radioactive Cesium from Sea Sludge Using Microbial Activity. <i>Key Engineering Materials</i> , 2014, 617, 117-120.	0.4	1
44	Influence of preparation conditions of hollow titania-nickel composite spheres on their catalytic activity for hydrolytic dehydrogenation of ammonia borane. <i>Materials Research Bulletin</i> , 2014, 52, 117-121.	2.7	7
45	Synthesis of orange-red-emitting Eu <sup>2+</sup> , Pr <sup>3+</sup> codoped SrS long afterglow phosphor. <i>Journal of Luminescence</i> , 2014, 146, 42-45.	1.5	22
46	Influence of preparation conditions of hollow silica-nickel composite spheres on their catalytic activity for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Alloys and Compounds</i> , 2014, 588, 615-621.	2.8	15
47	Fabrication of Hollow Silica-Alumina Composite Spheres Using L(+)-Arginine and their Catalytic Performance for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Key Engineering Materials</i> , 2014, 617, 170-173.	0.4	1
48	Fabrication of hollow silica-alumina composite spheres and their activity for hydrolytic dehydrogenation of ammonia borane. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 17136-17143.	3.8	19
49	Fabrication of hollow silica-zirconia composite spheres and their activity for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Alloys and Compounds</i> , 2014, 608, 261-265.	2.8	12
50	Influence of preparation conditions on the morphology of hollow silica-alumina composite spheres and their activity for hydrolytic dehydrogenation of ammonia borane. <i>Microporous and Mesoporous Materials</i> , 2014, 196, 349-353.	2.2	21
51	Influence of Preparation Conditions on the Morphology and Catalytic Activity of Hollow Spheres of Copper-Cerium Composite Oxide for Oxidation of Carbon Monoxide. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2014, 93, 1244-1250.	0.2	4
52	Influence of Preparation Conditions on Morphology of in-situ Synthesized Hollow Nickel-silica Spheres for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2014, 93, 323-327.	0.2	4
53	Effect of Solvents on Morphology of Hollow Nickel-Silica Composite Spheres and Their Catalytic Performance for Hydrolytic Dehydrogenation of Ammonia Borane. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2014, 93, 703-709.	0.2	1
54	Fabrication of hollow nickel-silica composite spheres using l(+)-arginine and their catalytic performance for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Molecular Catalysis A</i> , 2013, 371, 1-7.	4.8	23

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55	Fabrication of hollow metal oxide–nickel composite spheres and their catalytic activity for hydrolytic dehydrogenation of ammonia borane. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 1397-1404.	3.8	30
56	In situ synthesized spherical nickel–silica composite particles for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Alloys and Compounds</i> , 2013, 580, S313-S316.	2.8	12
57	Fluorescent properties of a blue-to green-emitting Ce <sup>3+</sup> , Tb <sup>3+</sup> codoped amorphous calcium silicate phosphors. <i>Journal of Luminescence</i> , 2012, 132, 2992-2996.	1.5	19
58	Fluorescent properties of a green- to red-emitting Eu <sup>3+</sup> , Tb <sup>3+</sup> codoped amorphous calcium silicate phosphor. <i>Journal of Luminescence</i> , 2012, 132, 2648-2652.	1.5	13
59	Effect of l-arginine on the catalytic activity and stability of nickel nanoparticles for hydrolytic dehydrogenation of ammonia borane. <i>Journal of Power Sources</i> , 2012, 216, 363-367.	4.0	14
60	Co–SiO <sub>2</sub> nanosphere-catalyzed hydrolytic dehydrogenation of ammonia borane for chemical hydrogen storage. <i>Journal of Power Sources</i> , 2010, 195, 8209-8214.	4.0	76
61	Bimetallic Au–Ni Nanoparticles Embedded in SiO <sub>2</sub> Nanospheres: Synergetic Catalysis in Hydrolytic Dehydrogenation of Ammonia Borane. <i>Chemistry - A European Journal</i> , 2010, 16, 3132-3137.	1.7	196
62	Hydrogen Production via Steam Reforming of Ethyl Alcohol over Palladium/Indium Oxide Catalyst. <i>Research Letters in Physical Chemistry</i> , 2009, 2009, 1-4.	0.3	8
63	Development of Advanced Reforming System for H <sub>2</sub> Station Using CO Converter Equipped with CO <sub>2</sub> Selective Membrane II. <i>ECS Transactions</i> , 2009, 17, 589-598.	0.3	0
64	Boron- and nitrogen-based chemical hydrogen storage materials. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 2303-2311.	3.8	337
65	Preparation and catalysis of poly(N-vinyl-2-pyrrolidone) (PVP) stabilized nickel catalyst for hydrolytic dehydrogenation of ammonia borane. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 3816-3822.	3.8	170
66	Hollow Ni–SiO <sub>2</sub> nanosphere-catalyzed hydrolytic dehydrogenation of ammonia borane for chemical hydrogen storage. <i>Journal of Power Sources</i> , 2009, 191, 209-216.	4.0	138
67	Hydrogen production via steam reforming of ethyl alcohol over nano-structured indium oxide catalysts. <i>Journal of Power Sources</i> , 2008, 179, 566-570.	4.0	48
68	Development of a high performance Cu-based ternary oxide catalyst for oxidative steam reforming of methanol using an artificial neural network. <i>Applied Catalysis A: General</i> , 2008, 351, 210-216.	2.2	17
69	Response to Sha's Comment on Our Article Titled "Optimization of the Temperature Profile of a Temperature Gradient Reactor for DME Synthesis Using a Simple Genetic Algorithm Assisted by a Neural Network". <i>Energy &amp; Fuels</i> , 2007, 21, 381-382.	2.5	4
70	Artificial Neural Network-Aided Catalyst Research for Low-Pressure DME Synthesis from Syngas. <i>ACS Symposium Series</i> , 2007, , 211-224.	0.5	1
71	Design and Development of Cu–Zn Oxide Catalyst for Direct Dimethyl Ether Synthesis Using an Artificial Neural Network and Physicochemical Properties of Elements. <i>Industrial &amp; Engineering Chemistry Research</i> , 2006, 45, 4905-4910.	1.8	16
72	Screening Using Artificial Neural Network of Additives for Cu-Zn Oxide Catalyst for Methanol Synthesis from Syngas. <i>Journal of the Japan Petroleum Institute</i> , 2005, 48, 145-149.	0.4	7

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73	Combinatorial Catalysis for Hydrogen Production from Ethanol. Materials Research Society Symposia Proceedings, 2005, 894, 1.	0.1	0
74	Production of Synthesis Gas by Catalytic Partial Oxidation of Tar Derived from Pyrolysis of Spent Malt. Journal of the Japan Petroleum Institute, 2005, 48, 162-172.	0.4	6
75	Optimization of Cu oxide catalysts for methanol synthesis by combinatorial tools using 96 well microplates, artificial neural network and genetic algorithm. Catalysis Today, 2004, 89, 455-464.	2.2	51
76	Optimization of Cu oxide catalyst for methanol synthesis under high CO <sub>2</sub> partial pressure using combinatorial tools. Applied Catalysis A: General, 2004, 262, 207-214.	2.2	17
77	Simultaneous Optimization of Preparation Conditions and Composition of the Methanol Synthesis Catalyst by an All-Encompassing Calculation on an Artificial Neural Network. Industrial & Engineering Chemistry Research, 2004, 43, 3282-3288.	1.8	21
78	Design of Low Cost Pipe Fitting Device for High-throughput Screening Reactor for Screening of Methanol Synthesis Catalyst. Journal of the Japan Petroleum Institute, 2004, 47, 218-221.	0.4	1
79	Optimization of Catalyst for Methanol Synthesis by a Combinatorial Approach Using a Parallel Activity Test and Genetic Algorithm Assisted by a Neural Network. Energy & Fuels, 2003, 17, 850-856.	2.5	31
80	Optimization of the Temperature Profile of a Temperature Gradient Reactor for DME Synthesis Using a Simple Genetic Algorithm Assisted by a Neural Network. Energy & Fuels, 2003, 17, 836-841.	2.5	39
81	60 Simple GA program developed for optimization of methanol and dimethyl ether synthesis. Studies in Surface Science and Catalysis, 2003, 145, 291-294.	1.5	2
82	Design of Cu-Zn-Al-Sc Oxide Catalyst for Methanol Synthesis Using Genetic Algorithm Based on Radial Basis Function Network as the Evaluation Function. Journal of the Japan Petroleum Institute, 2003, 46, 189-195.	0.4	13
83	Application of Genetic Algorithm to Optimize the Composition of Cu-Zn-Al-Sc Oxide Catalyst for Methanol Synthesis. Journal of the Japan Petroleum Institute, 2003, 46, 181-188.	0.4	12
84	Catalyst Development for Methanol Synthesis Using Parallel Reactors for High-throughput Screening Based on a 96 Well Microplate System. Journal of the Japan Petroleum Institute, 2003, 46, 328-334.	0.4	14
85	Optimization of Cu-based Oxide Catalyst for Methanol Synthesis by the Activity Map Envelope Derived from a Neural Network. Journal of the Japan Petroleum Institute, 2003, 46, 383-386.	0.4	6
86	Optimization of Cu-based Oxide Catalyst for Methanol Synthesis Using a Neural Network Trained by Design of Experiment. Journal of the Japan Petroleum Institute, 2003, 46, 387-391.	0.4	10
87	Low-pressure DME synthesis with Cu-based hybrid catalysts using temperature-gradient reactor. Fuel, 2002, 81, 1605-1609.	3.4	49
88	Optimization of Cu-Zn-Al Oxide Catalyst for Methanol Synthesis Using Genetic Algorithm and Neural Network as Its Evaluation Function.. Journal of the Japan Petroleum Institute, 2002, 45, 192-195.	0.4	13
89	Optimization of Cu-Zn-Al Oxide Catalyst for Methanol Synthesis Using Genetic Algorithm.. Sekiyu Gakkaishi (Journal of the Japan Petroleum Institute), 2001, 44, 327-331.	0.1	14
90	Role of Interparticle Space in Hollow Spheres of Silica-Based Solid Acids on Their Acidic Properties and Activity for Hydrolytic Dehydrogenation of Ammonia Borane. , 0, , .		0