Naoya Murakami

List of Publications by Year in descending order

74 papers	3,434 citations	172207 29 h-index	138251 58 g-index
74 all docs	74 docs citations	74 times ranked	4379 citing authors

#	Article	IF	Citations
1	Pristine Simple Oxides as Visible Light Driven Photocatalysts: Highly Efficient Decomposition of Organic Compounds over Platinum-Loaded Tungsten Oxide. Journal of the American Chemical Society, 2008, 130, 7780-7781.	6.6	729
2	Shape-Controlled Anatase Titanium(IV) Oxide Particles Prepared by Hydrothermal Treatment of Peroxo Titanic Acid in the Presence of Polyvinyl Alcohol. Journal of Physical Chemistry C, 2009, 113, 3062-3069.	1.5	280
3	Correlation between Photocatalytic Activities and Structural and Physical Properties of Titanium(IV) Oxide Powders. Chemistry Letters, 2009, 38, 238-239.	0.7	236
4	Photocatalytic reduction of CO2 over a hybrid photocatalyst composed of WO3 and graphitic carbon nitride (g-C3N4) under visible light. Journal of CO2 Utilization, 2014, 6, 17-25.	3.3	189
5	Switching redox site of photocatalytic reaction on titanium(IV) oxide particles modified with transition-metal ion controlled by irradiation wavelength. Applied Catalysis A: General, 2008, 348, 148-152.	2.2	159
6	Complete oxidation of acetaldehyde over a composite photocatalyst of graphitic carbon nitride and tungsten(VI) oxide under visible-light irradiation. Applied Catalysis B: Environmental, 2014, 150-151, 479-485.	10.8	106
7	Development of highly efficient sulfur-doped TiO2 photocatalysts hybridized with graphitic carbon nitride. Applied Catalysis B: Environmental, 2013, 142-143, 362-367.	10.8	101
8	Exposed crystal surface-controlled TiO2 nanorods having rutile phase from TiCl3 under hydrothermal conditions. Journal of Molecular Catalysis A, 2009, 300, 72-79.	4.8	92
9	Double-Beam Photoacoustic Spectroscopic Studies on Transient Absorption of Titanium(IV) Oxide Photocatalyst Powders. Journal of Physical Chemistry C, 2007, 111, 11927-11935.	1.5	84
10	Photocatalytic reduction of CO2 over exposed-crystal-face-controlled TiO2 nanorod having a brookite phase with co-catalyst loading. Applied Catalysis B: Environmental, 2014, 152-153, 309-316.	10.8	83
11	A fingerprint of metal-oxide powders: energy-resolved distribution of electron traps. Chemical Communications, 2016, 52, 12096-12099.	2.2	78
12	Incident light dependence for photocatalytic degradation of acetaldehyde and acetic acid on S-doped and N-doped TiO2 photocatalysts. Chemical Physics, 2007, 339, 64-72.	0.9	77
13	Bifunctionality of Rh³⁺ Modifier on TiO₂ and Working Mechanism of Rh³⁺/TiO₂ Photocatalyst under Irradiation of Visible Light. Journal of Physical Chemistry C, 2013, 117, 11008-11016.	1.5	67
14	Development of a visible-light-responsive rutile rod by site-selective modification of iron(III) ion on {1 1 1} exposed crystal faces. Applied Catalysis B: Environmental, 2010, 97, 115-119.	10.8	61
15	Dependence of Photocatalytic Activity on Aspect Ratio of Shape-Controlled Rutile Titanium(IV) Oxide Nanorods. Journal of Physical Chemistry C, 2011, 115, 419-424.	1.5	59
16	Dependence of Activity of Rutile Titanium(IV) Oxide Powder for Photocatalytic Overall Water Splitting on Structural Properties. Journal of Physical Chemistry C, 2014, 118, 9093-9100.	1.5	59
17	Performance of nitrogen- and sulfur-containing carbon material derived from thiourea and formaldehyde as electrochemical capacitor. Journal of Power Sources, 2011, 196, 10455-10460.	4.0	57
18	Improvement of photocatalytic activity of brookite titanium dioxide nanorods by surface modification using chemical etching. Applied Surface Science, 2012, 258, 5803-5809.	3.1	47

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19	Fabrication and characterization of a p-type Cu3Nb2O8 photocathode toward photoelectrochemical reduction of carbon dioxide. Applied Catalysis B: Environmental, 2015, 174-175, 471-476.	10.8	46
20	Photoacoustic spectroscopic analysis of photoinduced change in absorption of titanium(IV) oxide photocatalyst powders: A novel feasible technique for measurement of defect density. Chemical Physics Letters, 2006, 426, 204-208.	1.2	45
21	Development of metal cation compound-loaded S-doped TiO2 photocatalysts having a rutile phase under visible light. Applied Catalysis A: General, 2008, 349, 70-75.	2.2	45
22	Novel hydrothermal preparation of pure brookite-type titanium(IV) oxide nanocrystal under strong acidic conditions. Catalysis Communications, 2009, 10, 963-966.	1.6	43
23	Reversed double-beam photoacoustic spectroscopy of metal-oxide powders for estimation of their energy-resolved distribution of electron traps and electronic-band structure. Electrochimica Acta, 2018, 264, 83-90.	2.6	40
24	Development of an S-doped titania nanotube (TNT) site-selectively loaded with iron(III) oxide and its photocatalytic activities. Applied Catalysis B: Environmental, 2008, 84, 584-590.	10.8	38
25	Contribution of Discharge Excited Atomic N, N₂*, and N₂⁺ to a Plasma/Liquid Interfacial Reaction as Suggested by Quantitative Analysis. ChemPhysChem, 2019, 20, 1467-1474.	1.0	38
26	Effect of chemical etching by sulfuric acid or H2O2â€“NH3 mixed solution on the photocatalytic activity of rutile TiO2 nanorods. Applied Catalysis A: General, 2010, 380, 48-54.	2.2	32
27	Dependence of photocatalytic activity on particle size of a shape-controlled anatase titanium(IV) oxide nanocrystal. Journal of Molecular Catalysis A, 2012, 358, 106-111.	4.8	31
28	Development of a titania nanotube (TNT) loaded site-selectively with Pt nanoparticles and their photocatalytic activities. Applied Catalysis A: General, 2008, 337, 105-109.	2.2	30
29	Photocatalytic Hydrogen or Oxygen Evolution from Water over S- or N-Doped TiO2under Visible Light. International Journal of Photoenergy, 2008, 2008, 1-7.	1.4	30
30	Improvement of photocatalytic activity of high specific surface area graphitic carbon nitride by loading a co-catalyst. Rare Metals, 2019, 38, 468-474.	3.6	28
31	Characterization and photocatalytic performance of carbon nanotube material-modified TiO2 synthesized by using the hot CVD process. Applied Catalysis B: Environmental, 2009, 91, 533-538.	10.8	26
32	Improvement of visible light photocatalytic acetaldehyde decomposition of bismuth vanadate/silica nanocomposites by cocatalyst loading. Journal of Hazardous Materials, 2012, 211-212, 83-87.	6.5	26
33	Synthesis of anatase TiO2 with exposed {001} and {101} facets and photocatalytic activity. Rare Metals, 2019, 38, 287-291.	3.6	24
34	Nitrogen Fixation in a Plasma/Liquid Interfacial Reaction and Its Switching between Reduction and Oxidation. Journal of Physical Chemistry C, 2020, 124, 9401-9408.	1.5	23
35	What Are Titania Photocatalysts?â€•An Exploratory Correlation of Photocatalytic Activity with Structural and Physical Properties. Journal of Advanced Oxidation Technologies, 2010, 13, .	0.5	21
36	Improvement of capacitance value as the electrode of an electrochemical capacitor by mixing starch with guanidine phosphate. Journal of Power Sources, 2011, 196, 5769-5773.	4.0	21

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37	Photocatalytic reaction over iron hydroxides: A novel visible-light-responsive photocatalyst. Catalysis Communications, 2011, 12, 341-344.	1.6	19
38	Development of a visible-light-responsive titania nanotube photocatalyst by site-selective modification with hetero metal ions. Applied Catalysis B: Environmental, 2009, 92, 56-60.	10.8	18
39	Improvement of Thermoelectric Performance for Sb-Doped SnO2 Ceramics Material by Addition of Cu as Sintering Additive. Journal of Electronic Materials, 2014, 43, 3567-3573.	1.0	18
40	Control of the crystal structure of titanium(IV) oxide by hydrothermal treatment of a titanate nanotube under acidic conditions. CrystEngComm, 2010, 12, 532-537.	1.3	17
41	Photoacoustic Fourier Transform Near- and Mid-Infrared Spectroscopy for Measurement of Energy Levels of Electron Trapping Sites in Titanium(IV) Oxide Photocatalyst Powders. Journal of Physical Chemistry C, 2019, 123, 12169-12175.	1.5	16
42	Development of Plasmonic Photocatalyst by Siteâ€selective Loading of Bimetallic Nanoparticles of Au and Ag on Titanium(IV) Oxide. ChemCatChem, 2020, 12, 3783-3792.	1.8	16
43	In situ observation of photocatalytic reaction by photoacoustic spectroscopy: Detection of heat of exothermic photocatalytic reaction. Chemical Physics Letters, 2008, 451, 316-320.	1.2	14
44	Capacitance property of carbon material derived from starch mixed with guanidine phosphate as electrochemical capacitor. Journal of Power Sources, 2013, 227, 24-30.	4.0	12
45	Improvement of visible light responsivity of rutile TiO2 nanorods by site-selective modification of iron(III) ion on newly exposed faces formed by chemical etching treatment. Applied Catalysis B: Environmental, 2013, 130-131, 264-269.	10.8	12
46	Controlled structure of anatase TiO2 nanoparticles by using organic additives in a microwave process. Applied Catalysis A: General, 2011, 406, 119-123.	2.2	11
47	Development of Visible-Light Active S cation-doped TiO2 Photocatalyst. Current Organic Chemistry, 2010, 14, 699-708.	0.9	10
48	Performance of carbon material derived from starch mixed with flame retardant as electrochemical capacitor. Journal of Power Sources, 2014, 267, 635-640.	4.0	10
49	Mid-infrared absorption of trapped electrons in titanium(<scp>iv</scp>) oxide particles using a photoacoustic FTIR technique. Physical Chemistry Chemical Physics, 2018, 20, 24519-24522.	1.3	10
50	In situ photoacoustic FTIR studies on photocatalytic oxidation of 2-propanol over titanium(IV) oxide. Catalysis Communications, 2016, 83, 1-4.	1.6	9
51	In situ photoacoustic analysis of near-infrared absorption of rhodium-doped strontium titanate photocatalyst powder. Chemical Communications, 2020, 56, 14255-14258.	2.2	9
52	Determination of the internal quantum efficiency for photoelectrochemical reaction in a semiconductor photoelectrode by photoacoustic detection. Chemical Communications, 2020, 56, 5417-5420.	2.2	8
53	Improvement of Electrical Conductivity While Maintaining a High-Transmittance of Graphene Oxide/MWCNT Film by Hydrazine Reduction. Journal of Nanoscience and Nanotechnology, 2012, 12, 6930-6934.	0.9	7
54	Solution-processed amorphous niobium oxide as a novel electron collection layer for inverted polymer solar cells. Chemical Physics Letters, 2013, 586, 81-84.	1.2	7

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55	Spherical activated carbon derived from spherical cellulose and its performance as EDLC electrode. Journal of Applied Polymer Science, 2014, 131, .	1.3	7
56	Operando Analysis of Electron Accumulation in Titanium(IV) Oxide Particles in an Aqueous Suspension Using a Photoacoustic Spectroscopic Method. Journal of Physical Chemistry C, 2019, 123, 222-226.	1.5	7
57	In situ photoacoustic spectroscopic analysis on photocatalytic decolorization of methylene blue over titanium(<scp>iv</scp>) oxide particles. RSC Advances, 2016, 6, 65518-65523.	1.7	6
58	Drastically Increase in Atomic Nitrogen Production Depending on the Dielectric Constant of Beads Filled in the Discharge Space. ACS Omega, 2021, 6, 29759-29764.	1.6	6
59	Reduction of nitrate to ammonia using photocatalytically accumulated electrons on titanium(IV) oxide in a time-separated redox reaction. Inorganic Chemistry Communication, 2022, 141, 109585.	1.8	6
60	Photoacoustic Spectroscopic Estimation of Electron Mobility in Titanium(IV) Oxide Photocatalysts. Studies in Surface Science and Catalysis, 2007, 172, 429-432.	1.5	5
61	Chemical modification of diamond surface with linoleic acid by using benzoyl peroxide. Diamond and Related Materials, 2011, 20, 584-587.	1.8	5
62	Effect of electrochemical treatment in H2SO4 aqueous solution on carbon material derived from cellulose with added guanidine phosphate. Journal of Power Sources, 2013, 225, 150-156.	4.0	4
63	Simultaneous Measurements of Photoabsorption and Photoelectrochemical Performance for Thickness Optimization of a Semiconductor Photoelectrode. ACS Combinatorial Science, 2020, 22, 791-795.	3.8	3
64	Chemical modification of diamond surface with Xâ€“(C6H4)â€“COOH (X=F, Cl, Br, I) using benzoyl peroxide. Diamond and Related Materials, 2010, 19, 1003-1006.	1.8	2
65	Attempt of Deposition of Ag-Doped Amorphous Carbon Film by Ag-Cathode DC Plasma with CH₄ Flow. Journal of Nanoscience and Nanotechnology, 2015, 15, 4619-4631.	0.9	2
66	Low-temperature preparation of a molybdenum oxide hole collection layer by using a peroxo precursor for polymer solar cells. Solar Energy Materials and Solar Cells, 2015, 143, 522-528.	3.0	2
67	Accumulation Process of Photogenerated Electrons in Titanium(IV) Oxide Photocatalyst Particles: Photoacoustic Infrared Spectroscopy Study. Journal of Physical Chemistry C, 2022, 126, 4889-4898.	1.5	2
68	Chemical reaction of hydrogenated diamond surface with amino acids by using N-chlorosuccinimide. Diamond and Related Materials, 2009, 18, 1174-1178.	1.8	1
69	Synthesis of diamond film and UNCD on BeCu substrate by hot filament CVD. Journal of the Ceramic Society of Japan, 2013, 121, 187-194.	0.5	1
70	Synthesis of nanofibrous carbon with herringbone structure on Ni-supported SiC particles using hot CVD apparatus. Diamond and Related Materials, 2014, 48, 104-109.	1.8	1
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72	Smooth Electron Transfer from a Photoexcited Dye to Semiconductor Electrode Through a Swingable Molecular Interface. Electrochemistry, 2016, 84, 390-393.	0.6	0

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73	Development and Future Prospects of Photocatalyst Technology. Journal of the Institute of Electrical Engineers of Japan, 2010, 130, 234-237.	0.0	0
74	Spatial Separation of Reaction Sites on Rutile TiO2 Nanorod by Exposing Crystal Faces and Development of Visible Light Responsive Rutile TiO2 Nanorod. , 2012, , 17-41.		0