

Hitoshi Kusama

List of Publications by Year in descending order

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59
papers

2,010
citations

279487

23
h-index

233125

45
g-index

59
all docs

59
docs citations

59
times ranked

2422
citing authors

#	ARTICLE	IF	CITATIONS
1	Photocatalytic decomposition of water into H ₂ and O ₂ by a two-step photoexcitation reaction using a WO ₃ suspension catalyst and an Fe ³⁺ /Fe ²⁺ redox system. <i>Chemical Physics Letters</i> , 1997, 277, 387-391.	1.2	183
2	TiO ₂ Band Shift by Nitrogen-Containing Heterocycles in Dye-Sensitized Solar Cells: a Periodic Density Functional Theory Study. <i>Langmuir</i> , 2008, 24, 4411-4419.	1.6	161
3	In-situ FT-IR study on CO ₂ hydrogenation over Cu catalysts supported on SiO ₂ , Al ₂ O ₃ , and TiO ₂ . <i>Applied Catalysis A: General</i> , 1997, 165, 391-409.	2.2	146
4	CO ₂ hydrogenation to ethanol over promoted Rh/SiO ₂ catalysts. <i>Catalysis Today</i> , 1996, 28, 261-266.	2.2	136
5	Cs-Modified WO ₃ Photocatalyst Showing Efficient Solar Energy Conversion for O ₂ Production and Fe (III) Ion Reduction under Visible Light. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1196-1200.	2.1	122
6	Influence of alkylpyridine additives in electrolyte solution on the performance of dye-sensitized solar cell. <i>Solar Energy Materials and Solar Cells</i> , 2003, 80, 167-179.	3.0	110
7	Ethanol synthesis by catalytic hydrogenation of CO ₂ over Rh-Fe/SiO ₂ catalysts. <i>Energy</i> , 1997, 22, 343-348.	4.5	86
8	CO ₂ hydrogenation reactivity and structure of Rh/SiO ₂ catalysts prepared from acetate, chloride and nitrate precursors. <i>Applied Catalysis A: General</i> , 2001, 205, 285-294.	2.2	69
9	Influence of nitrogen-containing heterocyclic additives in I ² /I ³⁺ redox electrolytic solution on the performance of Ru-dye-sensitized nanocrystalline TiO ₂ solar cell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2005, 169, 169-176.	2.0	69
10	Influence of alkylaminopyridine additives in electrolytes on dye-sensitized solar cell performance. <i>Solar Energy Materials and Solar Cells</i> , 2004, 81, 87-99.	3.0	68
11	Influence of benzimidazole additives in electrolytic solution on dye-sensitized solar cell performance. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004, 162, 441-448.	2.0	66
12	DFT investigation of the TiO ₂ band shift by nitrogen-containing heterocycle adsorption and implications on dye-sensitized solar cell performance. <i>Solar Energy Materials and Solar Cells</i> , 2008, 92, 84-87.	3.0	60
13	Effect of Carbonate Ions on the Photooxidation of Water over Porous BiVO ₄ Film Photoelectrode under Visible Light. <i>Chemistry Letters</i> , 2010, 39, 17-19.	0.7	52
14	Effect of metal loading on CO ₂ hydrogenation reactivity over Rh/SiO ₂ catalysts. <i>Applied Catalysis A: General</i> , 2000, 197, 255-268.	2.2	48
15	Influence of pyrimidine additives in electrolytic solution on dye-sensitized solar cell performance. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003, 160, 171-179.	2.0	44
16	Theoretical studies of 1:1 charge-transfer complexes between nitrogen-containing heterocycles and I ₂ molecules, and implications on the performance of dye-sensitized solar cell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 181, 268-273.	2.0	40
17	Influence of pyrazole derivatives in I ² /I ³⁺ redox electrolyte solution on Ru(II)-dye-sensitized TiO ₂ solar cell performance. <i>Solar Energy Materials and Solar Cells</i> , 2005, 85, 333-344.	3.0	39
18	Effect of Cations on the Interactions of Ru Dye and Iodides in Dye-Sensitized Solar Cells: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 2544-2552.	1.5	33

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19	Alcohol synthesis by catalytic hydrogenation of CO ₂ over Rh-Co/SiO ₂ . <i>Applied Organometallic Chemistry</i> , 2000, 14, 836-840.	1.7	31
20	Theoretical Study on the Interactions between Black Dye and Iodide in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011, 115, 9267-9275.	1.5	29
21	Nitrogen-Containing Heterocycles's Interaction with Ru Dye in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20764-20771.	1.5	26
22	Characterization of Rh-Co/SiO ₂ catalysts for CO ₂ hydrogenation with TEM, XPS and FT-IR. <i>Applied Catalysis A: General</i> , 2001, 207, 85-94.	2.2	25
23	Theoretical Study on the Intermolecular Interactions of Black Dye Dimers and Black Dye's Deoxycholic Acid Complexes in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 23906-23914.	1.5	24
24	Influence of quinoline derivatives in I ⁻ /I ₃ ⁻ redox electrolyte solution on the performance of Ru(II)-dye-sensitized nanocrystalline TiO ₂ solar cell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004, 165, 157-163.	2.0	22
25	Significant Effects of Anion in Aqueous Reactant Solution on Photocatalytic O ₂ Evolution and Fe(III) Reduction. <i>Chemistry Letters</i> , 2010, 39, 846-847.	0.7	22
26	Combinatorial Search for Iron/Titanium-Based Ternary Oxides with a Visible-Light Response. <i>ACS Combinatorial Science</i> , 2010, 12, 356-362.	3.3	22
27	Influence of aminothiazole additives in I ⁻ /I ₃ ⁻ redox electrolyte solution on Ru(II)-dye-sensitized nanocrystalline TiO ₂ solar cell performance. <i>Solar Energy Materials and Solar Cells</i> , 2004, 82, 457-465.	3.0	21
28	Simultaneous Interactions of Ru Dye with Iodide Ions and Nitrogen-Containing Heterocycles in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11335-11341.	1.5	21
29	Near-IR Sensitization of Dye-Sensitized Solar Cells Using Thiocyanate-Free Cyclometalated Ruthenium(II) Complexes Having a Pyridylquinoline Ligand. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 1303-1311.	1.0	21
30	Density functional study of imidazole's iodine interaction and its implication in dye-sensitized solar cell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2005, 171, 197-204.	2.0	19
31	Improved performance of Black-dye-sensitized solar cells with nanocrystalline anatase TiO ₂ photoelectrodes prepared from TiCl ₄ and ammonium carbonate. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007, 189, 100-104.	2.0	19
32	Photocatalytic Energy Storage over Surface-modified WO ₃ Using V ⁵⁺ /V ⁴⁺ Redox Mediator. <i>Chemistry Letters</i> , 2012, 41, 1489-1491.	0.7	19
33	Density functional study of alkylpyridine's iodine interaction and its implications in the open-circuit photovoltage of dye-sensitized solar cell. <i>Solar Energy Materials and Solar Cells</i> , 2006, 90, 953-966.	3.0	18
34	Effect of Catalyst Preparation on the Oxidative Coupling of Methane over SrO's La ₂ O ₃ . <i>Bulletin of the Chemical Society of Japan</i> , 1994, 67, 2894-2897.	2.0	15
35	Theoretical study of quinolines-I ₂ intermolecular interaction and implications on dye-sensitized solar cell performance. <i>Journal of Computational Chemistry</i> , 2005, 26, 1372-1382.	1.5	15
36	Effect of Side Groups for Ruthenium Bipyridyl Dye on the Interactions with Iodine in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 1493-1502.	1.5	14

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37	A comparative computational study on the interactions of N719 and N749 dyes with iodine in dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 4379-4387.	1.3	14
38	Intermolecular interactions between a Ru complex and organic dyes in cosensitized solar cells: a computational study. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 16166.	1.3	12
39	Theoretical studies of charge-transfer complexes of I ₂ with pyrazoles, and implications on the dye-sensitized solar cell performance. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007, 187, 233-241.	2.0	11
40	Ethanol Synthesis by Catalytic Hydrogenation of Carbon Dioxide over Promoted Rhodium Catalysts. I. The Effect of Additives on Ethanol Synthesis by Catalytic Hydrogenation of Carbon Dioxide over Silica Supported Rhodium Catalysts.. <i>Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal</i> , 1995, 1995, 875-880.	0.1	8
41	Photo-Oxidative Coupling of Methane over TiO ₂ -based Catalysts. <i>Chemistry Letters</i> , 1997, 26, 457-458.	0.7	7
42	Insights into the carbonate effect on water oxidation over metal oxide photocatalysts/photoanodes. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 5894-5902.	1.3	6
43	Theoretical study of cyclometalated Ru(II) dyes: Implications on the open-circuit voltage of dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2013, 272, 80-89.	2.0	5
44	A computational study on Ru complexes with bidentate carboxylate ligands: Insights into the photocurrents of dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016, 314, 171-177.	2.0	5
45	NaBr-Assisted Photoelectrochemical and Photochemical Integrated Process for Isomerization of Maleate Esters to Fumarate Esters. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 6886-6893.	3.2	5
46	Data mining assisted by theoretical calculations for improving dye-sensitized solar cell performance. <i>Solar Energy Materials and Solar Cells</i> , 2007, 91, 76-78.	3.0	4
47	Comparative study on the interactions of TEMPO and iodine with organic dyes in dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016, 330, 95-101.	2.0	4
48	Interaction between dyes and SeCN ⁻ (SeCN) ₂ redox mediator in dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 376, 255-262.	2.0	3
49	Comparative study on the interactions of sulfide and iodine mediators with a dye in p-type dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 365, 110-118.	2.0	2
50	Interaction of tris(4-anisyl)amine mediator in dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 387, 112150.	2.0	2
51	A slight bluish-white fluorescence from E,E-2,6-bis(4-cyanostyryl)pyridine pristine crystals. <i>RSC Advances</i> , 2020, 10, 2727-2733.	1.7	2
52	Hydrogenation of CO ₂ over SiO ₂ Supported Rh-Co-alkalimetal Catalysts.. <i>Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal</i> , 2002, 2002, 107-110.	0.1	1
53	Interactions Between Thiocyanate-Free Bis-Tridentate Ru Complexes and Iodide in Dye-Sensitized Solar Cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017, 344, 134-142.	2.0	1
54	Interaction between disulfide/thiolate mediators and ruthenium complex in dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017, 349, 207-215.	2.0	1

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55	Interaction between dyes and iodide mediators in p-type dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 357, 60-71.	2.0	1
56	A computational study of a reduced dye and its O ₂ reduction: Implication on H ₂ O ₂ production with dye-sensitized photocathodes. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 418, 113437.	2.0	1
57	The Effect of Precursors on CO ₂ Hydrogenation Reactivity over SiO ₂ Supported Rh-Li and Rh-Fe Catalysts.. Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal, 2001, 2001, 483-485.	0.1	0
58	Hydrogenation Reaction of CO ₂ by Using FSM-16 and SiO ₂ Supported Rh Catalysts.. Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal, 2002, 2002, 103-105.	0.1	0
59	Intermolecular interaction between anthraquinone dyes and TEMPO mediator in dye-sensitized photocatalytic systems. Journal of Photochemistry and Photobiology, 2020, 2, 100003.	1.1	0