

# Kohjiro Hara

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

146 papers	17,316 citations	64 h-index	131 g-index
156 ext. papers	18,104 ext. citations	5.1 avg, IF	6.26 L-index

#	Paper	IF	Citations
146	Molecular Design of Coumarin Dyes for Efficient Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 597-606	3.4	936
145	Alkyl-functionalized organic dyes for efficient molecular photovoltaics. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 14256-7	16.4	793
144	Ultrafast plasmon-induced electron transfer from gold nanodots into TiO <sub>2</sub> nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 14852-3	16.4	765
143	Design of new coumarin dyes having thiophene moieties for highly efficient organic-dye-sensitized solar cells. <i>New Journal of Chemistry</i> , <b>2003</b> , 27, 783-785	3.6	596
142	Hexylthiophene-Functionalized Carbazole Dyes for Efficient Molecular Photovoltaics: Tuning of Solar-Cell Performance by Structural Modification. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 3993-4003	9.6	582
141	A High-Light-Harvesting-Efficiency Coumarin Dye for Stable Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , <b>2007</b> , 19, 1138-1141	24	532
140	Oligothiophene-containing coumarin dyes for efficient dye-sensitized solar cells. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 15476-82	3.4	531
139	A coumarin-derivative dye sensitized nanocrystalline TiO <sub>2</sub> solar cell having a high solar-energy conversion efficiency up to 5.6%. <i>Chemical Communications</i> , <b>2001</b> , 569-570	5.8	523
138	Highly efficient photon-to-electron conversion with mercurochrome-sensitized nanoporous oxide semiconductor solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2000</b> , 64, 115-134	6.4	482
137	Efficiencies of Electron Injection from Excited N3 Dye into Nanocrystalline Semiconductor (ZrO <sub>2</sub> , TiO <sub>2</sub> , ZnO, Nb <sub>2</sub> O <sub>5</sub> , SnO <sub>2</sub> , In <sub>2</sub> O <sub>3</sub> ) Films. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 4818-4822	3.4	481
136	Thiophene-Functionalized Coumarin Dye for Efficient Dye-Sensitized Solar Cells: Electron Lifetime Improved by Coadsorption of Deoxycholic Acid. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 7224-7230	3.8	458
135	Identification of Reactive Species in Photoexcited Nanocrystalline TiO <sub>2</sub> Films by Wide-Wavelength-Range (400–500 nm) Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 3817-3823	3.4	405
134	Novel Conjugated Organic Dyes for Efficient Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , <b>2005</b> , 15, 246-252	15.6	389
133	Effect of additives on the photovoltaic performance of coumarin-dye-sensitized nanocrystalline TiO <sub>2</sub> solar cells. <i>Langmuir</i> , <b>2004</b> , 20, 4205-10	4	386
132	Photoelectrochemical Properties of J Aggregates of Benzothiazole Merocyanine Dyes on a Nanostructured TiO <sub>2</sub> Film. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 1363-1371	3.4	334
131	Photosensitization of a porous TiO <sub>2</sub> electrode with merocyanine dyes containing a carboxyl group and a long alkyl chain. <i>Chemical Communications</i> , <b>2000</b> , 1173-1174	5.8	290
130	Direct observation of reactive trapped holes in TiO <sub>2</sub> undergoing photocatalytic oxidation of adsorbed alcohols: evaluation of the reaction rates and yields. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 416-7	16.4	280

129	Photophysical and (photo)electrochemical properties of a coumarin dye. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 3907-14	3.4	279
128	Efficient sensitization of nanocrystalline TiO <sub>2</sub> films with cyanine and merocyanine organic dyes. <i>Solar Energy Materials and Solar Cells</i> , <b>2003</b> , 80, 47-71	6.4	271
127	Novel polyene dyes for highly efficient dye-sensitized solar cells. <i>Chemical Communications</i> , <b>2003</b> , 252-3	5.8	261
126	Interfacial electron-transfer kinetics in metal-free organic dye-sensitized solar cells: combined effects of molecular structure of dyes and electrolytes. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 17874-81	16.4	256
125	Dynamics of efficient electron-hole separation in TiO <sub>2</sub> nanoparticles revealed by femtosecond transient absorption spectroscopy under the weak-excitation condition. <i>Physical Chemistry Chemical Physics</i> , <b>2007</b> , 9, 1453-60	3.6	234
124	Steady hydrogen evolution from water on Eosin Y-fixed TiO <sub>2</sub> photocatalyst using a silane-coupling reagent under visible light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2000</b> , 137, 63-69	4.7	230
123	Dye-sensitized nanocrystalline TiO <sub>2</sub> solar cells based on novel coumarin dyes. <i>Solar Energy Materials and Solar Cells</i> , <b>2003</b> , 77, 89-103	6.4	227
122	Molecular Design of Coumarin Dyes for Stable and Efficient Organic Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 17011-17017	3.8	226
121	Electrochemical reduction of carbon dioxide under high pressure on various electrodes in an aqueous electrolyte. <i>Journal of Electroanalytical Chemistry</i> , <b>1995</b> , 391, 141-147	4.1	221
120	Quantitative Analysis of Light-Harvesting Efficiency and Electron-Transfer Yield in Ruthenium-Dye-Sensitized Nanocrystalline TiO <sub>2</sub> Solar Cells. <i>Chemistry of Materials</i> , <b>2002</b> , 14, 2527-2535	9.6	211
119	Plasmon-Induced Charge Separation and Recombination Dynamics in Gold/TiO <sub>2</sub> Nanoparticle Systems: Dependence on TiO <sub>2</sub> Particle Size. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 6454-6462	3.8	209
118	Dye sensitization of nanocrystalline titanium dioxide with square planar platinum(II) diimine dithiolate complexes. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 5371-80	5.1	208
117	Visible-light-induced water splitting based on two-step photoexcitation between dye-sensitized layered niobate and tungsten oxide photocatalysts in the presence of a triiodide/iodide shuttle redox mediator. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 16872-84	16.4	203
116	Electron Injection Efficiency from Excited N3 into Nanocrystalline ZnO Films: Effect of (N3)n <sup>2+</sup> Aggregate Formation. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 2570-2574	3.4	201
115	Dye-Sensitized Nanocrystalline TiO <sub>2</sub> Solar Cells Based on Ruthenium(II) Phenanthroline Complex Photosensitizers. <i>Langmuir</i> , <b>2001</b> , 17, 5992-5999	4	162
114	Femtosecond Visible-to-IR Spectroscopy of TiO <sub>2</sub> Nanocrystalline Films: Elucidation of the Electron Mobility before Deep Trapping. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 11741-11746	3.8	158
113	Electron transport in coumarin-dye-sensitized nanocrystalline TiO <sub>2</sub> electrodes. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 23776-8	3.4	152
112	Influence of electrolytes on the photovoltaic performance of organic dye-sensitized nanocrystalline TiO <sub>2</sub> solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2001</b> , 70, 151-161	6.4	138

111	Robust dye-sensitized overall water splitting system with two-step photoexcitation of coumarin dyes and metal oxide semiconductors. <i>Chemical Communications</i> , <b>2009</b> , 3577-9	5.8	135
110	Substituted carbazole dyes for efficient molecular photovoltaics: long electron lifetime and high open circuit voltage performance. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 4829		121
109	Electrochemical Reduction of CO <sub>2</sub> on a Cu Electrode under High Pressure: Factors that Determine the Product Selectivity. <i>Journal of the Electrochemical Society</i> , <b>1994</b> , 141, 2097-2103	3.9	119
108	Efficiencies of Electron Injection from Excited Sensitizer Dyes to Nanocrystalline ZnO Films as Studied by Near-IR Optical Absorption of Injected Electrons. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 12957-12964	3.4	118
107	Electrochemical reduction of high pressure CO <sub>2</sub> at Pb, Hg and In electrodes in an aqueous KHCO <sub>3</sub> solution. <i>Journal of Electroanalytical Chemistry</i> , <b>1995</b> , 394, 199-203	4.1	118
106	Ultrafast Direct and Indirect Electron-Injection Processes in a Photoexcited Dye-Sensitized Nanocrystalline Zinc Oxide Film: The Importance of Exciplex Intermediates at the Surface. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 12583-12592	3.4	116
105	Organic Sensitizers Based on Hexylthiophene-Functionalized Indolo[3,2-b]carbazole for Efficient Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 13409-13415	3.8	109
104	Single crystalline zinc stannate nanoparticles for efficient photo-electrochemical devices. <i>Chemical Communications</i> , <b>2010</b> , 46, 1529-31	5.8	106
103	Lithium ion effect on electron injection from a photoexcited coumarin derivative into a TiO <sub>2</sub> nanocrystalline film investigated by visible-to-IR ultrafast spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 16406-14	3.4	106
102	Panchromatic sensitization of nanocrystalline TiO <sub>2</sub> with cis-Bis(4-carboxy-2-[2-(4-carboxypyridyl)]quinoline)bis(thiocyanato-N)ruthenium(II). <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 7921-31	5.1	102
101	Long-term stability of organic dye-sensitized solar cells based on an alkyl-functionalized carbazole dye. <i>Energy and Environmental Science</i> , <b>2009</b> , 2, 1109	35.4	100
100	Semiconductor-sensitized solar cells based on nanocrystalline In <sub>2</sub> S <sub>3</sub> /In <sub>2</sub> O <sub>3</sub> thin film electrodes. <i>Solar Energy Materials and Solar Cells</i> , <b>2000</b> , 62, 441-447	6.4	99
99	Highly stable sensitizer dyes for dye-sensitized solar cells: role of the oligothiophene moiety. <i>Energy and Environmental Science</i> , <b>2009</b> , 2, 542	35.4	98
98	Ultrafast plasmon induced electron injection mechanism in gold-TiO <sub>2</sub> nanoparticle system. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , <b>2013</b> , 15, 21-30	16.4	96
97	Ultrafast Stepwise Electron Injection from Photoexcited Ru-Complex into Nanocrystalline ZnO Film via Intermediates at the Surface. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 4162-4166	3.4	93
96	Enhancing the performance of quantum dots sensitized solar cell by SiO <sub>2</sub> surface coating. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 233107	3.4	91
95	Organic Dyes Containing Thieno[3,2-b]indole Donor for Efficient Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 18283-18290	3.8	91
94	Effect of the Particle Size on the Electron Injection Efficiency in Dye-Sensitized Nanocrystalline TiO <sub>2</sub> Films Studied by Time-Resolved Microwave Conductivity (TRMC) Measurements. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 10741-10746	3.8	82

93	A new efficient photosensitizer for nanocrystalline solar cells: synthesis and characterization of cis-bis(4,7-dicarboxy-1,10-phenanthroline)dithiocyanato ruthenium(II). <i>Dalton Transactions RSC</i> , <b>2000</b> , 2817-2822		82
92	Efficient panchromatic sensitization of nanocrystalline TiO <sub>2</sub> films by $\beta$ -diketonato ruthenium polypyridyl complexes. <i>New Journal of Chemistry</i> , <b>2002</b> , 26, 966-968	3.6	81
91	Exploitation of Ionic Liquid Electrolyte for Dye-Sensitized Solar Cells by Molecular Modification of Organic-Dye Sensitizers. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 2810-2816	9.6	75
90	Nanocrystalline electrodes based on nanoporous-walled WO <sub>3</sub> nanotubes for organic-dye-sensitized solar cells. <i>Langmuir</i> , <b>2011</b> , 27, 12730-6	4	74
89	Molecular Design of Organic Dye toward Retardation of Charge Recombination at Semiconductor/Dye/Electrolyte Interface: Introduction of Twisted Linker. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 17920-17925	3.8	72
88	Effect of the Ligand Structure on the Efficiency of Electron Injection from Excited Ru(II)phenanthroline Complexes to Nanocrystalline TiO <sub>2</sub> Films. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 374-379	3.4	72
87	Large Current Density CO <sub>2</sub> Reduction under High Pressure Using Gas Diffusion Electrodes. <i>Bulletin of the Chemical Society of Japan</i> , <b>1997</b> , 70, 571-576	5.1	69
86	Significant effects of the distance between the cyanine dye skeleton and the semiconductor surface on the photoelectrochemical properties of dye-sensitized porous semiconductor electrodes. <i>New Journal of Chemistry</i> , <b>2001</b> , 25, 200-202	3.6	69
85	High Efficiency Electrochemical Reduction of Carbon Dioxide under High Pressure on a Gas Diffusion Electrode Containing Pt Catalysts. <i>Journal of the Electrochemical Society</i> , <b>1995</b> , 142, L57-L59	3.9	69
84	Stepwise construction of head-to-tail-type oligothiophenes via iterative palladium-catalyzed C-H arylation and halogen exchange. <i>Organic Letters</i> , <b>2009</b> , 11, 2297-300	6.2	67
83	Trapping dynamics of electrons and holes in a nanocrystalline TiO <sub>2</sub> film revealed by femtosecond visible/near-infrared transient absorption spectroscopy. <i>Comptes Rendus Chimie</i> , <b>2006</b> , 9, 268-274	2.7	64
82	New platinum(II) polypyridyl photosensitizers for TiO <sub>2</sub> solar cells. <i>New Journal of Chemistry</i> , <b>2000</b> , 24, 343-345	3.6	64
81	Potential-induced degradation in photovoltaic modules based on n-type single crystalline Si solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2015</b> , 140, 361-365	6.4	62
80	Highly Efficient Photon-to-Electron Conversion of Mercurochrome-sensitized Nanoporous ZnO Solar Cells. <i>Chemistry Letters</i> , <b>2000</b> , 29, 316-317	1.7	58
79	Electrocatalytic Formation of CH <sub>4</sub> from CO <sub>2</sub> on a Pt Gas Diffusion Electrode. <i>Journal of the Electrochemical Society</i> , <b>1997</b> , 144, 539-545	3.9	54
78	Ultrafast interfacial charge separation processes from the singlet and triplet MLCT states of Ru(bpy) <sub>2</sub> (dcbpy) adsorbed on nanocrystalline SnO <sub>2</sub> under negative applied bias. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 3366-3373	3.9	54
77	Highly efficient polypyridyl-ruthenium(II) photosensitizers with chelating oxygen donor ligands: $\beta$ -diketonato-bis(dicarboxybipyridine)ruthenium. <i>Inorganica Chimica Acta</i> , <b>2000</b> , 310, 169-174	2.7	53
76	Sensitization of nanocrystalline TiO <sub>2</sub> film by ruthenium(II) diimine dithiolate complexes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2001</b> , 145, 135-141	4.7	52

75	Electrochemical CO <sub>2</sub> reduction on a glassy carbon electrode under high pressure. <i>Journal of Electroanalytical Chemistry</i> , <b>1997</b> , 421, 1-4	4.1	51
74	Investigations on anodic photocurrent loss processes in dye sensitized solar cells: comparison between nanocrystalline SnO <sub>2</sub> and TiO <sub>2</sub> films. <i>Chemical Physics Letters</i> , <b>2002</b> , 364, 297-302	2.5	49
73	Femtosecond diffuse reflectance transient absorption for dye-sensitized solar cells under operational conditions: effect of electrolyte on electron injection. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 6614-5	16.4	47
72	Mechanism of Particle Size Effect on Electron Injection Efficiency in Ruthenium Dye-Sensitized TiO <sub>2</sub> Nanoparticle Films. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 8135-8143	3.8	46
71	Effect of pH on absorption spectra of photogenerated holes in nanocrystalline TiO <sub>2</sub> films. <i>Chemical Physics Letters</i> , <b>2007</b> , 438, 268-273	2.5	46
70	Potential-induced degradation of Cu(In,Ga)Se <sub>2</sub> photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , <b>2015</b> , 54, 08KC13	1.4	44
69	New Ru(II) phenanthroline complex photosensitizers having different number of carboxyl groups for dye-sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2001</b> , 145, 117-122	4.7	44
68	Crystalline Si photovoltaic modules based on TiO <sub>2</sub> -coated cover glass against potential-induced degradation. <i>RSC Advances</i> , <b>2014</b> , 4, 44291-44295	3.7	43
67	Block copolymer templated nanoporous TiO <sub>2</sub> for quantum-dot-sensitized solar cells. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 492-497		42
66	Investigation of optimum conditions for high-efficiency organic thin-film solar cells based on polymer blends. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2006</b> , 182, 269-272	4.7	42
65	Quantitative Estimation of the Efficiency of Electron Injection from Excited Sensitizer Dye into Nanocrystalline ZnO Film. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 2643-2647	3.4	40
64	UV photoinduced reduction of water to hydrogen in Na <sub>2</sub> S, Na <sub>2</sub> SO <sub>3</sub> , and Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub> aqueous solutions. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>1999</b> , 128, 27-31	4.7	39
63	Near-IR transient absorption study on ultrafast electron-injection dynamics from a Ru-complex dye into nanocrystalline In <sub>2</sub> O <sub>3</sub> thin films: Comparison with SnO <sub>2</sub> , ZnO, and TiO <sub>2</sub> films. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2006</b> , 182, 273-279	4.7	38
62	Synthesis and photophysical properties of ruthenium(II) charge transfer sensitizers containing 4,4'-dicarboxy-2,2'-biquinoline and 5,8-dicarboxy-6,7-dihydro-dibenzo[1,10]-phenanthroline. <i>Inorganica Chimica Acta</i> , <b>2001</b> , 322, 7-16	2.7	38
61	Reductive Electrochemical Decomposition of Chloroform on Metal Electrodes. <i>Chemistry Letters</i> , <b>1997</b> , 26, 131-132	1.7	37
60	Photocatalytic hydrogen and oxygen formation over SiO <sub>2</sub> -supported RuS <sub>2</sub> in the presence of sacrificial donor and acceptor. <i>Applied Catalysis A: General</i> , <b>1999</b> , 189, 127-137	5.1	36
59	Electron injection dynamics in dye-sensitized semiconductor nanocrystalline films. <i>Surface Science Reports</i> , <b>2014</b> , 69, 389-441	12.9	33
58	Change in the product selectivity for the electrochemical CO <sub>2</sub> reduction by adsorption of sulfide ion on metal electrodes. <i>Journal of Electroanalytical Chemistry</i> , <b>1997</b> , 434, 239-243	4.1	33



57	Alkyl-Functionalized Organic Dyes for Efficient Molecular Photovoltaics [J. Am. Chem. Soc.2006,128, 14256-14257].. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 4202-4203	16.4	33
56	Organic dyes with oligo-n-hexylthiophene for dye-sensitized solar cells: Relation between chemical structure of donor and photovoltaic performance. <i>Dyes and Pigments</i> , <b>2012</b> , 92, 1250-1256	4.6	32
55	Carbazole Dyes with Alkyl-functionalized Thiophenes for Dye-sensitized Solar Cells: Relation between Alkyl Chain Length and Photovoltaic Performance. <i>Chemistry Letters</i> , <b>2011</b> , 40, 872-873	1.7	32
54	Reaction of holes in nanocrystalline TiO <sub>2</sub> films evaluated by highly sensitive transient absorption spectroscopy. <i>Catalysis Today</i> , <b>2007</b> , 120, 214-219	5.3	32
53	Alternation of Charge Injection and Recombination in Dye-Sensitized Solar Cells by the Addition of Nonconjugated Bridge to Organic Dyes. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 2024-2031	3.8	31
52	Novel lighter weight crystalline silicon photovoltaic module using acrylic-film as a cover sheet. <i>Japanese Journal of Applied Physics</i> , <b>2014</b> , 53, 092302	1.4	30
51	Synthesis and Properties of Seleno-analog MK-organic Dye for Photovoltaic Cells Prepared by C-H Functionalization Reactions of Selenophene Derivatives. <i>Chemistry Letters</i> , <b>2011</b> , 40, 922-924	1.7	30
50	Electrochemical reduction of high pressure carbon dioxide on Fe electrodes at large current density. <i>Journal of Electroanalytical Chemistry</i> , <b>1995</b> , 386, 257-260	4.1	30
49	Relationship between cross-linking conditions of ethylene vinyl acetate and potential induced degradation for crystalline silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , <b>2015</b> , 54, 08KG01	1.4	29
48	Investigation on antireflection coating for high resistance to potential-induced degradation. <i>Japanese Journal of Applied Physics</i> , <b>2014</b> , 53, 03CE01	1.4	29
47	Development of Carbazole Dyes for Efficient Molecular Photovoltaics. <i>Heterocycles</i> , <b>2013</b> , 87, 275	0.8	29
46	Crystalline Si photovoltaic modules functionalized by a thin polyethylene film against potential and damp-heat-induced degradation. <i>RSC Advances</i> , <b>2015</b> , 5, 15017-15023	3.7	28
45	Dual Electron Injection from Charge-Transfer Excited States of TiO <sub>2</sub> -Anchored Ru(II)-4,4'-Dicarboxy-2,2'-biquinoline Complex. <i>Chemistry Letters</i> , <b>2000</b> , 29, 490-491	1.7	28
44	Control of Measurement Environments for High-Efficiency Organic Photovoltaic Cells. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, L217-L219	1.4	27
43	Microscopic aspects of potential-induced degradation phenomena and their recovery processes for p-type crystalline Si photovoltaic modules. <i>Current Applied Physics</i> , <b>2016</b> , 16, 1659-1665	2.6	27
42	Concerted effect of large molecular dyes and bulky cobalt complex redox couple to retard recombination in dye-sensitized solar cells. <i>Electrochemistry Communications</i> , <b>2011</b> , 13, 778-780	5.1	26
41	Nanocrystalline solar cells sensitized with monocarboxyl or dicarboxyl pyridylquinoline ruthenium(II) complexes. <i>Inorganica Chimica Acta</i> , <b>2003</b> , 351, 283-290	2.7	26
40	Influence of surface structure of n-type single-crystalline Si solar cells on potential-induced degradation. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 166, 132-139	6.4	24

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|----|---|-----|----|
| 39 | Synthesis and photo-electrochemical properties of novel thienopyrazine and quinoxaline derivatives, and their dye-sensitized solar cell performance. <i>Organic Electronics</i> , <b>2012</b> , 13, 3097-3101                             | 3.5 | 22 |
| 38 | Plasmon induced electron transfer at gold/TiO <sub>2</sub> interface under femtosecond near-IR two-photon excitation. <i>Thin Solid Films</i> , <b>2009</b> , 518, 861-864  | 2.2 | 22 |
| 37 | Microscopic imaging of the efficiency of electron injection from excited sensitizer dye into nanocrystalline ZnO film. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2004</b> , 166, 69-74                          | 4.7 | 22 |
| 36 | Effect of excitation wavelength on electron injection efficiency in dye-sensitized nanocrystalline TiO <sub>2</sub> and ZrO <sub>2</sub> films. <i>Comptes Rendus Chimie</i> , <b>2006</b> , 9, 639-644                                   | 2.7 | 20 |
| 35 | Near-IR transient absorption spectra of N3 dye as a probe of aggregation on nanocrystalline semiconductor films. <i>Chemical Physics Letters</i> , <b>2006</b> , 423, 417-421   | 2.5 | 20 |
| 34 | Iterative Extension of Thiophene Ring Leading to Head-to-Tail-Type Oligothiophenes via Stepwise CH Arylation and Halogen Exchange Sequence. <i>Heterocycles</i> , <b>2010</b> , 82, 505   | 0.8 | 19 |
| 33 | Dye-Sensitized Solar Cells <b>2005</b> , 663-700  |     | 19 |
| 32 | Enhanced performance of dye-sensitized solar cells with novel 2,6-diphenyl-4H-pyranylidene dyes. <i>Organic Electronics</i> , <b>2012</b> , 13, 425-431   | 3.5 | 17 |
| 31 | Synthesis and Properties of 9,10-Anthrylene-substituted Phenyleneethynylene Dyes for Dye-sensitized Solar Cell. <i>Chemistry Letters</i> , <b>2011</b> , 40, 620-622  | 1.7 | 14 |
| 30 | Dye-sensitized Solar Cells Based on Novel Diphenylpyran Derivatives. <i>Chemistry Letters</i> , <b>2011</b> , 40, 510-511   | 1.7 | 14 |
| 29 | Synthesis and Properties of Anthrylene-Substituted Phenyleneethynylene Dyes Having Amino/Cyano Group(s) and Their Application to Dye-Sensitized Solar Cells. <i>Bulletin of the Chemical Society of Japan</i> , <b>2012</b> , 85, 687-697 | 5.1 | 13 |
| 28 | Electrochemical Reduction of N <sub>2</sub> O on Gas-Diffusion Electrodes. <i>Bulletin of the Chemical Society of Japan</i> , <b>1996</b> , 69, 2159-2162   | 5.1 | 13 |
| 27 | Plasma-enhanced chemical-vapor deposition of silicon nitride film for high resistance to potential-induced degradation. <i>Japanese Journal of Applied Physics</i> , <b>2015</b> , 54, 08KD12   | 1.4 | 12 |
| 26 | Electrocatalytic Fischer-Tropsch Reactions. Formation of Hydrocarbons and Oxygen-Containing Compounds from CO on a Pt Gas Diffusion Electrode. <i>Bulletin of the Chemical Society of Japan</i> , <b>1997</b> , 70, 745-754               | 5.1 | 11 |
| 25 | Novel and Efficient Organic Liquid Electrolytes for Dye-sensitized Solar Cells Based on a Ru(II) Terpyridyl Complex Photosensitizer. <i>Chemistry Letters</i> , <b>2003</b> , 32, 1014-1015   | 1.7 | 11 |
| 24 | Characterization of Photovoltaic Performance of Dye-Sensitized Solar Cells. <i>Electrochemistry</i> , <b>2005</b> , 73, 887-896   | 1.2 | 10 |
| 23 | Chemically strengthened cover glass for preventing potential induced degradation of crystalline silicon solar cells <b>2013</b> ,   |     | 9  |
| 22 | Durable crystalline Si photovoltaic modules based on silicone-sheet encapsulants. <i>Japanese Journal of Applied Physics</i> , <b>2018</b> , 57, 027101   | 1.4 | 8  |



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19	Electrochemical reduction of CO <sub>2</sub> by using metal supported gas diffusion electrode under high pressure. <i>Studies in Surface Science and Catalysis</i> , <b>1998</b> , 577-580	1.8	6
18	Dye-Sensitized Solar Cells <b>2011</b> , 642-674		5
17	Photocatalytic Activity of RuS <sub>2</sub> /SiO <sub>2</sub> for Water Decomposition. <i>Chemistry Letters</i> , <b>1998</b> , 27, 387-388	1.7	5
16	Spectroscopic investigation of long-term outdoor-exposed crystalline silicon photovoltaic modules. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2021</b> , 404, 112891	4.7	5
15	Ph <sub>2</sub> P(O) Group for Protection of Terminal Acetylenes. <i>Synlett</i> , <b>2011</b> , 2011, 2402-2406	2.2	4
14	Femtosecond visible-to-IR spectroscopy of TiO <sub>2</sub> nanocrystalline films: dynamics of UV-generated charge carrier relaxation at different excitation wavelengths <b>2007</b> ,		4
13	Influence of electrolyte on the photovoltaic performance of a dye-sensitized TiO <sub>2</sub> solar cell based on a Ru(II) terpyridyl complex photosensitizer. <i>Solar Energy Materials and Solar Cells</i> , <b>2004</b> , 85, 21-21	6.4	4
12	Potential-induced degradation of n-type crystalline Si photovoltaic modules in practical outdoor systems. <i>Japanese Journal of Applied Physics</i> , <b>2018</b> , 57, 117102	1.4	4
11	Current Status of Dye-Sensitized Solar Cells <b>2003</b> ,		3
10	Fabrication of Small-Molecular-Weight Organic Thin-Film Solar Cells by Combination of Wet and Dry Processes. <i>IEICE Transactions on Electronics</i> , <b>2006</b> , E89-C, 1771-1774	0.4	3
9	Carbazole Dyes with Ether Groups for Dye-Sensitized Solar Cells: Effect of Negative Charges in Dye Molecules on Electron Lifetime. <i>Japanese Journal of Applied Physics</i> , <b>2012</b> , 51, 10NE14	1.4	2
8	Mechanisms of plasmon-induced charge separation and recombination at gold nanoparticle supported on different size TiO <sub>2</sub> film systems <b>2007</b> ,		2
7	Development of Carbazole Dyes for Efficient Molecular Photovoltaics. <i>Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry</i> , <b>2010</b> , 68, 399-408	0.2	2
6	Carbazole Dyes with Ether Groups for Dye-Sensitized Solar Cells: Effect of Negative Charges in Dye Molecules on Electron Lifetime. <i>Japanese Journal of Applied Physics</i> , <b>2012</b> , 51, 10NE14	1.4	2
5	Durable crystalline silicon photovoltaic modules based on breathable structure. <i>Japanese Journal of Applied Physics</i> , <b>2021</b> , 60, 027001	1.4	2
4	Efficient Organic-Dye-Sensitized Nanocrystalline TiO <sub>2</sub> Solar Cells <b>2006</b> ,		1

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| 3 | Raman spectroscopic analysis of encapsulants in aged photovoltaic modules. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2022</b> , 425, 113721               | 4.7 | 1 |
| 2 | Metal-doped titanium oxide films for suppressing potential-induced degradation of photovoltaic modules. <i>Journal of the Ceramic Society of Japan</i> , <b>2021</b> , 129, 625-630 | 1   | 0 |
| 1 | Durable polyolefin encapsulants in aged photovoltaic modules. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2022</b> , 114015                                 | 4.7 |   |