Shigeo Ted Oyama

List of Publications by Year
in descending order

40 papers	2,796 citations	331259 21 h-index	288905 40 g-index
40 all docs	40 docs citations	40 times ranked	3024 citing authors

#	Article	IF	Citations
1	Correlations in palladium membranes for hydrogen separation: A review. Journal of Membrane Science, 2011, 375, 28-45.	4.1	536
2	Hydrodeoxygenation of guaiacol as model compound for pyrolysis oil on transition metal phosphide hydroprocessing catalysts. Applied Catalysis A: General, 2011, 391, 305-310.	2.2	500
3	The active site of nickel phosphide catalysts for the hydrodesulfurization of 4,6-DMDBT. Journal of Catalysis, 2008, 258, 393-400.	3.1	248
4	Studies of the synthesis of transition metal phosphides and their activity in the hydrodeoxygenation of a biofuel model compound. Journal of Catalysis, 2012, 294, 184-198.	3.1	214
5	Upgrading of pyrolysis bio-oil using nickel phosphide catalysts. Journal of Catalysis, 2016, 333, 115-126.	3.1	147
6	Effect of composition and promoters in Au/TS-1 catalysts for direct propylene epoxidation using H2 and O2. Catalysis Today, 2009, 147, 186-195.	2.2	95
7	Nature of active sites in Ni2P hydrotreating catalysts as probed by iron substitution. Applied Catalysis B: Environmental, 2015, 164, 204-216.	10.8	91
8	EXAFS measurements of a working catalyst in the liquid phase: An in situ study of a Ni2P hydrodesulfurization catalyst. Journal of Catalysis, 2006, 241, 20-24.	3.1	81
9	Ultrathin, hydrogen-selective silica membranes deposited on alumina-graded structures prepared from size-controlled boehmite sols. Journal of Membrane Science, 2007, 306, 216-227.	4.1	76
10	Kinetics of propylene epoxidation using H2 and O2 over a gold/mesoporous titanosilicate catalyst. Catalysis Today, 2007, 123, 189-197.	2.2	75
11	Unprecedented selectivity to the direct desulfurization (DDS) pathway in a highly active FeNi bimetallic phosphide catalyst. Journal of Catalysis, 2012, 285, 1-5.	3.1	73
12	Effect of gold oxidation state on the epoxidation and hydrogenation of propylene on Au/TS-1. Journal of Catalysis, 2011, 280, 40-49.	3.1	60
13	The influence of recycling non-condensable gases in the fractional catalytic pyrolysis of biomass. Bioresource Technology, 2012, 111, 482-490.	4.8	59
14	Gas-phase epoxidation of propylene through radicals generated by silica-supported molybdenum oxide. Applied Catalysis A: General, 2007, 316, 142-151.	2.2	56
15	Enhanced reactivity of direct propylene epoxidation with H2 and O2 over Ge-modified Au/TS-1 catalysts. Journal of Catalysis, 2009, 267, 202-206.	3.1	55
16	Mechanistic study of propane selective oxidation with H2 and O2 on Au/TS-1. Journal of Catalysis, 2008, 257, 32-42.	3.1	46
17	Ligand and Ensemble Effects in Bimetallic NiFe Phosphide Catalysts for the Hydrodeoxygenation of 2-Methyltetrahydrofuran. Topics in Catalysis, 2012, 55, 969-980.	1.3	44
18	Effects of ball-milling treatment on physicochemical properties and solid base activity of hexagonal boron nitrides. Catalysis Science and Technology, 2019, 9, 302-309.	2.1	42

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19	Experimental and kinetic studies of the ethanol steam reforming reaction equipped with ultrathin Pd and Pdâ€“Cu membranes for improved conversion and hydrogen yield. Journal of Membrane Science, 2012, 409-410, 222-231.	4.1	36
20	Scanning Tunneling Microscopy and Photoemission Electron Microscopy Studies on Single Crystal Ni₂P Surfaces. Journal of Nanoscience and Nanotechnology, 2009, 9, 195-201.	0.9	30
21	Gas-phase radical generation by Ti oxide clusters supported on silica: application to the direct epoxidation of propylene to propylene oxide using molecular oxygen as an oxidant. Catalysis Letters, 2006, 110, 47-51.	1.4	23
22	Design of a high-temperature and high-pressure liquid flow cell for x-ray absorption fine structure measurements under catalytic reaction conditions. Review of Scientific Instruments, 2008, 79, 014101.	0.6	21
23	Platinumâ€Like Catalytic Behavior of Au⁺. ChemCatChem, 2010, 2, 1582-1586.	1.8	16
24	Operando QEXAFS studies of Ni₂P during thiophene hydrodesulfurization: direct observation of Niâ€”S bond formation under reaction conditions. Journal of Synchrotron Radiation, 2012, 19, 205-209.	1.0	15
25	Infrared spectroscopic studies of the hydrodeoxygenation of Î³-valerolactone on Ni2P/MCM-41. Catalysis Today, 2019, 323, 54-61.	2.2	15
26	A New One-Pot Sequential Reduction-Deposition Method for the synthesis of Silica-supported NiPt and CuPt Bimetallic Catalysts. Applied Catalysis A: General, 2020, 591, 117371.	2.2	14
27	The Direct Partial Oxidation of Methane to Dimethyl Ether over Pt/Y₂O₃Catalysts Using an NO/O₂Shuttle. Angewandte Chemie - International Edition, 2020, 59, 16644-16650.	7.2	14
28	Surface-Initiated Gas-Phase Epoxidation of Propylene with Molecular Oxygen by Silica-Supported Molybdenum Oxide: Effects of Addition of C3H8 or NO and Reactor Design. Catalysis Letters, 2008, 121, 33-38.	1.4	13
29	The optimal point within the Robeson upper boundary. Chemical Engineering Research and Design, 2015, 97, 109-119.	2.7	13
30	Combined In Situ XAFS and FTIR Study of the Hydrodeoxygenation Reaction of 2-Methyltetrahydrofuran on Ni₂P/SiO₂. Journal of Physical Chemistry C, 2019, 123, 7633-7643.	1.5	12
31	Gas Separation Silica Membranes Prepared by Chemical Vapor Deposition of Methyl-Substituted Silanes. Membranes, 2019, 9, 144.	1.4	12
32	Interplay of Kinetics and Thermodynamics in Catalytic Steam Methane Reforming over Ni/MgO-SiO2. Industrial & Engineering Chemistry Research, 2017, 56, 1148-1158.	1.8	11
33	Synthesis of Silica Membranes by Chemical Vapor Deposition Using a Dimethyldimethoxysilane Precursor. Membranes, 2020, 10, 50.	1.4	10
34	The influence of solvent polarity on the dehydrogenation of isoborneol over a Cu/ZnO/Al2O3 catalyst. Catalysis Today, 2019, 323, 44-53.	2.2	9
35	Applicability of the Delplot method for the determination of catalytic reaction sequences: Hydrodeoxygenation of Î³-valerolactone on Ni2P/MCM-41. Chemical Engineering Science, 2020, 223, 115697.	1.9	9
36	Simulation study of single-gas permeation of carbon dioxide and methane in hybrid inorganicâ€“organic membrane. Journal of Membrane Science, 2012, 387-388, 30-39.	4.1	8

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37	Fabrication and Evaluation of Trimethylmethoxysilane (TMMOS)-Derived Membranes for Gas Separation. Membranes, 2019, 9, 123.	1.4	8
38	Calcium-Modified Ni-SDC Anodes in Solid Oxide Fuel Cells for Direct Dry Reforming of Methane. Journal of the Electrochemical Society, 2020, 167, 134512.	1.3	5
39	Direct electrochemical synthesis of oxygenates from ethane using phosphate-based electrolysis cells. Chemical Communications, 2020, 56, 11199-11202.	2.2	2
40	The Direct Partial Oxidation of Methane to Dimethyl Ether over Pt/Y 2 O 3 Catalysts Using an NO/O 2 Shuttle. Angewandte Chemie, 2020, 132, 16787-16793.	1.6	2