Yasutaka Kuwahara

List of Publications by Year
in descending order

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200	8,511	36303	62596
papers	citations	51 h-index	80 g-index

211	211	211	8550
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dramatic Enhancement of CO₂ Uptake by Poly(ethyleneimine) Using Zirconosilicate Supports. Journal of the American Chemical Society, 2012, 134, 10757-10760.	13.7	205
2	Hydrogen Doped Metal Oxide Semiconductors with Exceptional and Tunable Localized Surface Plasmon Resonances. Journal of the American Chemical Society, 2016, 138, 9316-9324.	13.7	201
3	Catalytic Transfer Hydrogenation of Biomass-Derived Levulinic Acid and Its Esters to Î³-Valerolactone over Sulfonic Acid-Functionalized UiO-66. ACS Sustainable Chemistry and Engineering, 2017, 5, 1141-1152.	6.7	198
4	Functionalized mesoporous SBA-15 silica: recent trends and catalytic applications. Nanoscale, 2020, 12, 11333-11363.	5.6	193
5	Plasmonic Au@Pd Nanoparticles Supported on a Basic Metalâ€“Organic Framework: Synergic Boosting of H₂ Production from Formic Acid. ACS Energy Letters, 2017, 2, 1-7.	17.4	180
6	Single-site and nano-confined photocatalysts designed in porous materials for environmental uses and solar fuels. Chemical Society Reviews, 2018, 47, 8072-8096.	38.1	176
7	A Plasmonic Molybdenum Oxide Hybrid with Reversible Tunability for Visibleâ€Lightâ€Enhanced Catalytic Reactions. Advanced Materials, 2015, 27, 4616-4621.	21.0	174
8	Design and architecture of metal organic frameworks for visible light enhanced hydrogen production. Applied Catalysis B: Environmental, 2017, 218, 555-569.	20.2	173
9	Twoâ€Phase System Utilizing Hydrophobic Metalâ€“Organic Frameworks (MOFs) for Photocatalytic Synthesis of Hydrogen Peroxide. Angewandte Chemie - International Edition, 2019, 58, 5402-5406.	13.8	169
10	Catalytic transfer hydrogenation of biomass-derived levulinic acid and its esters to Î³-valerolactone over ZrO 2 catalyst supported on SBA-15 silica. Catalysis Today, 2017, 281, 418-428.	4.4	129
11	Harnessing single-active plasmonic nanostructures for enhanced photocatalysis under visible light. Journal of Materials Chemistry A, 2015, 3, 5244-5258.	10.3	127
12	Efficient photocatalytic degradation of organics diluted in water and air using TiO₂designed with zeolites and mesoporous silica materials. Journal of Materials Chemistry, 2011, 21, 2407-2416.	6.7	119
13	A novel conversion process for waste slag: synthesis of a hydrotalcite-like compound and zeolite from blast furnace slag and evaluation of adsorption capacities. Journal of Materials Chemistry, 2010, 20, 5052.	6.7	118
14	Enhanced CO₂ Adsorption over Polymeric Amines Supported on Heteroatomâ€Incorporated SBAâ€15 Silica: Impact of Heteroatom Type and Loading on Sorbent Structure and Adsorption Performance. Chemistry - A European Journal, 2012, 18, 16649-16664.	3.3	118
15	Design and Functionalization of Photocatalytic Systems within Mesoporous Silica. ChemSusChem, 2014, 7, 1528-1536.	6.8	109
16	Esterification of levulinic acid with ethanol over sulfated Si-doped ZrO2 solid acid catalyst: Study of the structureâ€“activity relationships. Applied Catalysis A: General, 2014, 476, 186-196.	4.3	104
17	Recent strategies targeting efficient hydrogen production from chemical hydrogen storage materials over carbon-supported catalysts. NPG Asia Materials, 2018, 10, 277-292.	7.9	104
18	Synthesis of Ce ions doped metalâ€“organic framework for promoting catalytic H₂ production from ammonia borane under visible light irradiation. Journal of Materials Chemistry A, 2015, 3, 14134-14141.	10.3	102

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19	Mild Deoxygenation of Sulfoxides over Plasmonic Molybdenum Oxide Hybrid with Dramatic Activity Enhancement under Visible Light. Journal of the American Chemical Society, 2018, 140, 9203-9210.	13.7	102
20	TiO2 photocatalyst for degradation of organic compounds in water and air supported on highly hydrophobic FAU zeolite: Structural, sorptive, and photocatalytic studies. Journal of Catalysis, 2012, 285, 223-234.	6.2	101
21	Pd Nanoparticles and Aminopolymers Confined in Hollow Silica Spheres as Efficient and Reusable Heterogeneous Catalysts for Semihydrogenation of Alkynes. ACS Catalysis, 2019, 9, 1993-2006.	11.2	101
22	Enhancement of plasmonic activity by Pt/Ag bimetallic nanocatalyst supported on mesoporous silica in the hydrogen production from hydrogen storage material. Applied Catalysis B: Environmental, 2018, 223, 10-15.	20.2	97
23	Hydrophobic Modification of a Mesoporous Silica Surface Using a Fluorine-Containing Silylation Agent and Its Application as an Advantageous Host Material for the TiO₂ Photocatalyst. Journal of Physical Chemistry C, 2009, 113, 1552-1559.	3.1	96
24	Enhanced Catalytic Activity on Titanosilicate Molecular Sieves Controlled by Cationâ^'Ï€ Interactions. Journal of the American Chemical Society, 2011, 133, 12462-12465.	13.7	96
25	Pd/Ag and Pd/Au bimetallic nanocatalysts on mesoporous silica for plasmon-mediated enhanced catalytic activity under visible light irradiation. Journal of Materials Chemistry A, 2016, 4, 10142-10150.	10.3	95
26	High-surface-area plasmonic MoO_{3â^'x}: rational synthesis and enhanced ammonia borane dehydrogenation activity. Journal of Materials Chemistry A, 2017, 5, 8946-8953.	10.3	94
27	New Approaches Toward the Hydrogen Production From Formic Acid Dehydrogenation Over Pd-Based Heterogeneous Catalysts. Frontiers in Materials, 2019, 6, .	2.4	93
28	Shape and Composition Effects on Photocatalytic Hydrogen Production for Ptâ€“Pd Alloy Cocatalysts. ACS Applied Materials & Interfaces, 2016, 8, 20667-20674.	8.0	91
29	A hydrophobic titanium doped zirconium-based metal organic framework for photocatalytic hydrogen peroxide production in a two-phase system. Journal of Materials Chemistry A, 2020, 8, 1904-1910.	10.3	89
30	Non-Noble-Metal Nanoparticle Supported on Metalâ€“Organic Framework as an Efficient and Durable Catalyst for Promoting H₂ Production from Ammonia Borane under Visible Light Irradiation. ACS Applied Materials & Interfaces, 2016, 8, 21278-21284.	8.0	88
31	Synthesis and characterization of a Pd/Ag bimetallic nanocatalyst on SBA-15 mesoporous silica as a plasmonic catalyst. Journal of Materials Chemistry A, 2015, 3, 18889-18897.	10.3	87
32	Photocatalytic production of hydrogen peroxide through selective two-electron reduction of dioxygen utilizing amine-functionalized MIL-125 deposited with nickel oxide nanoparticles. Chemical Communications, 2018, 54, 9270-9273.	4.1	81
33	Controlled Pyrolysis of Niâ€MOFâ€74 as a Promising Precursor for the Creation of Highly Active Ni Nanocatalysts in Sizeâ€Selective Hydrogenation. Chemistry - A European Journal, 2018, 24, 898-905.	3.3	78
34	Esterification of levulinic acid with ethanol over sulfated mesoporous zirconosilicates: Influences of the preparation conditions on the structural properties and catalytic performances. Catalysis Today, 2014, 237, 18-28.	4.4	75
35	Enhanced hydrogen production from ammonia borane using controlled plasmonic performance ofÂAu nanoparticles deposited on TiO₂. Journal of Materials Chemistry A, 2017, 5, 21883-21892.	10.3	75
36	A novel conversion process for waste slag: synthesis of calcium silicate hydrate from blast furnace slag and its application as a versatile adsorbent for water purification. Journal of Materials Chemistry A, 2013, 1, 7199.	10.3	72

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37	Localized Surface Plasmon Resonances in Plasmonic Molybdenum Tungsten Oxide Hybrid for Visible-Light-Enhanced Catalytic Reaction. Journal of Physical Chemistry C, 2017, 121, 23531-23540.	3.1	72
38	A new catalytic opportunity for waste materials: Application of waste slag based catalyst in CO2 fixation reaction. Journal of CO2 Utilization, 2013, 1, 50-59.	6.8	68
39	Surface plasmon resonance enhancement of production of H2 from ammonia borane solution with tunable Cu2â^'xS nanowires decorated by Pd nanoparticles. Nano Energy, 2017, 31, 57-63.	16.0	65
40	Fabrication of hydrophobic zeolites using triethoxyfluorosilane and their application as supports for TiO2 photocatalysts. Chemical Communications, 2008, , 4783.	4.1	63
41	Transesterifications using a hydrocalumite synthesized from waste slag: an economical and ecological route for biofuel production. Catalysis Science and Technology, 2012, 2, 1842.	4.1	63
42	Hybrid phase 1T/2H-MoS₂with controllable 1T concentration and its promoted hydrogen evolution reaction. Nanoscale, 2020, 12, 11908-11915.	5.6	62
43	Highly efficient Ru/carbon catalysts prepared by pyrolysis of supported Ru complex towards the hydrogen production from ammonia borane. Applied Catalysis A: General, 2016, 527, 45-52.	4.3	61
44	Evolution of the PVPâ€“Pd Surface Interaction in Nanoparticles through the Case Study of Formic Acid Decomposition. Langmuir, 2016, 32, 12110-12118.	3.5	61
45	Nitrogen-doped carbon materials as a promising platform toward the efficient catalysis for hydrogen generation. Applied Catalysis A: General, 2019, 571, 25-41.	4.3	61
46	Ru nanoparticles confined in Zr-containing spherical mesoporous silica containers for hydrogenation of levulinic acid and its esters into Î³-valerolactone at ambient conditions. Catalysis Today, 2015, 258, 262-269.	4.4	59
47	Palladium Nanoparticles Supported on Titaniumâ€Doped Graphitic Carbon Nitride for Formic Acid Dehydrogenation. Chemistry - an Asian Journal, 2017, 12, 860-867.	3.3	57
48	A novel synthetic route to hydroxyapatiteâ€“zeolite composite material from steel slag: investigation of synthesis mechanism and evaluation of physicochemical properties. Journal of Materials Chemistry, 2009, 19, 7263.	6.7	55
49	Catalytic transfer hydrogenation of levulinate esters to Î³-valerolactone over supported ruthenium hydroxide catalysts. RSC Advances, 2014, 4, 45848-45855.	3.6	55
50	Ti cluster-alkylated hydrophobic MOFs for photocatalytic production of hydrogen peroxide in two-phase systems. Chemical Communications, 2019, 55, 6743-6746.	4.1	54
51	PdAg alloy nanoparticles encapsulated in N-doped microporous hollow carbon spheres for hydrogenation of CO2 to formate. Applied Catalysis B: Environmental, 2021, 283, 119628.	20.2	54
52	Overcoming Acidic H₂O₂/Fe(II/III) Redox-Induced Low H₂O₂ Utilization Efficiency by Carbon Quantum Dots Fenton-like Catalysis. Environmental Science & Technology, 2022, 56, 2617-2625.	10.0	54
53	Silver Nanoparticles Supported on CeO₂â€SBAâ€15 by Microwave Irradiation Possess Metalâ€“Support Interactions and Enhanced Catalytic Activity. Chemistry - A European Journal, 2014, 20, 15746-15752.	3.3	52
54	Enhancement of Agâ€Based Plasmonic Photocatalysis in Hydrogen Production from Ammonia Borane by the Assistance of Singleâ€Site Tiâ€Oxide Moieties within a Silica Framework. Chemistry - A European Journal, 2017, 23, 3616-3622.	3.3	51

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55	Hollow Mesoporous Organosilica Spheres Encapsulating PdAg Nanoparticles and Poly(Ethyleneimine) as Reusable Catalysts for CO₂ Hydrogenation to Formate. ACS Catalysis, 2020, 10, 6356-6366.	11.2	51
56	Recent Progress on Black Phosphorusâ€Based Materials for Photocatalytic Water Splitting. Small Methods, 2018, 2, 1800212.	8.6	50
57	The fabrication of TiO2 supported on slag-made calcium silicate as low-cost photocatalyst with high adsorption ability for the degradation of dye pollutants in water. Catalysis Today, 2017, 281, 21-28.	4.4	49
58	Design of Singleâ€Site Photocatalysts by Using Metalâ€“Organic Frameworks as a Matrix. Chemistry - an Asian Journal, 2018, 13, 1767-1779.	3.3	49
59	TiO2 photocatalyst loaded on hydrophobic Si3N4 support for efficient degradation of organics diluted in water. Applied Catalysis A: General, 2008, 350, 164-168.	4.3	48
60	One-pot synthesis of molybdenum oxide nanoparticles encapsulated in hollow silica spheres: an efficient and reusable catalyst for epoxidation of olefins. Journal of Materials Chemistry A, 2017, 5, 18518-18526.	10.3	48
61	Enhancement in Adsorption and Catalytic Activity of Enzymes Immobilized on Phosphorus- and Calcium-Modified MCM-41. Journal of Physical Chemistry B, 2011, 115, 10335-10345.	2.6	47
62	Poly(ethyleneimine)â€tethered Ir Complex Catalyst Immobilized in Titanate Nanotubes for Hydrogenation of CO₂ to Formic Acid. ChemCatChem, 2017, 9, 1906-1914.	3.7	47
63	Plasmonic metal/Mo_xW_{1â^'x}O_{3â^'y} for visible-light-enhanced H₂ production from ammonia borane. Journal of Materials Chemistry A, 2018, 6, 10932-10938.	10.3	47
64	Enhanced formic acid dehydrogenation by the synergistic alloying effect of PdCo catalysts supported on graphitic carbon nitride. International Journal of Hydrogen Energy, 2019, 44, 28483-28493.	7.1	46
65	Synthesis of zeolite from steel slag and its application as a support of nano-sized TiO2 photocatalyst. Journal of Materials Science, 2008, 43, 2407-2410.	3.7	44
66	Investigation of Size Sensitivity in the Hydrogen Production from Formic Acid over Carbonâ€Supported Pd Nanoparticles. ChemistrySelect, 2016, 1, 1879-1886.	1.5	44
67	Fabrication of Photocatalytic Paper Using TiO₂ Nanoparticles Confined in Hollow Silica Capsules. Langmuir, 2017, 33, 288-295.	3.5	44
68	Some novel porous materials for selective catalytic oxidations. Materials Today, 2020, 32, 244-259.	14.2	44
69	PdAg Nanoparticles within Core-Shell Structured Zeolitic Imidazolate Framework as a Dual Catalyst for Formic Acid-based Hydrogen Storage/Production. Scientific Reports, 2019, 9, 15675.	3.3	43
70	Metalâ€“organic framework-based nanomaterials for photocatalytic hydrogen peroxide production. Physical Chemistry Chemical Physics, 2020, 22, 14404-14414.	2.8	43
71	Plasmonic Ru/hydrogen molybdenum bronzes with tunable oxygen vacancies for light-driven reduction of p-nitrophenol. Journal of Materials Chemistry A, 2019, 7, 3783-3789.	10.3	41
72	Construction of Hybrid MoS₂ Phase Coupled with SiC Heterojunctions with Promoted Photocatalytic Activity for 4-Nitrophenol Degradation. Langmuir, 2020, 36, 1174-1182.	3.5	41

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73	Insights on palladium decorated nitrogen-doped carbon xerogels for the hydrogen production from formic acid. Catalysis Today, 2019, 324, 90-96.	4.4	40
74	Lipase-embedded silica nanoparticles with oil-filled coreâ€“shell structure: stable and recyclable platforms for biocatalysts. Chemical Communications, 2012, 48, 2882.	4.1	39
75	Defect Engineering of MoS₂ and Its Impacts on Electrocatalytic and Photocatalytic Behavior in Hydrogen Evolution Reactions. Chemistry - an Asian Journal, 2019, 14, 278-285.	3.3	39
76	PdAg nanoparticles supported on resorcinol-formaldehyde polymers containing amine groups: the promotional effect of phenylamine moieties on CO₂ transformation to formic acid. Journal of Materials Chemistry A, 2019, 7, 16356-16363.	10.3	39
77	Introduction of a secondary ligand into titanium-based metalâ€“organic frameworks for visible-light-driven photocatalytic hydrogen peroxide production from dioxygen reduction. Journal of Materials Chemistry A, 2021, 9, 2815-2821.	10.3	39
78	Liquid-phase oxidation of alkylaromatics to aromatic ketones with molecular oxygen over a Mn-based metalâ€“organic framework. Dalton Transactions, 2017, 46, 8415-8421.	3.3	38
79	Visible-light-driven hydrogen peroxide production from water and dioxygen by perylenetetracarboxylic diimide modified titanium-based metalâ€“organic frameworks. Journal of Materials Chemistry A, 2021, 9, 26371-26380.	10.3	38
80	Design of New Functional Titanium Oxide-Based Photocatalysts for Degradation of Organics Diluted in Water and Air. Current Organic Chemistry, 2010, 14, 616-629.	1.6	37
81	Controlled synthesis of carbon-supported Co catalysts from single-sites to nanoparticles: characterization of the structural transformation and investigation of their oxidation catalysis. Physical Chemistry Chemical Physics, 2017, 19, 4967-4974.	2.8	37
82	CoO_x-decorated CeO₂ heterostructures: effects of morphology on their catalytic properties in diesel soot combustion. Nanoscale, 2020, 12, 1779-1789.	5.6	37
83	Synthesis of mesoporous silica-supported Ag nanorod-based bimetallic catalysts and investigation of their plasmonic activity under visible light irradiation. Catalysis Science and Technology, 2017, 7, 2551-2558.	4.1	36
84	Screening of Carbon-Supported PdAg Nanoparticles in the Hydrogen Production from Formic Acid. Industrial & Engineering Chemistry Research, 2016, 55, 7612-7620.	3.7	35
85	Synthesis of carbon-supported Pdâ€“Co bimetallic catalysts templated by Co nanoparticles using the galvanic replacement method for selective hydrogenation. RSC Advances, 2017, 7, 22294-22300.	3.6	35
86	Plasmonic catalysis of Ag nanoparticles deposited on CeO2 modified mesoporous silica for the nitrostyrene reduction under light irradiation conditions. Catalysis Today, 2019, 324, 83-89.	4.4	35
87	A quasi-stable molybdenum sub-oxide with abundant oxygen vacancies that promotes CO₂ hydrogenation to methanol. Chemical Science, 2021, 12, 9902-9915.	7.4	35
88	Roomâ€Temperature and Aqueousâ€Phase Synthesis of Plasmonic Molybdenum Oxide Nanoparticles for Visibleâ€Lightâ€Enhanced Hydrogen Generation. Chemistry - an Asian Journal, 2016, 11, 2377-2381.	3.3	33
89	Engineering of Surface Environment of Pd Nanoparticle Catalysts on Carbon Support with Pyreneâ€“Thiol Ligands for Semihydrogenation of Alkynes. ACS Applied Materials & Interfaces, 2019, 11, 37708-37719.	8.0	33
90	Wasteâ€Slag Hydrocalumite and Derivatives as Heterogeneous Base Catalysts. ChemSusChem, 2012, 5, 1523-1532.	6.8	32

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91	Microwave-antenna induced in situ synthesis of Cu nanowire threaded ZIF-8 with enhanced catalytic activity in H₂production. Nanoscale, 2016, 8, 7749-7754.	5.6	32
92	Synthesis of plasmonic gold nanoparticles supported on morphology-controlled TiO2 for aerobic alcohol oxidation. Catalysis Today, 2020, 352, 255-261.	4.4	32
93	Synthesis of a binary alloy nanoparticle catalyst with an immiscible combination of Rh and Cu assisted by hydrogen spillover on a TiO₂ support. Chemical Science, 2020, 11, 4194-4203.	7.4	32
94	Catalytic combustion of diesel soot over Fe and Ag-doped manganese oxides: role of heteroatoms in the catalytic performances. Catalysis Science and Technology, 2018, 8, 1905-1914.	4.1	31
95	Design of Pdâ€“Grapheneâ€“Au Nanorod Nanocomposite Catalyst for Boosting Suzukiâ€“Miyaura Coupling Reaction by Assistance of Surface Plasmon Resonance. Journal of Physical Chemistry C, 2019, 123, 24575-24583.	3.1	31
96	Incorporation of a Ru complex into an amine-functionalized metalâ€“organic framework for enhanced activity in photocatalytic aerobic benzyl alcohol oxidation. Catalysis Science and Technology, 2019, 9, 1511-1517.	4.1	31
97	Design of Silver-Based Controlled Nanostructures for Plasmonic Catalysis under Visible Light Irradiation. Bulletin of the Chemical Society of Japan, 2019, 92, 19-29.	3.2	31
98	Plasmon-induced catalytic CO₂ hydrogenation by a nano-sheet Pt/H_xMoO_{3âˆ’y} hybrid with abundant surface oxygen vacancies. Journal of Materials Chemistry A, 2021, 9, 13898-13907.	10.3	31
99	PdAg nanoparticles and aminopolymer confined within mesoporous hollow carbon spheres as an efficient catalyst for hydrogenation of CO₂ to formate. Journal of Materials Chemistry A, 2020, 8, 4437-4446.	10.3	31
100	Oxidation of Benzyl Alcohol over Nanoporous Auâ€“CeO₂ Catalysts Prepared from Amorphous Alloys and Effect of Alloying Au with Amorphous Alloys. Industrial & Engineering Chemistry Research, 2018, 57, 5599-5605.	3.7	30
101	Twoâ€Phase System Utilizing Hydrophobic Metalâ€“Organic Frameworks (MOFs) for Photocatalytic Synthesis of Hydrogen Peroxide. Angewandte Chemie, 2019, 131, 5456-5460.	2.0	30
102	Facile Synthesis of Yolkâ€“Shell Nanostructured Photocatalyst with Improved Adsorption Properties and Molecularâ€Sieving Properties. ChemCatChem, 2016, 8, 2781-2788.	3.7	29
103	Visible-light-enhanced catalytic activity of Ru nanoparticles over carbon modified g-C3N4. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 327-333.	3.9	29
104	Manipulation of plasmon-induced hot electron transport in Pd/MoO3-x@ZIF-8: Boosting the activity of Pd-catalyzed nitroaromatic hydrogenation under visible-light irradiation. Applied Catalysis B: Environmental, 2021, 282, 119511.	20.2	29
105	How the Morphology of NiO_x-Decorated CeO₂ Nanostructures Affects Catalytic Properties in CO₂ Methanation. Langmuir, 2021, 37, 5376-5384.	3.5	28
106	Interconversion of Formate/Bicarbonate for Hydrogen Storage/Release: Improved Activity Following Sacrificial Surface Modification of a Ag@Pd/TiO₂ Catalyst with a TiO_x Shell. ACS Applied Energy Materials, 2020, 3, 5819-5829.	5.1	27
107	Recent strategies for enhancing the catalytic activity of CO2 hydrogenation to formate/formic acid over Pd-based catalyst. Journal of CO2 Utilization, 2021, 54, 101765.	6.8	27
108	Dual Role of Missing-Linker Defects Terminated by Acetate Ligands in a Zirconium-Based MOF in Promoting Photocatalytic Hydrogen Peroxide Production. Journal of Physical Chemistry C, 2021, 125, 27909-27918.	3.1	27

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109	Ru/H MoO3- with plasmonic effect for boosting photothermal catalytic CO2 methanation. Applied Catalysis B: Environmental, 2022, 317, 121734.	20.2	27
110	Size Effect of Carbon-Supported Pd Nanoparticles in the Hydrogen Production from Formic Acid. Bulletin of the Chemical Society of Japan, 2015, 88, 1500-1502.	3.2	26
111	Visibleâ€Lightâ€Responsive Carbon Dioxide Reduction System: Rhenium Complex Intercalated into a Zirconium Phosphate Layered Matrix. ChemCatChem, 2015, 7, 3519-3525.	3.7	26
112	Pdâ€“Cu Alloy Nanoparticles Confined within Mesoporous Hollow Carbon Spheres for the Hydrogenation of CO₂ to Formate. Journal of Physical Chemistry C, 2021, 125, 3961-3971.	3.1	25
113	Catalytic Conversion of Levulinic Acid and Its Esters to Î³-Valerolactone over Silica-Supported Zirconia Catalysts. Bulletin of the Chemical Society of Japan, 2014, 87, 1252-1254.	3.2	24
114	Heterometallic and Hydrophobic Metalâ€“Organic Frameworks as Durable Photocatalysts for Boosting Hydrogen Peroxide Production in a Two-Phase System. ACS Applied Energy Materials, 2021, 4, 4823-4830.	5.1	24
115	The ClOÂ· generation and chlorate suppression in photoelectrochemical reactive chlorine species systems on BiVO4 photoanodes. Applied Catalysis B: Environmental, 2021, 296, 120387.	20.2	24
116	Activity, Recyclability, and Stability of Lipases Immobilized on Oilâ€Filled Spherical Silica Nanoparticles with Different Silica Shell Structures. ChemCatChem, 2013, 5, 2527-2536.	3.7	23
117	Phosphate Removal from Aqueous Solutions Using Calcium Silicate Hydrate Prepared from Blast Furnace Slag. ISIJ International, 2017, 57, 1657-1664.	1.4	23
118	Tailoring the Size and Shape of Colloidal Noble Metal Nanocrystals as a Valuable Tool in Catalysis. Catalysis Surveys From Asia, 2019, 23, 127-148.	2.6	23
119	Preparation of hydrophobically modified single-site Ti-containing mesoporous silica (TiSBA-15) and their enhanced catalytic performances. Catalysis Today, 2011, 175, 393-397.	4.4	22
120	Synthesis of Ca-based Layered Double Hydroxide from Blast Furnace Slag and Its Catalytic Applications. ISIJ International, 2015, 55, 1531-1537.	1.4	22
121	Enhancement of Catalytic Activity Over AuPd Nanoparticles Loaded Metal Organic Framework Under Visible Light Irradiation. Topics in Catalysis, 2016, 59, 1765-1771.	2.8	22
122	Removal of Phosphate from Aqueous Solution Using Layered Double Hydroxide Prepared from Waste Iron-Making Slag. Bulletin of the Chemical Society of Japan, 2016, 89, 472-480.	3.2	22
123	In situ-created Mn(<scp>iii</scp>) complexes active for liquid-phase oxidation of alkylaromatics to aromatic ketones with molecular oxygen. Catalysis Science and Technology, 2016, 6, 442-448.	4.1	22
124	Additive-Free Aqueous Phase Synthesis of Formic Acid by Direct CO2 Hydrogenation over a PdAg Catalyst on a Hydrophilic N-Doped Polymerâ€“Silica Composite Support with High CO2 Affinity. ACS Applied Energy Materials, 2020, 3, 5847-5855.	5.1	22
125	Plasmonic nanocatalysts for visible-NIR light induced hydrogen generation from storage materials. Materials Advances, 2021, 2, 880-906.	5.4	22
126	Palladium Nanoparticles Encapsulated in Hollow Titanosilicate Spheres as an Ideal Nanoreactor for Oneâ€pot Oxidation. Chemistry - A European Journal, 2017, 23, 380-389.	3.3	21

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127	Design and application of photocatalysts using porous materials. Catalysis Reviews - Science and Engineering, 2021, 63, 165-233.	12.9	21
128	Defect Engineering of Pt/TiO_{2â€“x} Photocatalysts via Reduction Treatment Assisted by Hydrogen Spillover. ACS Applied Materials & Interfaces, 2021, 13, 48669-48678.	8.0	21
129	Shape Effect of MnOx-Decorated CeO2 Catalyst in Diesel Soot Oxidation. Bulletin of the Chemical Society of Japan, 2017, 90, 556-564.	3.2	20
130	Hollow titanosilicate nanospheres encapsulating PdAu alloy nanoparticles as reusable high-performance catalysts for a H₂O₂-mediated one-pot oxidation reaction. Journal of Materials Chemistry A, 2019, 7, 7221-7231.	10.3	19
131	Photocatalytically-driven H2 production over Cu/TiO2 catalysts decorated with multi-walled carbon nanotubes. Catalysis Today, 2021, 364, 182-189.	4.4	19
132	Synthesis of Hydroxyapatiteâ€“Zeolite Composite Material from Disposed Steel Slag and Investigation of Its Structural and Physicochemical Characteristics. Chemistry Letters, 2009, 38, 626-627.	1.3	18
133	A direct conversion of blast furnace slag to a mesoporous silicaâ€“calcium oxide composite and its application in CO₂ captures. Green Chemistry, 2020, 22, 3759-3768.	9.0	18
134	Controlling Photocatalytic Activity and Size Selectivity of TiO₂ Encapsulated in Hollow Silica Spheres by Tuning Silica Shell Structures Using Sacrificial Biomolecules. Langmuir, 2017, 33, 6314-6321.	3.5	17
135	Photocatalytic Approaches for Hydrogen Production via Formic Acid Decomposition. Topics in Current Chemistry, 2019, 377, 27.	5.8	17
136	Mesoporous silica supported Pd/Ag bimetallic nanoparticles as a plasmonic catalyst for chemoselective hydrogenation of p-nitrostyrene under visible light irradiation. Journal of Chemical Sciences, 2017, 129, 1661-1669.	1.5	16
137	Crystal Facet Engineering and Hydrogen Spillover-Assisted Synthesis of Defective Pt/TiO_{2â€“x} Nanorods with Enhanced Visible Light-Driven Photocatalytic Activity. ACS Applied Materials & Interfaces, 2022, 14, 2291-2300.	8.0	16
138	Enhanced visible-NIR absorption and oxygen vacancy generation of Pt/H_xMoWO_y by H-spillover to facilitate photothermal catalytic CO₂ hydrogenation. Journal of Materials Chemistry A, 2022, 10, 10854-10864.	10.3	16
139	Fabrication of Hydrophobic Zeolites Using Triethoxyfluorosilane and their Application for Photocatalytic Degradation of Acetaldehyde. Topics in Catalysis, 2009, 52, 643-648.	2.8	15
140	Preparation of Pt/C Catalyst by Coaxial Arc Plasma Deposition for Polymer Electrolyte Membrane Fuel Cells. ECS Electrochemistry Letters, 2015, 4, F57-F60.	1.9	15
141	Skeletal Ni Catalysts Prepared from Amorphous Niâ€“Zr Alloys: Enhanced Catalytic Performance for Hydrogen Generation from Ammonia Borane. ChemPhysChem, 2016, 17, 412-417.	2.1	15
142	Properties, fabrication and applications of plasmonic semiconductor nanocrystals. Catalysis Science and Technology, 2020, 10, 4141-4163.	4.1	15
143	Recent Applications of Amorphous Alloys to Design Skeletal Catalysts. Bulletin of the Chemical Society of Japan, 2020, 93, 438-454.	3.2	15
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