

Tsukasa Torimoto

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210
papers

8,954
citations

49
h-index

88
g-index

243
ext. papers

9,567
ext. citations

4.7
avg, IF

5.91
L-index

#	Paper	IF	Citations
210	New frontiers in materials science opened by ionic liquids. <i>Advanced Materials</i> , 2010 , 22, 1196-221	24	718
209	Sputter deposition onto ionic liquids: Simple and clean synthesis of highly dispersed ultrafine metal nanoparticles. <i>Applied Physics Letters</i> , 2006 , 89, 243117	3.4	326
208	Ligand-free platinum nanoparticles encapsulated in a hollow porous carbon shell as a highly active heterogeneous hydrogenation catalyst. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 7063-6	16.4	309
207	Facile synthesis of ZnS-AgInS ₂ solid solution nanoparticles for a color-adjustable luminophore. <i>Journal of the American Chemical Society</i> , 2007 , 129, 12388-9	16.4	295
206	Effects of Adsorbents Used as Supports for Titanium Dioxide Loading on Photocatalytic Degradation of Propylamide. <i>Environmental Science & Technology</i> , 1996 , 30, 1275-1281	10.3	253
205	Effect of Inert Supports for Titanium Dioxide Loading on Enhancement of Photodecomposition Rate of Gaseous Propionaldehyde. <i>The Journal of Physical Chemistry</i> , 1995 , 99, 9986-9991		252
204	Quantitative analysis of defective sites in titanium(IV) oxide photocatalyst powders. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 778-783	3.6	200
203	Titanium dioxide/adsorbent hybrid photocatalysts for photodestruction of organic substances of dilute concentrations. <i>Catalysis Today</i> , 2000 , 58, 133-140	5.3	176
202	Single-step synthesis of gold-silver alloy nanoparticles in ionic liquids by a sputter deposition technique. <i>Chemical Communications</i> , 2008 , 691-3	5.8	174
201	Plasmon-Enhanced Photocatalytic Activity of Cadmium Sulfide Nanoparticle Immobilized on Silica-Coated Gold Particles. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 2057-2062	6.4	163
200	Effect of activated carbon content in TiO ₂ -loaded activated carbon on photodegradation behaviors of dichloromethane. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1997 , 103, 153-157	4.7	160
199	Observation of Ionic Liquid by Scanning Electron Microscope. <i>Chemistry Letters</i> , 2006 , 35, 600-601	1.7	149
198	CdS Quantum Dots Sensitized TiO ₂ Sandwich Type Photoelectrochemical Solar Cells. <i>Chemistry Letters</i> , 2007 , 36, 88-89	1.7	140
197	Room-Temperature Ionic Liquid. A New Medium for Material Production and Analyses under Vacuum Conditions. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 3177-3188	6.4	136
196	Remarkable photoluminescence enhancement of ZnS-AgInS ₂ solid solution nanoparticles by post-synthesis treatment. <i>Chemical Communications</i> , 2010 , 46, 2082-4	5.8	136
195	Photocatalytic reduction of CO ₂ using surface-modified CdS photocatalysts in organic solvents. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998 , 113, 93-97	4.7	135
194	Preparation and photoelectrochemical properties of densely immobilized Cu ₂ ZnSnS ₄ nanoparticle films. <i>Journal of Materials Chemistry</i> , 2010 , 20, 5319		132

193	Fabrication of CdS Nanoparticle Chains along DNA Double Strands. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 8799-8803	3.4	124
192	Discrimination of the active crystalline phases in anatase-rutile mixed titanium(IV) oxide photocatalysts through action spectrum analyses. <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 5910-5914	3.6	120
191	Tunable photoluminescence from the visible to near-infrared wavelength region of non-stoichiometric AgInS ₂ nanoparticles. <i>Journal of Materials Chemistry</i> , 2012 , 22, 12851		116
190	Development of new techniques for scanning electron microscope observation using ionic liquid. <i>Electrochimica Acta</i> , 2008 , 53, 6228-6234	6.7	108
189	Rhodium Nanoparticle Encapsulated in a Porous Carbon Shell as an Active Heterogeneous Catalyst for Aromatic Hydrogenation. <i>Advanced Functional Materials</i> , 2008 , 18, 2190-2196	15.6	105
188	Catalytic activity and regeneration property of a Pd nanoparticle encapsulated in a hollow porous carbon sphere for aerobic alcohol oxidation. <i>Langmuir</i> , 2010 , 26, 17720-5	4	104
187	Photofunctional Materials Fabricated with Chalcopyrite-Type Semiconductor Nanoparticles Composed of AgInS ₂ and Its Solid Solutions. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 336-47	6.4	100
186	Characterization of Ultrasmall CdS Nanoparticles Prepared by the Size-Selective Photoetching Technique. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 6838-6845	3.4	98
185	Controlling the Electronic Energy Structure of ZnS/AgInS ₂ Solid Solution Nanocrystals for Photoluminescence and Photocatalytic Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 24740-24749	3.8	97
184	Influence of carbon black as an adsorbent used in TiO ₂ photocatalyst films on photodegradation behaviors of propylamide. <i>Journal of Catalysis</i> , 1998 , 177, 240-246	7.3	94
183	Preparation of novel silica-cadmium sulfide composite nanoparticles having adjustable void space by size-selective photoetching. <i>Journal of the American Chemical Society</i> , 2003 , 125, 316-7	16.4	90
182	Photoelectrochemical Doping of TiO ₂ Particles and the Effect of Charge Carrier Density on the Photocatalytic Activity of Microporous Semiconductor Electrode Films. <i>Journal of the Electrochemical Society</i> , 1996 , 143, 3712-3717	3.9	81
181	Double-Beam Photoacoustic Spectroscopic Studies on Transient Absorption of Titanium(IV) Oxide Photocatalyst Powders. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 11927-11935	3.8	79
180	Small-Angle X-ray Scattering Study of Au Nanoparticles Dispersed in the Ionic Liquids 1-Alkyl-3-methylimidazolium Tetrafluoroborate. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 3917-3922	3.8	78
179	Evaluation of Diffusibility of Adsorbed Propionaldehyde on Titanium Dioxide-Loaded Adsorbent Photocatalyst Films from Its Photodecomposition Rate. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 2644-2649	3.4	75
178	Effect of solvents on photocatalytic reduction of carbon dioxide using TiO ₂ nanocrystal photocatalyst embedded in SiO ₂ matrices. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1997 , 108, 187-192	4.7	73
177	Photochemical hydrogen evolution from aqueous triethanolamine solutions sensitized by binaphthol-modified titanium(IV) oxide under visible-light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003 , 160, 61-67	4.7	72
176	Self-assembly of ionic liquid (BMI-PF ₆)-stabilized gold nanoparticles on a silicon surface: chemical and structural aspects. <i>Langmuir</i> , 2008 , 24, 7785-92	4	67

175	Preparation of Luminescent AgInS ₂ /AgGaS ₂ Solid Solution Nanoparticles and Their Optical Properties. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 3283-3287	6.4	65
174	Encapsulation of titanium(IV) oxide particles in hollow silica for size-selective photocatalytic reactions. <i>Chemical Communications</i> , 2007 , 3753-5	5.8	64
173	Photocatalytic syntheses of azoxybenzene by visible light irradiation of silica-coated cadmium sulfide nanocomposites. <i>Chemical Communications</i> , 2007 , 483-5	5.8	63
172	Development of in situ electrochemical scanning electron microscopy with ionic liquids as electrolytes. <i>ChemPhysChem</i> , 2008 , 9, 763-7	3.2	61
171	Development of in situ scanning electron microscope system for real time observation of metal deposition from ionic liquid. <i>Electrochemistry Communications</i> , 2008 , 10, 1901-1904	5.1	61
170	Compositional control of AuPt nanoparticles synthesized in ionic liquids by the sputter deposition technique. <i>CrystEngComm</i> , 2012 , 14, 4922	3.3	55
169	Nanosize-Controlled Syntheses of Indium Metal Particles and Hollow Indium Oxide Particles via the Sputter Deposition Technique in Ionic Liquids. <i>Chemistry of Materials</i> , 2010 , 22, 5209-5215	9.6	54
168	Oxygen reduction catalytic ability of platinum nanoparticles prepared by room-temperature ionic liquid-sputtering method. <i>Journal of Power Sources</i> , 2010 , 195, 5980-5985	8.9	54
167	Effect of Structural Variation on Photocurrent Efficiency in Alkyl-Substituted Porphyrin Solid-State Thin Layer Photocells. <i>Chemistry of Materials</i> , 1998 , 10, 1771-1776	9.6	54
166	Platinum nanoparticle immobilization onto carbon nanotubes using Pt-sputtered room-temperature ionic liquid. <i>RSC Advances</i> , 2012 , 2, 8262	3.7	53
165	Photoinduced Electron Transfer from Zinc Sulfide Microcrystals Modified with Various Alkanethiols to Methyl Viologen. <i>Langmuir</i> , 1994 , 10, 4517-4522	4	53
164	Size control and immobilization of gold nanoparticles stabilized in an ionic liquid on glass substrates for plasmonic applications. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 1804-11	3.6	52
163	Controlling surface reactions of CdS nanocrystals: photoluminescence activation, photoetching and photostability under light irradiation. <i>Nanotechnology</i> , 2007 , 18, 465702	3.4	52
162	Atomic resolution imaging of gold nanoparticle generation and growth in ionic liquids. <i>Journal of the American Chemical Society</i> , 2014 , 136, 13789-97	16.4	49
161	Plasmon-Enhanced Photoluminescence and Photocatalytic Activities of Visible-Light-Responsive ZnS-AgInS ₂ Solid Solution Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 2511-2520	3.8	49
160	Photochemical fine-tuning of luminescent color of cadmium selenide nanoparticles: fabricating a single-source multicolor luminophore. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 13314-8	3.4	48
159	Composition-dependent electrocatalytic activity of AuPd alloy nanoparticles prepared via simultaneous sputter deposition into an ionic liquid. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 7286-94	3.6	47
158	Size and Structure-Dependent Photocatalytic Activity of Jingle-Bell-Shaped Silica-Coated Cadmium Sulfide Nanoparticles for Methanol Dehydrogenation. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 18670-18674	3.4	47

157	Narrow band-edge photoluminescence from AgInS ₂ semiconductor nanoparticles by the formation of amorphous III ^{IV} semiconductor shells. <i>NPG Asia Materials</i> , 2018 , 10, 713-726	10.3	46
156	Stacked-structure-dependent photoelectrochemical properties of CdS nanoparticle/layered double hydroxide (LDH) nanosheet multilayer films prepared by layer-by-layer accumulation. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 5369-76	3.6	45
155	A Facile Synthesis of AuAg Alloy Nanoparticles Using a Chemical Reaction Induced by Sputter Deposition of Metal onto Ionic Liquids. <i>Electrochemistry</i> , 2009 , 77, 636-638	1.2	45
154	Electrocatalytic Activity of Platinum Nanoparticles Synthesized by Room-Temperature Ionic Liquid-Sputtering Method. <i>Electrochemistry</i> , 2009 , 77, 693-695	1.2	45
153	Light intensity dependence of the action spectra of photocatalytic reactions with anatase titanium(IV) oxide. <i>Chemical Physics Letters</i> , 2004 , 392, 220-224	2.5	45
152	Photoelectrochemical Properties of Size-Quantized CdS Thin Films Prepared by an Electrochemical Method. <i>Langmuir</i> , 1998 , 14, 7077-7081	4	45
151	Controlling Shape Anisotropy of ZnS-AgInS Solid Solution Nanoparticles for Improving Photocatalytic Activity. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 27151-27161	9.5	44
150	Widely Controllable Electronic Energy Structure of ZnSe _x AgInSe _{2-x} Solid Solution Nanocrystals for Quantum-Dot-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29517-29524	3.8	43
149	Photosensitization of ZnO rod electrodes with AgInS ₂ nanoparticles and ZnS-AgInS ₂ solid solution nanoparticles for solar cell applications. <i>RSC Advances</i> , 2012 , 2, 552-559	3.7	43
148	Photoacoustic spectroscopic analysis of photoinduced change in absorption of titanium(IV) oxide photocatalyst powders: A novel feasible technique for measurement of defect density. <i>Chemical Physics Letters</i> , 2006 , 426, 204-208	2.5	43
147	Characteristic Features of Size-Selective Photoetching of CdS Nanoparticles as a Means of Preparation of Monodisperse Particles. <i>Journal of the Electrochemical Society</i> , 1998 , 145, 1964-1968	3.9	43
146	Preparation and Photoelectrochemical Properties of Two-Dimensionally Organized CdS Nanoparticle Thin Films. <i>Langmuir</i> , 1999 , 15, 1853-1858	4	43
145	Crystal phase-controlled synthesis of rod-shaped AgInTe ₂ nanocrystals for in vivo imaging in the near-infrared wavelength region. <i>Nanoscale</i> , 2016 , 8, 5435-40	7.7	42
144	Thermally Induced Self-assembly of Gold Nanoparticles Sputter-deposited in Ionic Liquids on Highly Ordered Pyrolytic Graphite Surfaces. <i>Chemistry Letters</i> , 2009 , 38, 330-331	1.7	42
143	Emission quench of water-soluble ZnS-AgInS ₂ solid solution nanocrystals and its application to chemosensors. <i>Chemical Communications</i> , 2009 , 7485-7	5.8	40
142	Photocatalytic reduction of carbon dioxide in the presence of nitrate using TiO ₂ nanocrystal photocatalyst embedded in SiO ₂ matrices. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998 , 115, 227-230	4.7	40
141	Photoelectrochemical Characterization of Nearly Monodisperse CdS Nanoparticles Immobilized Gold Electrodes. <i>Langmuir</i> , 1999 , 15, 1503-1507	4	38
140	ZnS _x AgInS _{2-x} nanoparticles as a temperature sensor. <i>Sensors and Actuators B: Chemical</i> , 2013 , 176, 505-508.5	37	

139	Tunable Photoelectrochemical Properties of Chalcopyrite AgInS ₂ Nanoparticles Size-Controlled with a Photoetching Technique. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 21895-21902	3.8	37
138	Solution-phase Synthesis of Stannite-type Ag ₂ ZnSnS ₄ Nanoparticles for Application to Photoelectrode Materials. <i>Chemistry Letters</i> , 2012 , 41, 1009-1011	1.7	36
137	Palladium Nanoparticles in Ionic Liquid by Sputter Deposition as Catalysts for SuzukiMiyaura Coupling in Water. <i>Chemistry Letters</i> , 2010 , 39, 1069-1071	1.7	36
136	Preparation and Properties of Size-Quantized TiO ₂ Particles Immobilized in Poly(vinylpyrrolidinone) Gel Films. <i>Langmuir</i> , 1995 , 11, 3725-3729	4	36
135	Surface structures of lead sulfide microcrystals modified with 4-(hydroxythio)phenol and their influences on photoinduced charge transfer. <i>Journal of the American Chemical Society</i> , 1993 , 115, 1874-1880	1.6	36
134	Effects of Size Quantization of Zinc Sulfide Microcrystallites on Photocatalytic Reduction of Carbon Dioxide. <i>Chemistry Letters</i> , 1990 , 19, 1483-1486	1.7	35
133	Tuning of the fluorescence wavelength of CdTe quantum dots with 2 nm resolution by size-selective photoetching. <i>Nanotechnology</i> , 2009 , 20, 215302	3.4	34
132	Size-selective photocatalytic reactions by titanium(IV) oxide coated with a hollow silica shell in aqueous solutions. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 6319-26	3.6	34
131	Preparation and Characterization of Water-Soluble Jingle-Bell-Shaped Silica-Coated Cadmium Sulfide Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 11946-11952	3.4	34
130	Preparation of Size-Quantized ZnS Thin Films Using Electrochemical Atomic Layer Epitaxy and Their Photoelectrochemical Properties. <i>Langmuir</i> , 2000 , 16, 5820-5824	4	34
129	Light-induced saturation change in the angle-independent structural coloration of colloidal amorphous arrays. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 344-348	7.1	33
128	Photoinduced electron transfer between the anionic porphyrins and viologens in titania nanosheets and monodisperse mesoporous silica hybrid films. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 931-5	9.5	33
127	Pyrene-to-porphyrin excited singlet energy transfer in LBL-deposited LDH nanosheets. <i>Journal of Porphyrins and Phthalocyanines</i> , 2007 , 11, 428-433	1.8	33
126	Photoelectrochemical Properties of Size-Quantized CdS Microcrystals Modified with Various Amounts of Viologen-Functionalized Thiol. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 13658-13664		33
125	Ultrathin oxide shell coating of metal nanoparticles using ionic liquid/metal sputtering. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 6177-6186	13	32
124	Highly durable Pt nanoparticle-supported carbon catalysts for the oxygen reduction reaction tailored by using an ionic liquid thin layer. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 12152-12157	13	32
123	Wavelength- and efficiency-tunable plasmon-induced charge separation by the use of Au-Ag alloy nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 4042-6	3.6	30
122	Electrochemical deposition of gold frame structure on silver nanocubes. <i>Chemical Communications</i> , 2009 , 2917-9	5.8	30

121	Photoelectrochemical activities of ultrathin lead sulfide films prepared by electrochemical atomic layer epitaxy. <i>Journal of Electroanalytical Chemistry</i> , 2002 , 522, 33-39	4.1	29
120	Wavelength-Tunable Band-Edge Photoluminescence of Nonstoichiometric Ag-In-S Nanoparticles via Ga Doping. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 42844-42855	9.5	29
119	Photochemical electron transfer through [corrected] the interface of hybrid films of titania nano-sheets and mono-dispersed spherical mesoporous silica particles. <i>Physical Chemistry Chemical Physics</i> , 2006 , 8, 4585-90	3.6	27
118	Controlling the visible-light driven photocatalytic activity of alloyed ZnSe/AgInSe ₂ quantum dots for hydrogen production. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 13142-13149	13	26
117	Synthesis of alloy AuCu nanoparticles with the L1 ₂ structure in an ionic liquid using sputter deposition. <i>Dalton Transactions</i> , 2015 , 44, 4186-94	4.3	26
116	Influence of Zn on the photoluminescence of colloidal (AgIn)ZnS nanocrystals. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 3963-3969	3.6	25
115	Electric-field-induced changes in absorption and emission spectra of CdS nanoparticles doped in a polymer film. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 20927-36	3.4	25
114	Electrochemical preparation of ZnS/CdS superlattice and its photoelectrochemical properties. <i>Electrochemistry Communications</i> , 2000 , 2, 359-362	5.1	24
113	Controllable electronic energy structure of size-controlled Cu ₂ ZnSnS ₄ nanoparticles prepared by a solution-based approach. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 672-5	3.6	23
112	Systematic Studies on Emission Quenching of Cadmium Telluride Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 21621-21628	3.8	23
111	Single-step preparation of two-dimensionally organized gold particles via ionic liquid/metal sputter deposition. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 13150-9	3.6	22
110	Photoelectrochemical properties of size-quantized semiconductor photoelectrodes prepared by two-dimensional cross-linking of monodisperse CdS nanoparticles. <i>Electrochimica Acta</i> , 2000 , 45, 3269-3276	6.7	22
109	Labeling and in vivo visualization of transplanted adipose tissue-derived stem cells with safe cadmium-free aqueous ZnS coating of ZnS-AgInS nanoparticles. <i>Scientific Reports</i> , 2017 , 7, 40047	4.9	21
108	Single-particle spectroscopy of I-III-VI semiconductor nanocrystals: spectral diffusion and suppression of blinking by two-color excitation. <i>Nanoscale</i> , 2016 , 8, 13687-94	7.7	21
107	Three-dimensional micro/nano-scale structure fabricated by combination of non-volatile polymerizable RTIL and FIB irradiation. <i>Scientific Reports</i> , 2014 , 4, 3722	4.9	20
106	Layer-by-layer accumulation of cadmium sulfide core/silica shell nanoparticles and size-selective photoetching to make adjustable void space between core and shell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003 , 160, 69-76	4.7	20
105	Effect of Surface Charge of 4-Aminothiophenol-Modified PbS Microcrystal Photocatalysts on Photoinduced Charge Transfer. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 3036-3043		20
104	Development of a novel photocatalytic reaction system for oxidative decomposition of volatile organic compounds in water with enhanced aeration. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003 , 160, 121-126	4.7	19

103	Formation of a Pt-Decorated Au Nanoparticle Monolayer Floating on an Ionic Liquid by the Ionic Liquid/Metal Sputtering Method and Tunable Electrocatalytic Activities of the Resulting Monolayer. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10874-83	9.5	19
102	Tailored Photoluminescence Properties of Ag(In,Ga)Se ₂ Quantum Dots for Near-Infrared In Vivo Imaging. <i>ACS Applied Nano Materials</i> , 2020 , 3, 3275-3287	5.6	18
101	Visible Light-induced Hydrogen Evolution from Aqueous Suspensions of Titanium(IV) Oxide Modified with Binaphthol. <i>Electrochemistry</i> , 2002 , 70, 442-445	1.2	18
100	Effects of Surface Charges and Surface States of Chemically Modified Cadmium Sulfide Nanoparticles Immobilized to Gold Electrode Substrate on Photoinduced Charge Transfers. <i>Langmuir</i> , 1999 , 15, 2714-2718	4	18
99	Enhanced Photocatalytic Activity of ZnAgInS Semiconductor Nanocrystals with a Dumbbell-Shaped Heterostructure. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 13705-13715	3.8	17
98	Fabrication of Transition Metal Oxide Nanoparticles Highly Dispersed in Ionic Liquids by Sputter Deposition. <i>Chemistry Letters</i> , 2010 , 39, 1072-1074	1.7	17
97	Photoinduced Electron Transfer of ZnS _x AgInS _{2-x} Solid-Solution Semiconductor Nanoparticles: Emission Quenching and Photocatalytic Reactions Controlled by Electrostatic Forces. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 15667-15676	3.8	16
96	Photoluminescence Enhancement of ZnS _x AgInS _{2-x} Solid Solution Nanoparticles Layer-by-layer-assembled in Inorganic Multilayer Thin Films. <i>Chemistry Letters</i> , 2008 , 37, 700-701	1.7	16
95	One-step Preparation and Photosensitivity of Size-quantized Cadmium Chalcogenide Nanoparticles Deposited on Porous Zinc Oxide Film Electrodes. <i>Chemistry Letters</i> , 2007 , 36, 712-713	1.7	15
94	Pt-Nanoparticle-Supported Carbon Electrocatalysts Functionalized with a Protic Ionic Liquid and Organic Salt. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701123	4.6	15
93	Oxygen reduction electrocatalysts sophisticated by using Pt nanoparticle-dispersed ionic liquids with electropolymerizable additives. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 11853-11862	13	14
92	Composition-Dependent Photoelectrochemical Properties of Nonstoichiometric Cu ₂ ZnSnS ₄ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21055-21063	3.8	14
91	Fabrication of Nanoframe Structures by Site-selective Assembly of Gold Nanoparticles on Silver Cubes in an Ionic Liquid. <i>Chemistry Letters</i> , 2011 , 40, 84-86	1.7	14
90	Sensing of protein adsorption with a porous bulk composite comprising silver nanoparticles deposited on hydroxyapatite. <i>Journal of Materials Science: Materials in Medicine</i> , 2010 , 21, 1225-32	4.5	14
89	Effect of ionic surfactants on the iridescent color in lamellar liquid crystalline phase of a nonionic surfactant. <i>Journal of Colloid and Interface Science</i> , 2007 , 305, 308-14	9.3	14
88	Preparation Method Allowing Self-isolation of CdS Nanocrystals Emitting Intense Band-gap Luminescence. <i>Chemistry Letters</i> , 2004 , 33, 1344-1345	1.7	14
87	Adipose Tissue-Derived Stem Cell Imaging Using Cadmium-Free Quantum Dots. <i>Cell Medicine</i> , 2013 , 6, 91-7	4.9	13
86	Rod-shaped ZnAgInS nanocrystals with wavelength-tunable band-edge photoluminescence in the near-IR region. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2034-2042	7.1	12

85	Influences of Initial Particle Size on Preparation of Monodisperse CdS Nanoparticles with Size-Selective Photoetching. <i>Chemistry Letters</i> , 1999 , 28, 379-380	1.7	12
84	Modulating the immobilization process of Au nanoparticles on TiO ₂ (110) by electrostatic interaction between the surface and ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 13585-93 ⁶	3.6	11
83	Photochemical shape control of cadmium sulfide nanorods coated with an amorphous silica thin layer. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 506-13	1.3	11
82	Well-controlled synthesis of wurtzite-type Cu ₂ ZnSnS ₄ nanoparticles using multiple sulfur sources via a two-step heating process. <i>CrystEngComm</i> , 2015 , 17, 174-182	3.3	10
81	Direct surface modification of semiconductor quantum dots with metal-organic frameworks. <i>CrystEngComm</i> , 2019 , 21, 5568-5577	3.3	10
80	Immobilization of ZnS-AgInS ₂ Solid Solution Nanoparticles on ZnO Rod Array Electrodes and Their Photoresponse with Visible Light Irradiation. <i>Chemistry Letters</i> , 2010 , 39, 619-621	1.7	9
79	Fabrication of jingle-bell-shaped core-shell nanoparticulate films and molecular-size-responsive photoluminescence quenching of cadmium sulfide cores. <i>Small</i> , 2006 , 2, 854-8	11	9
78	Electroluminescence from band-edge-emitting AgInS ₂ /GaS _x core/shell quantum dots. <i>Applied Physics Letters</i> , 2020 , 117, 091101	3.4	9
77	Intra- and inter-atomic optical transitions of Fe, Co, and Ni ferrocyanides studied using first-principles many-electron calculations. <i>Journal of Applied Physics</i> , 2016 , 119, 235102	2.5	9
76	Photo-induced electron migrations in the nano-cavities of mesoporous silica sensitized by a cationic porphyrin dye. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 495-500	1.3	8
75	Synthesis of metal-cadmium sulfide nanocomposites using jingle-bell-shaped core-shell photocatalyst particles. <i>Journal of Applied Electrochemistry</i> , 2005 , 35, 751-756	2.6	8
74	Observation of Ionic Liquid by Electron Microscopy. <i>Hyomen Kagaku</i> , 2007 , 28, 322-326		8
73	Controlling the oxidation state of molybdenum oxide nanoparticles prepared by ionic liquid/metal sputtering to enhance plasmon-induced charge separation.. <i>RSC Advances</i> , 2020 , 10, 28516-28522	3.7	8
72	Optical force mapping at the single-nanometre scale. <i>Nature Communications</i> , 2021 , 12, 3865	17.4	8
71	Evaluation of Surface Ligands on Semiconductor Nanoparticle Surfaces Using Electron Transfer to Redox Species. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 16012-16023	3.8	8
70	Efficient quantum-dot light-emitting diodes using ZnS-AgInS ₂ solid-solution quantum dots in combination with organic charge-transport materials. <i>Applied Physics Letters</i> , 2020 , 116, 093302	3.4	7
69	Temperature-independent formation of Au nanoparticles in ionic liquids by arc plasma deposition. <i>Chemical Physics Letters</i> , 2016 , 658, 188-191	2.5	7
68	Platinum Nanoparticle-Supported Electrocatalysts Functionalized by Carbonization of Protic Ionic Liquid and Organic Salts. <i>ACS Applied Energy Materials</i> , 2018 , 1, 3030-3034	6.1	7

67	Theory for self-consistent interplay between light and nanomaterials strongly modified by metallic nanostructures. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 4214-25	3.6	7
66	Surface-plasmon-enhanced photocurrent generation of CdTe nanoparticle/titania nanosheet composite layers on Au particulate films. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011 , 221, 244-249	4.7	7
65	Hybridization of silver nanoparticles on hydroxyapatite in an aqueous solution. <i>Journal of the Ceramic Society of Japan</i> , 2009 , 117, 294-298	1	7
64	Photo-switching behavior of CdS nanoparticles doped in a polymer film. <i>Comptes Rendus Chimie</i> , 2006 , 9, 742-749	2.7	7
63	Core Nanoparticle Engineering for Narrower and More Intense Band-Edge Emission from AgInS/GaS Core/Shell Quantum Dots. <i>Nanomaterials</i> , 2019 , 9,	5.4	7
62	Photoluminescence Enhancement by Light Harvesting of Metal-Organic Frameworks Surrounding Semiconductor Quantum Dots. <i>Chemistry of Materials</i> , 2021 , 33, 1607-1617	9.6	7
61	Size-Controlled Synthesis of Ag ₈ SnS ₆ Nanocrystals for Efficient Photoenergy Conversion Systems Driven by Visible and Near-IR Lights. <i>Particle and Particle Systems Characterization</i> , 2014 , 31, 1122-1126	3.1	6
60	One-Pot Synthesis of Water-Soluble Nanoparticles of ZnS-AgInS ₂ Solid Solution with Controllable Photoluminescence. <i>Electrochemistry</i> , 2011 , 79, 790-792	1.2	6
59	Carbon Composite with Pt Nanoparticles Prepared by Room-Temperature Ionic Liquid-Sputtering Method. <i>ECS Transactions</i> , 2010 , 33, 127-133	1	6
58	Photocatalytic electron flow through the interface of titania nanosheets and mesoporous silica hybrid films. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009 , 207, 135-143	4.7	6
57	Hot electron transfer in Zn-Ag-In-Te nanocrystal-methyl viologen complexes enhanced with higher-energy photon excitation.. <i>RSC Advances</i> , 2020 , 10, 16361-16365	3.7	6
56	Electrocatalytic Activity of Bimetallic Pd-Au Particle Films Prepared by Sequential Sputter Deposition of Pd and Au onto Hydroxyl-functionalized Ionic Liquid. <i>Chemistry Letters</i> , 2017 , 46, 956-959	1.7	5
55	Nanostructure Engineering of Size-Quantized Semiconductor Particles for Photoelectrochemical Applications. <i>Electrochemistry</i> , 2017 , 85, 534-542	1.2	5
54	Introduction of Ionic Liquid to Vacuum Conditions for Development of Material Productions and Analyses. <i>Electrochemistry</i> , 2012 , 80, 498-503	1.2	5
53	Efficient Reductive Alkylation of Aniline with Acetone over Pt Nanoparticles Encapsulated in Hollow Porous Carbon. <i>Chemistry Letters</i> , 2008 , 37, 948-949	1.7	5
52	Photocatalytic Preparation of Encapsulated Gold Nanoparticles by Jingle-bell-shaped Cadmium Sulfide/Silica Nanoparticles. <i>Topics in Catalysis</i> , 2005 , 35, 321-325	2.3	5
51	Effects of Mordenite Support on Photodegradation of Gaseous Organic Compounds over TiO ₂ Photocatalyst. <i>Bulletin of the Chemical Society of Japan</i> , 1999 , 72, 1615-1621	5.1	5
50	Shape-controlled synthesis of Cu ₂ O nanoparticles with single-digit nanoscale void space via ionic liquid/metal sputtering and their photoelectrochemical properties. <i>Japanese Journal of Applied Physics</i> , 2021 , 60, SAAC01	1.4	5

49	Red light-inducible overall water-splitting photocatalyst, gold-inserted zinc rhodium oxide and bismuth vanadium oxide heterojunction, connected using gold prepared by sputtering in ionic liquid. <i>Journal of Chemical Physics</i> , 2020 , 153, 014701	3.9	5
48	Photoluminescence characterization of ZnS-AgInS ₂ (ZAIS) nanoparticles adsorbed on plasmonic chip studied with fluorescence microscopy. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018 , 367, 347-354	4.7	5
47	Luminescent Quaternary Ag(InGa)S/GaS Core/Shell Quantum Dots Prepared Using Dithiocarbamate Compounds and Photoluminescence Recovery via Post Treatment. <i>Inorganic Chemistry</i> , 2021 , 60, 13101-13109	5.1	5
46	Top-Down Synthesis Methods for Nanoscale Catalysts 2016 , 171-205		4
45	Improvement of photoluminescence stability of ZnS-AgInS ₂ nanoparticles through interactions with ionic liquids. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017 , 332, 371-375	4.7	4
44	Long Term Optical Properties of ZnS-AgInS ₂ and AgInS ₂ -AgGaS ₂ Solid-Solution Semiconductor Nanoparticles Dispersed in Polymer Matrices. <i>Electrochemistry</i> , 2011 , 79, 813-816	1.2	4
43	Modification of excimer emission of perylene dye thin films by single silver nanocubes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011 , 221, 194-198	4.7	4
42	Photoacoustic Spectroscopic Estimation of Electron Mobility in Titanium(IV) Oxide Photocatalysts. <i>Studies in Surface Science and Catalysis</i> , 2007 , 172, 429-432	1.8	4
41	Preparation of CdS Microcrystals Covalently Bound with Viologen Groups and Their Photoelectrochemical Properties. <i>Chemistry Letters</i> , 1994 , 23, 977-980	1.7	4
40	Photoluminescence properties of quinary Ag(In,Ga)(S,Se) quantum dots with a gradient alloy structure for in vivo bioimaging. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 12791-12801	7.1	4
39	Enhanced Photoelectrochemical Properties of ZnAgInTe Nanocrystals with High Energy Photon Excitation. <i>ChemNanoMat</i> , 2019 , 5, 1028-1035	3.5	3
38	Shape-controlled Synthesis of ZnS/InS ₂ /AgInS ₂ Solid Solution Nanoparticles and Their Photoluminescence Properties. <i>Chemistry Letters</i> , 2013 , 42, 171-173	1.7	3
37	Enhanced Photocurrent Generation in Layer-by-Layer-Assembled CdS Nanoparticle/Titania Nanosheet Multilayer Films. <i>Electrochemistry</i> , 2011 , 79, 776-778	1.2	3
36	Red-light-activatable ruthenium phthalocyanine catalysts. <i>Chemical Communications</i> , 2021 ,	5.8	3
35	Microscopic Structure of Separately Accommodated Porphyrins and Viologens in Mesoporous Silica and Titania Nanosheet Hybrid Films. <i>Transactions of the Materials Research Society of Japan</i> , 2007 , 32, 449-452	0.2	3
34	Incoherent Optical Tweezers on Black Titanium. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 27586-27593	3.5	3
33	Nanotraffic Lights: Rayleigh Scattering Microspectroscopy of Optically Trapped Octahedral Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 23096-23102	3.8	2
32	Visualization of Electrochemical Reactions by Redox-dependent Quenching of Photoluminescence from ZnS-AgInS ₂ Solid Solution Semiconductor Nanoparticles. <i>Electrochemistry</i> , 2014 , 82, 338-340	1.2	2

31	Use of Ionic Liquid Under Vacuum Conditions 2013 ,		2
30	?????????in situ?????????????. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2008 , 59, 801-805		2
29	Origin of chiral discrimination by a two-dimensionally chiral self-assembled monolayer: A quantum chemical study. <i>Chemical Physics Letters</i> , 2006 , 432, 502-507	2.5	2
28	Surface Modification of Photoluminescent CdS Nanocrystals Inducing Spontaneous Phase Transfer Reaction. <i>Chemistry Letters</i> , 2005 , 34, 1300-1301	1.7	2
27	Photoinduced Destruction of Bromoform Dissolved in Water Using TiO ₂ -loaded Adsorbent. <i>Zeitschrift Fur Physikalische Chemie</i> , 1999 , 213, 43-48	3.1	2
26	Optical Trapping of Nanocrystals at Oil/Water Interfaces: Implications for Photocatalysis. <i>ACS Applied Nano Materials</i> ,	5.6	2
25	Single-step preparation of indium tin oxide nanocrystals dispersed in ionic liquids via oxidation of molten In-Sn alloys. <i>Chemical Communications</i> , 2016 , 52, 12241-12244	5.8	2
24	Electrocatalyst: Pt-Nanoparticle-Supported Carbon Electrocatalysts Functionalized with a Protic Ionic Liquid and Organic Salt (Adv. Mater. Interfaces 3/2018). <i>Advanced Materials Interfaces</i> , 2018 , 5, 1870010	4.6	1
23	Nanoscale Laser Processing of Hollow Silica Microbeads Assisted by Surface Plasmon Resonance of Gold Particles. <i>Chemistry Letters</i> , 2011 , 40, 1411-1413	1.7	1
22	Quantum dot sensitized solar cells 2008 ,		1
21	Surface ligand chemistry on quaternary Ag(In _x Ga _{1-x}) ₂ S ₂ semiconductor quantum dots for improving photoluminescence properties. <i>Nanoscale Advances</i> , 2022 , 4, 849-857	5.1	1
20	Optical trapping of gold and semiconductor nanoparticles at oil-water interfaces with a focused near-infrared laser beam 2018 ,		1
19	?????????????????????????????. <i>Electrochemistry</i> , 2001 , 69, 866-871	1.2	1
18	Synthesis of submicron-sized CdS particles using reverse micelles. <i>Journal of Nanophotonics</i> , 2020 , 14, 1	1.1	1
17	Variations in Photoluminescence Intensity of a Quantum Dot Assembly Investigated by Its Adsorption on Cubic Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 8285-8293	3.8	1
16	Perylene-Cy3 FRET System to Analyze Photoactive DNA Structures. <i>Chemistry - A European Journal</i> , 2021 , 27, 12845-12850	4.8	1
15	[Paper] Green Electroluminescence Generated by Band-edge Transition in Ag-In-Ga-S/Ga _x S Core/shell Quantum Dots. <i>ITE Transactions on Media Technology and Applications</i> , 2021 , 9, 222-227	0.7	0
14	In situ Electron Microscope Observation of Surface Chemical Reactions Using Ionic Liquid. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2016 , 67, 79-83	0.1	

- 13 Electron Microscope Observation of Soft Materials Using Ionic Liquids. *Hyomen Kagaku*, **2015**, 36, 195-200
- 12 1.?????????????????????????????????. *Electrochemistry*, **2013**, 81, 635-640 1.2
- 11 Studies on Reaction Conditions for Size-selective Photoetching of Cadmium Telluride Nanocrystals. *Electrochemistry*, **2010**, 78, 170-174 1.2
- 10 Embedding Quantum Dots with High Quantum Yield in Inorganic Matrix By Sol-Gel Method. *ECS Meeting Abstracts*, **2020**, MA2020-02, 3639-3639 0
- 9 Syntheses and Photoelectrochemical Properties of Plasmonic Molybdenum Oxide Nanoparticles Via Ionic Liquid/Metal Sputtering. *ECS Meeting Abstracts*, **2020**, MA2020-02, 2962-2962 0
- 8 Temperature dependences of photoluminescence intensities observed from AgInGaS and AgInGaS/GaSx core-shell nanoparticles. *Journal of Nanophotonics*, **2020**, 14, 1 1.1
- 7 Preparation of Highly Luminescent Semiconductor Nanoparticles for the Application of White-Light-Emitting Devices. *Hosokawa Powder Technology Foundation ANNUAL REPORT*, **2006**, 14, 178-183 0
- 6 Controlling Optical Properties of Multinary Quantum Dots for Developing Novel Photoelectrochemical Reactions **2020**, 223-237
- 5 Photocatalytic Reaction and Surface Photoreaction on Ultra-Fine Semiconductor Particles. Preparation of Size-Quantized Semiconductor Microcrystals and Their Application to Photocatalysts.. *Hyomen Kagaku*, **1995**, 16, 173-179
- 4 Controlling the Size and Chemical Composition of Multinary Semiconductor Nanocrystals for Improving Photochemical Functions. *Hyomen Kagaku*, **2017**, 38, 18-23
- 3 Colloidal Syntheses of Semiconductor Nanoparticles with Tunable Photoluminescence in Visible-Light Region and Their Application to Photo-functional Materials. *Journal of the Japan Society of Colour Material*, **2014**, 87, 430-435 0
- 2 Controlling Electronic Energy Structure of Ag₁₀Cd₃Se Quantum Dots Showing Band-Edge Emission. *ECS Meeting Abstracts*, **2020**, MA2020-02, 3121-3121 0
- 1 Recent Progress of Multinary Semiconductor Quantum Dots Towards Luminescent and Photoelectrochemical Applications. *Denki Kagaku*, **2022**, 90, 115-121 0