Takashi Kamegawa

List of Publications by Year
in descending order

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66 papers	3,156 citations	201575 27 h-index	149623 56 g-index
71 all docs	71 docs citations	71 times ranked	4175 citing authors

#	Article	IF	Citations
1	Superhydrophobic Surfaces with Photocatalytic Selfâ€Cleaning Properties by Nanocomposite Coating of TiO₂ and Polytetrafluoroethylene. Advanced Materials, 2012, 24, 3697-3700.	11.1	298
2	The Synthesis of Sizeâ€and Colorâ€Controlled Silver Nanoparticles by Using Microwave Heating and their Enhanced Catalytic Activity by Localized Surface Plasmon Resonance. Angewandte Chemie - International Edition, 2013, 52, 7446-7450.	7.2	225
3	Amine-functionalized MIL-101(Cr) with imbedded platinum nanoparticles as a durable photocatalyst for hydrogen production from water. Chemical Communications, 2014, 50, 11645-11648.	2.2	199
4	Single-site and nano-confined photocatalysts designed in porous materials for environmental uses and solar fuels. Chemical Society Reviews, 2018, 47, 8072-8096.	18.7	176
5	Graphene Coating of TiO₂ Nanoparticles Loaded on Mesoporous Silica for Enhancement of Photocatalytic Activity. Journal of Physical Chemistry C, 2010, 114, 15049-15053.	1.5	147
6	A Visibleâ€Lightâ€Harvesting Assembly with a Sulfocalixarene Linker between Dyes and a Ptâ€TiO₂ Photocatalyst. Angewandte Chemie - International Edition, 2013, 52, 916-919.	7.2	139
7	Preparation of Hydroxynaphthalene-Modified TiO₂ via Formation of Surface Complexes and their Applications in the Photocatalytic Reduction of Nitrobenzene under Visible-Light Irradiation. ACS Applied Materials & Interfaces, 2012, 4, 6635-6639.	4.0	125
8	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
9	Design and Functionalization of Photocatalytic Systems within Mesoporous Silica. ChemSusChem, 2014, 7, 1528-1536.	3.6	109
10	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.	3.1	101
11	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.	1.5	96
12	Enhanced Catalytic Activity on Titanosilicate Molecular Sieves Controlled by Cationâ^'Ï€ Interactions. Journal of the American Chemical Society, 2011, 133, 12462-12465.	6.6	96
13	Enhanced photocatalytic properties of TiO₂-loaded porous silica with hierarchical macroporous and mesoporous architectures in water purification. Journal of Materials Chemistry A, 2015, 3, 2323-2330.	5.2	70
14	Design of TiO2-zeolite composites with enhanced photocatalytic performances under irradiation of UV and visible light. Microporous and Mesoporous Materials, 2013, 165, 142-147.	2.2	67
15	Design of macroporous TiO2 thin film photocatalysts with enhanced photofunctional properties. Energy and Environmental Science, 2011, 4, 1411.	15.6	66
16	Fabrication of hydrophobic zeolites using triethoxyfluorosilane and their application as supports for TiO2 photocatalysts. Chemical Communications, 2008, , 4783.	2.2	63
17	Transesterifications using a hydrocalumite synthesized from waste slag: an economical and ecological route for biofuel production. Catalysis Science and Technology, 2012, 2, 1842.	2.1	63
18	Preparation and Characterization of Unique Inorganicâ^'Organic Hybrid Mesoporous Materials Incorporating Arenetricarbonyl Complexes [â^'C6H4M(CO)3â^'] (M = Cr, Mo). Journal of the American Chemical Society, 2005, 127, 16784-16785.	6.6	60

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19	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
20	Synthesis and Unique Catalytic Performance of Single-Site Ti-Containing Hierarchical Macroporous Silica with Mesoporous Frameworks. Langmuir, 2011, 27, 2873-2879.	1.6	55
21	Active Site Design in a Coreâ€“Shell Nanostructured Catalyst for a Oneâ€Pot Oxidation Reaction. Chemistry - A European Journal, 2011, 17, 9047-9051.	1.7	43
22	Enhanced hydrogenation activity of nano-sized Pdâ€“Ni bimetal particles on Ti-containing mesoporous silica prepared by a photo-assisted deposition method. Journal of Materials Chemistry, 2012, 22, 16243.	6.7	43
23	Structural Design of Pd/SiO₂@Ti-Containing Mesoporous Silica Coreâ€“Shell Catalyst for Efficient One-Pot Oxidation Using in Situ Produced H₂O₂. Journal of Physical Chemistry C, 2012, 116, 14360-14367.	1.5	39
24	Multifunctional surface designed by nanocomposite coating of polytetrafluoroethylene and TiO2 photocatalyst: self-cleaning and superhydrophobicity. Scientific Reports, 2017, 7, 13628.	1.6	39
25	Size-controlled synthesis of silver nanoparticles on Ti-containing mesoporous silica thin film and photoluminescence enhancement of rhodamine 6G dyes by surface plasmon resonance. Journal of Materials Chemistry, 2009, 19, 6745.	6.7	38
26	Photocatalytic performance of TiO₂â€“zeolite templated carbon composites in organic contaminant degradation. Physical Chemistry Chemical Physics, 2014, 16, 25004-25007.	1.3	27
27	Activity, Recyclability, and Stability of Lipases Immobilized on Oilâ€Filled Spherical Silica Nanoparticles with Different Silica Shell Structures. ChemCatChem, 2013, 5, 2527-2536.	1.8	23
28	Preparation of single-site Ti-containing mesoporous silica with a nanotube architecture and its enhanced catalytic activities. Journal of Materials Chemistry A, 2013, 1, 891-897.	5.2	23
29	Design of Composite Photocatalyst of TiO2 and Y-Zeolite for Degradation of 2-Propanol in the Gas Phase under UV and Visible Light Irradiation. Molecules, 2014, 19, 16477-16488.	1.7	23
30	Low-temperature synthesis of highly hydrophilic Ti-containing mesoporous silica thin films on polymer substrates by photocatalytic removal of structure-directing agents. Journal of Materials Chemistry, 2011, 21, 236-241.	6.7	21
31	Design and application of photocatalysts using porous materials. Catalysis Reviews - Science and Engineering, 2021, 63, 165-233.	5.7	21
32	Design of Single-Site Ti Embedded Highly Hydrophilic Silica Thin Films with Macroâ€“Mesoporous Structures. ACS Applied Materials & Interfaces, 2011, 3, 4561-4565.	4.0	20
33	Synthesis of Nano-Sized Platinum Metal Particles on Ti-Containing Mesoporous Silica Using Microwave-Assisted Deposition Method. Topics in Catalysis, 2010, 53, 218-223.	1.3	19
34	An efficient method for the creation of a superhydrophobic surface: ethylene polymerization over self-assembled colloidal silica nanoparticles incorporating single-site Cr-oxide catalysts. Journal of Materials Chemistry, 2011, 21, 8543.	6.7	18
35	Reactivity of Niâ€“Carbon Nanofibers/Mesocellular Silica Composite Catalyst for Phenylacetylene Hydrogenation. Industrial & Engineering Chemistry Research, 2014, 53, 10105-10111.	1.8	18
36	Preparation of inorganicâ€“organic hybrid mesoporous material incorporating organoruthenium complexes (â€“[C6H4RuCp]PF6â€“) and its application as a heterogeneous catalyst. Journal of Materials Chemistry, 2011, 21, 12228.	6.7	17

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37	Controlled Synthesis and Surface Hydrophilic Properties of Ti-Containing Mesoporous Silica Thin Films Using Various Structure-Directing Agents. Journal of Physical Chemistry C, 2011, 115, 15410-15415.	1.5	17
38	Application of Microwave-Assisted Deposition for the Synthesis of Noble Metal Particles on Ti-Containing Mesoporous Silica. Catalysis Letters, 2009, 129, 404-407.	1.4	16
39	Fabrication of Hydrophobic Zeolites Using Triethoxyfluorosilane and their Application for Photocatalytic Degradation of Acetaldehyde. Topics in Catalysis, 2009, 52, 643-648.	1.3	15
40	Preparation of Crâ€“Ti Binary Oxide Anchored Mesoporous Silica by CVD Method and Their Photocatalytic Activities. Topics in Catalysis, 2010, 53, 555-559.	1.3	15
41	Design of superhydrophobic surfaces by synthesis of carbon nanotubes over Coâ€“Mo nanocatalysts deposited under microwave irradiation on Ti-containing mesoporous silica thin films. Physical Chemistry Chemical Physics, 2011, 13, 6309.	1.3	15
42	Photoelectrochemical properties of copper oxide (CuO) influenced by work functions of conductive electrodes. Research on Chemical Intermediates, 2019, 45, 5947-5958.	1.3	15
43	Design of superhydrophilic surfaces on metallic substrates by the fabrication of Ti-containing mesoporous silica thin film. Applied Catalysis A: General, 2010, 387, 95-99.	2.2	13
44	Preparation of aluminum-containing mesoporous silica with hierarchical macroporous architecture and its enhanced catalytic activities. Physical Chemistry Chemical Physics, 2013, 15, 13323.	1.3	13
45	Preferential Oxidation of CO Impurities in the Presence of H2 on NiO-Loaded and Unloaded TiO2 Photocatalysts at 293ÂK. Catalysis Letters, 2009, 129, 7-11.	1.4	12
46	Preparation of Skeletal Cu Catalysts by Thermal and Chemical Treatment of Cuâ€“Ti Amorphous Alloys and Their Enhanced Catalytic Activities. Bulletin of the Chemical Society of Japan, 2013, 86, 1002-1004.	2.0	10
47	Hydroxylation of Phenol on Iron-Containing Mesoporous Silica with Hierarchical Macroporous Architecture. Bulletin of the Chemical Society of Japan, 2015, 88, 572-574.	2.0	10
48	Enhanced Catalysis of Plasmonic Silver Nanoparticles by a Combination of Macro-/Mesoporous Nanostructured Silica Support. Journal of Physical Chemistry C, 2021, 125, 9150-9157.	1.5	10
49	Photocatalytic selective oxidation of CO with O2 in the presence of H2 over highly dispersed chromium oxide on silica under visible or solar light irradiation. Research on Chemical Intermediates, 2008, 34, 427-434.	1.3	9
50	Preparation of Thin Macroporous TiO2 Films Using PMMA Microspheres and Their Photoinduced Hydrophilicities. Chemistry Letters, 2009, 38, 610-611.	0.7	9
51	Metamagnetic Behavior in a Quadruple Perovskite Oxide. Inorganic Chemistry, 2021, 60, 7023-7030.	1.9	9
52	Unique Surface Properties of Nanocomposite Thin Film Photocatalysts of TiO2 and Poly(tetrafluoroethylene). Chemistry Letters, 2015, 44, 509-511.	0.7	8
53	Spherical TiO₂/Mesoporous SiO₂ Core/Shell Type Photocatalyst for Water Purification. Journal of Nanoscience and Nanotechnology, 2016, 16, 9273-9277.	0.9	8
54	TiO₂ superstructures with oriented nanospaces: a strategy for efficient and selective photocatalysis. Nanoscale, 2020, 12, 6420-6428.	2.8	8

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55	Heterogeneous Fenton Degradation of Organic Pollutants in Water Enhanced by Combining Ironâ€type Layered Double Hydroxide and Sulfate. Chemistry - an Asian Journal, 2021, 16, 1887-1892.	1.7	8
56	Preparation of Size-controlled Copper-nanoparticle-supported Catalyst Using Rapid and Uniform Heating under Microwave Irradiation. Chemistry Letters, 2012, 41, 614-616.	0.7	7
57	Design of Advanced Functional Materials Using Nanoporous Singleâ€Site Photocatalysts. Chemical Record, 2020, 20, 660-671.	2.9	7
58	Simple Design of Hydrophobic Zeolite Material by Modification Using TEFS and its Application as a Support of TiO2 Photocatalyst. Topics in Catalysis, 2009, 52, 193-196.	1.3	6
59	Construction of an organoruthenium complex (â€“[biphRuCp]PF6â€“) within a biphenylene-bridged inorganicâ€“organic hybrid mesoporous material, and its catalytic activity in the selective hydrosilylation of 1-hexyne. Research on Chemical Intermediates, 2014, 40, 105-113.	1.3	6
60	Preparation of W-Containing Mesoporous Silica Thin Films and Their Surface Hydrophilic Properties. E-Journal of Surface Science and Nanotechnology, 2009, 7, 141-144.	0.1	6
61	Photocatalytic Decomposition of Lactic Acid in Water on a Photoelectrochemical Circuit System Consisting of a Rod-type TiO2 Electrode and Silicon Solar Cell. Topics in Catalysis, 2008, 47, 162-165.	1.3	3
62	Coating of Transparent Ti-containing Mesoporous Silica Thin Films on Quartz and Aluminum Alloy Substrates for Fabrication of Highly Hydrophilic Surfaces. ISIJ International, 2010, 50, 255-258.	0.6	3
63	Synthesis of SiO2-TiO2 fibers with photocatalytic activity by TiCl4 vapor curing on melt-spun silicone resin fiber. Journal of the Ceramic Society of Japan, 2011, 119, 544-547.	0.5	3
64	Design and Functionalization of Photocatalytic Systems within Mesoporous Silica. ChemSusChem, 2014, 7, 1495-1495.	3.6	3
65	Hydrogenation of Phenol Using Silica-Supported Pd and PdAu Catalysts in the Presence of H2 and O2. Bulletin of the Chemical Society of Japan, 2012, 85, 1057-1059.	2.0	1
66	Synthesis of Flower-Like Structured Calcium Silicide and Its Application in the Preparation of Palladium-Loaded Catalyst. Bulletin of the Chemical Society of Japan, 2021, 94, 2089-2091.	2.0	0