Takato Mitsudome

List of Publications by Year
in descending order

87 papers	5,048 citations	101496 36 h-index	91828 69 g-index
106 all docs	106 docs citations	106 times ranked	5263 citing authors

#	Article	IF	Citations
1	Phosphorus-Alloying as a Powerful Method for Designing Highly Active and Durable Metal Nanoparticle Catalysts for the Deoxygenation of Sulfoxides: Ligand and Ensemble Effects of Phosphorus. Jacs Au, 2022, 2, 419-427.	3.6	12
2	Selective Hydrodeoxygenation of Esters to Unsymmetrical Ethers over a Zirconium Oxide-Supported Ptâ€“Mo Catalyst. Jacs Au, 2022, 2, 665-672.	3.6	12
3	H 2 â€Free Selective Dehydroxymethylation of Primary Alcohols over Palladium Nanoparticle Catalysts. ChemCatChem, 2021, 13, 1135-1139.	1.8	4
4	Ni₂P Nanoalloy as an Airâ€Stable and Versatile Hydrogenation Catalyst in Water: Pâ€Alloying Strategy for Designing Smart Catalysts. Chemistry - A European Journal, 2021, 27, 4439-4446.	1.7	18
5	Air-Stable and Reusable Cobalt Phosphide Nanoalloy Catalyst for Selective Hydrogenation of Furfural Derivatives. ACS Catalysis, 2021, 11, 750-757.	5.5	60
6	A copper nitride catalyst for the efficient hydroxylation of aryl halides under ligand-free conditions. Organic and Biomolecular Chemistry, 2021, 19, 6593-6597.	1.5	7
7	Support-Boosted Nickel Phosphide Nanoalloy Catalysis in the Selective Hydrogenation of Maltose to Maltitol. ACS Sustainable Chemistry and Engineering, 2021, 9, 6347-6354.	3.2	19
8	Single-Crystal Cobalt Phosphide Nanorods as a High-Performance Catalyst for Reductive Amination of Carbonyl Compounds. Jacs Au, 2021, 1, 501-507.	3.6	34
9	A nickel phosphide nanoalloy catalyst for the C-3 alkylation of oxindoles with alcohols. Scientific Reports, 2021, 11, 10673.	1.6	10
10	Efficient Dâ€Xylose Hydrogenation to Dâ€Xylitol over a Hydrotalciteâ€Supported Nickel Phosphide Nanoparticle Catalyst. European Journal of Inorganic Chemistry, 2021, 2021, 3327-3331.	1.0	9
11	Hydrotalcite-Supported Cobalt Phosphide Nanorods as a Highly Active and Reusable Heterogeneous Catalyst for Ammonia-Free Selective Hydrogenation of Nitriles to Primary Amines. ACS Sustainable Chemistry and Engineering, 2021, 9, 11238-11246.	3.2	16
12	Air-stable and reusable nickel phosphide nanoparticle catalyst for the highly selective hydrogenation of <scp>d</scp>-glucose to <scp>d</scp>-sorbitol. Green Chemistry, 2021, 23, 2010-2016.	4.6	34
13	Nickel phosphide nanoalloy catalyst for the selective deoxygenation of sulfoxides to sulfides under ambient H₂ pressure. Organic and Biomolecular Chemistry, 2020, 18, 8827-8833.	1.5	18
14	Pd/Cu-Catalyzed Dehydrogenative Coupling of Dimethyl Phthalate: Synchrotron Radiation Sheds Light on the Cu Cycle Mechanism. ACS Catalysis, 2020, 10, 5909-5919.	5.5	9
15	A cobalt phosphide catalyst for the hydrogenation of nitriles. Chemical Science, 2020, 11, 6682-6689.	3.7	66
16	Unique Catalysis of Nickel Phosphide Nanoparticles to Promote the Selective Transformation of Biofuranic Aldehydes into Diketones in Water. ACS Catalysis, 2020, 10, 4261-4267.	5.5	71
17	Air-stable and reusable cobalt ion-doped titanium oxide catalyst for alkene hydrosilylation. Green Chemistry, 2019, 21, 4566-4570.	4.6	14
18	XAS Analysis of Reactions of (Arylimido)vanadium(V) Dichloride Complexes Containing Anionic NHC That Contains a Weakly Coordinating B(C₆F₅)₃ Moiety (WCA-NHC) or Phenoxide Ligands with Al Alkyls: A Potential Ethylene Polymerization Catalyst with WCA-NHC Ligands. ACS Omega, 2019, 4, 18833-18845.	1.6	33

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19	Solution XAS Analysis for Exploring Active Species in Syndiospecific Styrene Polymerization and 1-Hexene Polymerization Using Half-Titanoceneâ€“MAO Catalysts: Significant Changes in the Oxidation State in the Presence of Styrene. Organometallics, 2019, 38, 4497-4507.	1.1	16
20	Efficient Synthesis of Benzofurans via Crossâ€Coupling of Catechols with Hydroxycoumarins Using O₂ as an Oxidant Catalyzed by AlPO₄â€Supported Rh Nanoparticle. ChemistrySelect, 2019, 4, 11394-11397.	0.7	4
21	Direct observation of catalytically active species in reaction solution by X-ray absorption spectroscopy (XAS). Japanese Journal of Applied Physics, 2019, 58, 100502.	0.8	7
22	Solution XAS Analysis of Various (Imido)vanadium(V) Dichloride Complexes Containing Monodentate Anionic Ancillary Donor Ligands: Effect of Aluminium Cocatalyst in Ethylene/Norbornene (Co)polymerization. Journal of the Japan Petroleum Institute, 2018, 61, 282-287.	0.4	10
23	Oxidative cross-coupling reaction of catechols with active methylene compounds in an aqueous medium using an AlPO₄-supported Ru catalyst. Catalysis Science and Technology, 2018, 8, 5401-5405.	2.1	4
24	Mechanistic Insights on Pd/Cu-Catalyzed Dehydrogenative Coupling of Dimethyl Phthalate. ACS Catalysis, 2018, 8, 5827-5841.	5.5	12
25	Solution XAS Analysis for Exploring the Active Species in Homogeneous Vanadium Complex Catalysis. Journal of the Physical Society of Japan, 2018, 87, 061014.	0.7	14
26	Synthesis of (Adamantylimido)vanadium(V) Dimethyl Complex Containing (2-Anilidomethyl)pyridine Ligand and Selected Reactions: Exploring the Oxidation State of the Catalytically Active Species in Ethylene Dimerization. Organometallics, 2017, 36, 530-542.	1.1	33
27	Effective management of polyethers through depolymerization to symmetric and unsymmetric glycol diesters using a proton-exchanged montmorillonite catalyst. Green Chemistry, 2017, 19, 2612-2619.	4.6	7
28	A Titanium Dioxide Supported Gold Nanoparticle Catalyst for the Selective Nâ€Formylation of Functionalized Amines with Carbon Dioxide and Hydrogen. ChemCatChem, 2017, 9, 3632-3636.	1.8	53
29	New Routes for Refinery of Biogenic Platform Chemicals Catalyzed by Cerium Oxide-supported Ruthenium Nanoparticles in Water. Scientific Reports, 2017, 7, 14007.	1.6	15
30	Mild Hydrogenation of Amides to Amines over a Platinumâ€Vanadium Bimetallic Catalyst. Angewandte Chemie, 2017, 129, 9509-9513.	1.6	20
31	Mild Hydrogenation of Amides to Amines over a Platinumâ€Vanadium Bimetallic Catalyst. Angewandte Chemie - International Edition, 2017, 56, 9381-9385.	7.2	73
32	A dual-functional heterogeneous ruthenium catalyst for the green one-pot synthesis of biphenols. Catalysis Science and Technology, 2017, 7, 3205-3209.	2.1	4
33	Metal-Support Cooperative Catalysts for Environmentally Benign Molecular Transformations. Chemical Record, 2017, 17, 4-26.	2.9	25
34	Synthesis and Structural Analysis of (Imido)vanadium Dichloride Complexes Containing 2-(2â€²-Benz-imidazolyl)pyridine Ligands: Effect of Al Cocatalyst for Efficient Ethylene (Co)polymerization. ACS Omega, 2017, 2, 8660-8673.	1.6	26
35	Effect of Al Cocatalyst in Ethylene and Ethylene/Norbornene (Co)polymerization by (Imido)vanadium Dichloride Complexes Containing Anionic <i>N</i>-Heterocyclic Carbenes Having Weakly Coordinating Borate Moiety. Journal of the Japan Petroleum Institute, 2017, 60, 256-262.	0.4	34
36	On-demand Hydrogen Production from Organosilanes at Ambient Temperature Using Heterogeneous Gold Catalysts. Scientific Reports, 2016, 6, 37682.	1.6	14

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37	Synthesis of tetraline derivatives through depolymerization of polyethers with aromatic compounds using a heterogeneous titanium-exchanged montmorillonite catalyst. RSC Advances, 2016, 6, 89231-89233.	1.7	4
38	One-Pot Transformation of Levulinic Acid to 2-Methyltetrahydrofuran Catalyzed by Ptâ€“Mo/H-Î² in Water. ACS Sustainable Chemistry and Engineering, 2016, 4, 682-685.	3.2	71
39	Green, Multiâ€Gram Oneâ€Step Synthesis of Coreâ€“Shell Nanocomposites in Water and Their Catalytic Application to Chemoselective Hydrogenations. Chemistry - A European Journal, 2016, 22, 17962-17966.	1.7	20
40	Depolymerization of Polyethers to Chloroesters Using Heterogeneous Proton-exchanged Montmorillonite Catalyst. ChemistrySelect, 2016, 1, 201-204.	0.7	3
41	O2-enhanced Catalytic Activity of Gold Nanoparticles in Selective Oxidation of Hydrosilanes to Silanols. Chemistry Letters, 2015, 44, 1062-1064.	0.7	21
42	Highly Efficient Dehydrogenative Coupling of Hydrosilanes with Amines or Amides Using Supported Gold Nanoparticles. Chemistry - A European Journal, 2015, 21, 3202-3205.	1.7	19
43	Selective Câ€“C Coupling Reaction of Dimethylphenol to Tetramethyldiphenoquinone Using Molecular Oxygen Catalyzed by Cu Complexes Immobilized in Nanospaces of Structurally-Ordered Materials. Molecules, 2015, 20, 3089-3106.	1.7	7
44	One-step Synthesis of Core-Gold/Shell-Ceria Nanomaterial and Its Catalysis for Highly Selective Semihydrogenation of Alkynes. Journal of the American Chemical Society, 2015, 137, 13452-13455.	6.6	185
45	Hydrogenation of Sulfoxides to Sulfides under Mild Conditions Using Ruthenium Nanoparticle Catalysts. Angewandte Chemie - International Edition, 2014, 53, 8348-8351.	7.2	54
46	Direct Transformation of Furfural to 1,2-Pentanediol Using a Hydrotalcite-Supported Platinum Nanoparticle Catalyst. ACS Sustainable Chemistry and Engineering, 2014, 2, 2243-2247.	3.2	131
47	Highly Efficient Deoxygenation of Sulfoxides Using Hydroxyapatite-supported Ruthenium Nanoparticles. Chemistry Letters, 2014, 43, 420-422.	0.7	19
48	Highly atom-efficient and chemoselective reduction of ketones in the presence of aldehydes using heterogeneous catalysts. Green Chemistry, 2013, 15, 2695.	4.6	11
49	Gold nanoparticle catalysts for selective hydrogenations. Green Chemistry, 2013, 15, 2636.	4.6	267
50	Regioselective oxidative coupling of 2,6-dimethylphenol to tetramethyldiphenoquinone using polyamine dendrimer-encapsulated Cu catalysts. RSC Advances, 2013, 3, 9662.	1.7	8
51	Highly Efficient Etherification of Silanes by Using a Gold Nanoparticle Catalyst: Remarkable Effect of O₂. Chemistry - A European Journal, 2013, 19, 14398-14402.	1.7	30
52	Gold nanoparticle-catalyzed cyclocarbonylation of 2-aminophenols. Green Chemistry, 2013, 15, 608.	4.6	24
53	Metalâ€“Ligand Coreâ€“Shell Nanocomposite Catalysts for the Selective Semihydrogenation of Alkynes. Angewandte Chemie - International Edition, 2013, 52, 1481-1485.	7.2	140
54	Advanced Coreâ€“Shell Nanoparticle Catalysts for Efficient Organic Transformations. ChemCatChem, 2013, 5, 1681-1691.	1.8	50

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55	Highly Atomâ€Efficient Oxidation of Electronâ€Deficient Internal Olefins to Ketones Using a Palladium Catalyst. Angewandte Chemie - International Edition, 2013, 52, 5961-5964.	7.2	49
56	Simple and Efficient 1,3â€Isomerization of Allylic Alcohols using a Supported Monomeric Vanadiumâ€Oxide Catalyst. ChemCatChem, 2013, 5, 2879-2882.	1.8	2
57	Coreâ€“Shell AgNP@CeO₂ Nanocomposite Catalyst for Highly Chemoselective Reductions of Unsaturated Aldehydes. Chemistry - A European Journal, 2013, 19, 5255-5258.	1.7	60
58	Size Selective Synthesis of Subnano Pd Clusters Using Core [Poly(propylene imine)]â€“Shell [Poly(benzyl) Tj ETQq0 0 0 rgBT /Overlock 1	0.7	1
59	Selective Hydrogenolysis of Glycerol to 1,2-Propanediol Using Heterogeneous Copper Nanoparticle Catalyst Derived from Cuâ€“Al Hydrotalcite. Chemistry Letters, 2013, 42, 729-731.	0.7	24
60	Remarkable Effect of Bases on Coreâ€“Shell AgNP@CeO2 Nanocomposite-catalyzed Highly Chemoselective Reduction of Unsaturated Aldehydes. Chemistry Letters, 2013, 42, 660-662.	0.7	14
61	Selective Hydrogenolysis of Glycerol to 1,3-Propanediol Catalyzed by Pt Nanoparticlesâ€“AlO<i>x</i>/WO3. Chemistry Letters, 2012, 41, 1720-1722.	0.7	56
62	Novel Catalysis in the Internal Nanocavity of Polyamine Dendrimer for Intramolecular Michael Reaction. Chemistry Letters, 2012, 41, 801-803.	0.7	6
63	Highly efficient double-carbonylation of amines to oxamides using gold nanoparticle catalysts. Chemical Communications, 2012, 48, 11733.	2.2	20
64	Direct synthesis of unsymmetrical ethers from alcohols catalyzed by titanium cation-exchanged montmorillonite. Green Chemistry, 2012, 14, 610.	4.6	33
65	Design of a Silverâ€“Cerium Dioxide Coreâ€“Shell Nanocomposite Catalyst for Chemoselective Reduction Reactions. Angewandte Chemie - International Edition, 2012, 51, 136-139.	7.2	258
66	Back Cover: Design of a Silver-Cerium Dioxide Core-Shell Nanocomposite Catalyst for Chemoselective Reduction Reactions (Angew. Chem. Int. Ed. 1/2012). Angewandte Chemie - International Edition, 2012, 51, 278-278.	7.2	2
67	Rhodium-grafted hydrotalcite catalyst for heterogeneous 1,4-addition reaction of organoboron reagents to electron deficient olefins. Green Chemistry, 2011, 13, 2416.	4.6	23
68	Highly Efficient Gold Nanoparticle Catalyzed Deoxygenation of Amides, Sulfoxides, and Pyridine <i>N</i>â€Oxides. Chemistry - A European Journal, 2011, 17, 1768-1772.	1.7	97
69	Wackerâ€Type Oxidation of Internal Olefins Using a PdCl₂/<i>N</i>,<i>N</i>â€Dimethylacetamide Catalyst System under Copperâ€Free Reaction Conditions. Angewandte Chemie - International Edition, 2010, 49, 1238-1240.	7.2	99
70	Roomâ€Temperature Deoxygenation of Epoxides with CO Catalyzed by Hydrotalciteâ€Supported Gold Nanoparticles in Water. Chemistry - A European Journal, 2010, 16, 11818-11821.	1.7	51
71	Titelbild: Wacker-Type Oxidation of Internal Olefins Using a PdCl2/N,N-Dimethylacetamide Catalyst System under Copper-Free Reaction Conditions (Angew. Chem. 7/2010). Angewandte Chemie, 2010, 122, 1189-1189.	1.6	0
72	Innentitelbild: Supported Gold and Silver Nanoparticles for Catalytic Deoxygenation of Epoxides into Alkenes (Angew. Chem. 32/2010). Angewandte Chemie, 2010, 122, 5518-5518.	1.6	0

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73	Cover Picture: Wacker-Type Oxidation of Internal Olefins Using a PdCl2/N,N-Dimethylacetamide Catalyst System under Copper-Free Reaction Conditions (Angew. Chem. Int. Ed. 7/2010). Angewandte Chemie - International Edition, 2010, 49, 1169-1169.	7.2	0
74	Supported Gold and Silver Nanoparticles for Catalytic Deoxygenation of Epoxides into Alkenes. Angewandte Chemie - International Edition, 2010, 49, 5545-5548.	7.2	117
75	Inside Cover: Supported Gold and Silver Nanoparticles for Catalytic Deoxygenation of Epoxides into Alkenes (Angew. Chem. Int. Ed. 32/2010). Angewandte Chemie - International Edition, 2010, 49, 5390-5390.	7.2	1
76	Creation of a high-valent manganese species on hydrotalcite and its application to the catalytic aerobic oxidation of alcohols. Green Chemistry, 2010, 12, 2142.	4.6	26
77	Efficient Aerobic Oxidation of Alcohols using a Hydrotalciteâ€Supported Gold Nanoparticle Catalyst. Advanced Synthesis and Catalysis, 2009, 351, 1890-1896.	2.1	188
78	Supported silver nanoparticle catalyst for selective hydration of nitriles to amides in water. Chemical Communications, 2009, , 3258.	2.2	164
79	Supported gold nanoparticles as a reusable catalyst for synthesis of lactones from diols using molecular oxygen as an oxidant under mild conditions. Green Chemistry, 2009, 11, 793.	4.6	121
80	Supported gold nanoparticle catalyst for the selective oxidation of silanes to silanols in water. Chemical Communications, 2009, , 5302.	2.2	139
81	Oxidantâ€Free Alcohol Dehydrogenation Using a Reusable Hydrotalciteâ€Supported Silver Nanoparticle Catalyst. Angewandte Chemie - International Edition, 2008, 47, 138-141.	7.2	274
82	Supported Silverâ€Nanoparticleâ€Catalyzed Highly Efficient Aqueous Oxidation of Phenylsilanes to Silanols. Angewandte Chemie - International Edition, 2008, 47, 7938-7940.	7.2	177
83	Copper nanoparticles on hydrotalcite as a heterogeneous catalyst for oxidant-free dehydrogenation of alcohols. Chemical Communications, 2008, , 4804.	2.2	180
84	Magnetically recoverable heterogeneous catalyst: Palladium nanocluster supported on hydroxyapatite-encapsulated Î³-Fe2O3 nanocrystallites for highly efficient dehalogenation with molecular hydrogen. Green Chemistry, 2007, 9, 1246.	4.6	126
85	Montmorillonite-Entrapped Sub-nanoordered Pd Clusters as a Heterogeneous Catalyst for Allylic Substitution Reactions. Angewandte Chemie - International Edition, 2007, 46, 3288-3290.	7.2	77
86	Convenient and Efficient Pd-Catalyzed Regioselective Oxyfunctionalization of Terminal Olefins by Using Molecular Oxygen as Sole Reoxidant. Angewandte Chemie - International Edition, 2006, 45, 481-485.	7.2	241
87	Design of Well-Defined Active Sites on Crystalline Materials for Liquid-Phase Oxidations. , 0, , 157-183.		4