

# Hideki Kato

## List of Publications by Citations

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162  
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63  
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139  
g-index

178  
ext. papers

20,629  
ext. citations

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avg. IF

6.86  
L-index

#	Paper	IF	Citations
162	A Novel Aqueous Process for Preparation of Crystal Form-Controlled and Highly Crystalline BiVO <sub>4</sub> Powder from Layered Vanadates at Room Temperature and Its Photocatalytic and Photophysical Properties. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 11459-11467	16.4	1633
161	Highly efficient water splitting into H <sub>2</sub> and O <sub>2</sub> over lanthanum-doped NaTaO <sub>3</sub> photocatalysts with high crystallinity and surface nanostructure. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 3082-9	16.4	1422
160	Selective Preparation of Monoclinic and Tetragonal BiVO <sub>4</sub> with Scheelite Structure and Their Photocatalytic Properties. <i>Chemistry of Materials</i> , <b>2001</b> , 13, 4624-4628	9.6	869
159	Hydrolysis of cellulose by amorphous carbon bearing SO <sub>3</sub> H, COOH, and OH groups. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 12787-93	16.4	839
158	Photocatalytic Activities of Noble Metal Ion Doped SrTiO <sub>3</sub> under Visible Light Irradiation. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 8992-8995	3.4	738
157	Visible-Light-Response and Photocatalytic Activities of TiO <sub>2</sub> and SrTiO <sub>3</sub> Photocatalysts Codoped with Antimony and Chromium. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 5029-5034	3.4	732
156	Photocatalytic H <sub>2</sub> evolution reaction from aqueous solutions over band structure-controlled (AgIn) <sub>x</sub> Zn <sub>2(1-x)</sub> S <sub>2</sub> solid solution photocatalysts with visible-light response and their surface nanostructures. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 13406-13	16.4	726
155	Photocatalytic O <sub>2</sub> evolution under visible light irradiation on BiVO <sub>4</sub> in aqueous AgNO <sub>3</sub> solution. <i>Catalysis Letters</i> , <b>1998</b> , 53, 229-230	2.8	579
154	Water Splitting into H <sub>2</sub> and O <sub>2</sub> on Alkali Tantalate Photocatalysts ATaO <sub>3</sub> (A = Li, Na, and K). <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 4285-4292	3.4	579
153	Water Splitting into H <sub>2</sub> and O <sub>2</sub> on New Sr <sub>2</sub> M <sub>2</sub> O <sub>7</sub> (M = Nb and Ta) Photocatalysts with Layered Perovskite Structures: Factors Affecting the Photocatalytic Activity. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 571-575	3.4	540
152	Role of Ag <sup>+</sup> in the Band Structures and Photocatalytic Properties of AgMO <sub>3</sub> (M: Ta and Nb) with the Perovskite Structure. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 12441-12447	3.4	425
151	Visible-light-induced H <sub>2</sub> evolution from an aqueous solution containing sulfide and sulfite over a ZnS-CuInS <sub>2</sub> -AgInS <sub>2</sub> solid-solution photocatalyst. <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 44, 3565-8	16.4	404
150	Strategies for the Development of Visible-light-driven Photocatalysts for Water Splitting. <i>Chemistry Letters</i> , <b>2004</b> , 33, 1534-1539	1.7	361
149	Construction of Z-scheme Type Heterogeneous Photocatalysis Systems for Water Splitting into H <sub>2</sub> and O <sub>2</sub> under Visible Light Irradiation. <i>Chemistry Letters</i> , <b>2004</b> , 33, 1348-1349	1.7	356
148	Photophysical properties and photocatalytic activities of bismuth molybdates under visible light irradiation. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 17790-7	3.4	344
147	New tantalate photocatalysts for water decomposition into H <sub>2</sub> and O <sub>2</sub> . <i>Chemical Physics Letters</i> , <b>1998</b> , 295, 487-492	2.5	339
146	The effect of co-catalyst for Z-scheme photocatalysis systems with an Fe <sup>3+</sup> /Fe <sup>2+</sup> electron mediator on overall water splitting under visible light irradiation. <i>Journal of Catalysis</i> , <b>2008</b> , 259, 133-137	7.3	329

145	H <sub>2</sub> evolution from an aqueous methanol solution on SrTiO <sub>3</sub> photocatalysts codoped with chromium and tantalum ions under visible light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2004</b> , 163, 181-186	4.7	294
144	AgInZn <sub>7</sub> S <sub>9</sub> solid solution photocatalyst for H <sub>2</sub> evolution from aqueous solutions under visible light irradiation. <i>Chemical Communications</i> , <b>2002</b> , 1958-9	5.8	287
143	Photophysical properties and photocatalytic activities under visible light irradiation of silver vanadates. <i>Physical Chemistry Chemical Physics</i> , <b>2003</b> , 5, 3061	3.6	281
142	[Co(bpy) <sub>3</sub> ](3+/2+) and [Co(phen) <sub>3</sub> ](3+/2+) electron mediators for overall water splitting under sunlight irradiation using Z-scheme photocatalyst system. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 5441-9	16.4	276
141	Photocatalytic water splitting into H <sub>2</sub> and O <sub>2</sub> over various tantalate photocatalysts. <i>Catalysis Today</i> , <b>2003</b> , 78, 561-569	5.3	269
140	Effect of lanthanide-doping into NaTaO <sub>3</sub> photocatalysts for efficient water splitting. <i>Chemical Physics Letters</i> , <b>2000</b> , 331, 373-377	2.5	268
139	Nickel and either tantalum or niobium-codoped TiO <sub>2</sub> and SrTiO <sub>3</sub> photocatalysts with visible-light response for H <sub>2</sub> or O <sub>2</sub> evolution from aqueous solutions. <i>Physical Chemistry Chemical Physics</i> , <b>2005</b> , 7, 2241-5	3.6	255
138	Photocatalytic Hydrogen Evolution on Zn <sub>1-x</sub> In <sub>2x</sub> AgIn <sub>2</sub> S <sub>2</sub> Solid Solution Photocatalysts with Wide Visible Light Absorption Bands. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 1969-1975	9.6	251
137	Adsorption-enhanced hydrolysis of beta-1,4-glucan on graphene-based amorphous carbon bearing SO <sub>3</sub> H, COOH, and OH groups. <i>Langmuir</i> , <b>2009</b> , 25, 5068-75	4	234
136	Photocatalytic H <sub>2</sub> evolution under visible-light irradiation over band-structure-controlled (Cu <sub>1-x</sub> Zn <sub>2x</sub> )S <sub>2</sub> solid solutions. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 7323-9	3.4	228
135	Water splitting into H <sub>2</sub> and O <sub>2</sub> over niobate and titanate photocatalysts with (111) plane-type layered perovskite structure. <i>Energy and Environmental Science</i> , <b>2009</b> , 2, 306	35.4	227
134	Role of Sn <sup>2+</sup> in the Band Structure of SnM <sub>2</sub> O <sub>6</sub> and Sn <sub>2</sub> M <sub>2</sub> O <sub>7</sub> (M = Nb and Ta) and Their Photocatalytic Properties. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 1299-1307	9.6	218
133	Novel Stannite-type Complex Sulfide Photocatalysts Al <sub>2</sub> -Zn-AIV-S <sub>4</sub> (Al = Cu and Ag; AIV = Sn and Ge) for Hydrogen Evolution under Visible-Light Irradiation. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 1402-1409	9.6	191
132	Effects of doping of metal cations on morphology, activity, and visible light response of photocatalysts. <i>Chemical Physics</i> , <b>2007</b> , 339, 104-110	2.3	178
131	Synthesis of highly active rhodium-doped SrTiO <sub>3</sub> powders in Z-scheme systems for visible-light-driven photocatalytic overall water splitting. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 12327-33	13	173
130	Tailoring of deep-red luminescence in Ca <sub>2</sub> SiO <sub>4</sub> :Eu(2+). <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 7756-9	16.4	172
129	Highly efficient decomposition of pure water into H <sub>2</sub> and O <sub>2</sub> over NaTaO <sub>3</sub> photocatalysts. <i>Catalysis Letters</i> , <b>1999</b> , 58, 153-155	2.8	165
128	Hydrolysis of Cellulose by a Solid Acid Catalyst under Optimal Reaction Conditions. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 3181-3188	3.8	146

127	Photodynamics of NaTaO <sub>3</sub> Catalysts for Efficient Water Splitting. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 14383-14387	3.4	139
126	Polymerizable Complex Synthesis of Pure Sr <sub>2</sub> Nb <sub>x</sub> Ta <sub>2-x</sub> O <sub>7</sub> Solid Solutions with High Photocatalytic Activities for Water Decomposition into H <sub>2</sub> and O <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2002</b> , 14, 3369-3376	9.6	136
125	Nanosized Au Particles as an Efficient Cocatalyst for Photocatalytic Overall Water Splitting. <i>Catalysis Letters</i> , <b>2006</b> , 108, 7-10	2.8	122
124	Synthesis and acid catalysis of cellulose-derived carbon-based solid acid. <i>Solid State Sciences</i> , <b>2010</b> , 12, 1029-1034	3.4	115
123	Role of Iron Ion Electron Mediator on Photocatalytic Overall Water Splitting under Visible Light Irradiation Using Z-Scheme Systems. <i>Bulletin of the Chemical Society of Japan</i> , <b>2007</b> , 80, 2457-2464	5.1	115
122	Photocatalytic O <sub>2</sub> Evolution of Rhodium and Antimony-Codoped Rutile-Type TiO <sub>2</sub> under Visible Light Irradiation. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 17420-17426	3.8	113
121	The relationship between photocatalytic activity and crystal structure in strontium tantalates. <i>Journal of Catalysis</i> , <b>2005</b> , 232, 102-107	7.3	112
120	Visible-Light-Induced H <sub>2</sub> Evolution from an Aqueous Solution Containing Sulfide and Sulfite over a ZnS/CuInS <sub>2</sub> /AgInS <sub>2</sub> Solid-Solution Photocatalyst. <i>Angewandte Chemie</i> , <b>2005</b> , 117, 3631-3634	3.6	107
119	Energy Structure and Photocatalytic Activity of Niobates and Tantalates Containing Sn(II) with a 5s <sup>2</sup> Electron Configuration. <i>Chemistry Letters</i> , <b>2004</b> , 33, 28-29	1.7	105
118	Photoinduced Dynamics of TiO <sub>2</sub> Doped with Cr and Sb. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 1167-1173	3.1	102
117	Structure and catalysis of cellulose-derived amorphous carbon bearing SO <sub>3</sub> H groups. <i>ChemSusChem</i> , <b>2011</b> , 4, 778-84	8.3	99
116	Photocatalytic Activities of Layered Titanates and Niobates Ion-Exchanged with Sn <sup>2+</sup> under Visible Light Irradiation. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 17678-17682	3.8	88
115	Photocatalytic Decomposition of Water into H <sub>2</sub> and O <sub>2</sub> over Novel Photocatalyst K <sub>3</sub> Ta <sub>3</sub> Si <sub>2</sub> O <sub>13</sub> with Pillared Structure Consisting of Three TaO <sub>6</sub> Chains. <i>Chemistry Letters</i> , <b>1997</b> , 26, 867-868	1.7	86
114	The effect of alkaline earth metal ion dopants on photocatalytic water splitting by NaTaO <sub>3</sub> powder. <i>ChemSusChem</i> , <b>2009</b> , 2, 873-7	8.3	84
113	Photocatalytic Decomposition of Pure Water into H <sub>2</sub> and O <sub>2</sub> over SrTa <sub>2</sub> O <sub>6</sub> Prepared by a Flux Method. <i>Chemistry Letters</i> , <b>1999</b> , 28, 1207-1208	1.7	84
112	Water Splitting into H <sub>2</sub> and O <sub>2</sub> over Ba <sub>5</sub> Nb <sub>4</sub> O <sub>15</sub> Photocatalysts with Layered Perovskite Structure Prepared by Polymerizable Complex Method. <i>Chemistry Letters</i> , <b>2006</b> , 35, 1052-1053	1.7	83
111	Structure and Acid Catalysis of Mesoporous Nb <sub>2</sub> O <sub>5</sub> · <i>n</i> H <sub>2</sub> O. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 3332-3339	9.6	77
110	The effect of Au cocatalyst loaded on La-doped NaTaO <sub>3</sub> on photocatalytic water splitting and O <sub>2</sub> photoreduction. <i>Applied Catalysis B: Environmental</i> , <b>2013</b> , 136-137, 89-93	21.8	76

109	Formation of Surface Nano-step Structures and Improvement of Photocatalytic Activities of NaTaO <sub>3</sub> by Doping of Alkaline Earth Metal Ions. <i>Chemistry Letters</i> , <b>2004</b> , 33, 1260-1261	1.7	73
108	A Novel Photodeposition Method in the Presence of Nitrate Ions for Loading of an Iridium Oxide Cocatalyst for Water Splitting. <i>Chemistry Letters</i> , <b>2005</b> , 34, 946-947	1.7	72
107	SO <sub>3</sub> H-bearing mesoporous carbon with highly selective catalysis. <i>Microporous and Mesoporous Materials</i> , <b>2011</b> , 143, 443-450	5.3	70
106	Visible light response of AgLi <sub>1/3</sub> M <sub>2/3</sub> O <sub>2</sub> (M = Ti and Sn) synthesized from layered Li <sub>2</sub> MO <sub>3</sub> using molten AgNO <sub>3</sub> . <i>Journal of Materials Chemistry</i> , <b>2008</b> , 18, 647-653		70
105	Energy structure and photocatalytic activity for water splitting of Sr <sub>2</sub> (Ta <sub>1-x</sub> Nb <sub>x</sub> ) <sub>2</sub> O <sub>7</sub> solid solution. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2001</b> , 145, 129-133	4.7	67
104	H <sub>2</sub> Evolution from Aqueous Potassium Sulfite Solutions under Visible Light Irradiation over a Novel Sulfide Photocatalyst NaInS <sub>2</sub> with a Layered Structure. <i>Chemistry Letters</i> , <b>2002</b> , 31, 882-883	1.7	67
103	Fabrication of SrTiO <sub>3</sub> exposing characteristic facets using molten salt flux and improvement of photocatalytic activity for water splitting. <i>Catalysis Science and Technology</i> , <b>2013</b> , 3, 1733	5.5	66
102	Photocatalytic reduction of nitrate ions over tantalate photocatalysts. <i>Physical Chemistry Chemical Physics</i> , <b>2002</b> , 4, 2833-2838	3.6	65
101	Photophysical and Photocatalytic Properties of Molybdates and Tungstates with a Scheelite Structure. <i>Chemistry Letters</i> , <b>2004</b> , 33, 1216-1217	1.7	64
100	Anomalous Orange Light-Emitting (Sr,Ba) <sub>2</sub> SiO <sub>4</sub> :Eu(2+) Phosphors for Warm White LEDs. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 11615-20	9.5	64
99	Photoluminescence Properties of Mn <sup>4+</sup> -activated Perovskite-type Titanates, La <sub>2</sub> M <sub>2</sub> TiO <sub>6</sub> :Mn <sup>4+</sup> (M = Mg and Zn). <i>Chemistry Letters</i> , <b>2015</b> , 44, 1541-1543	1.7	63
98	Investigations of Electronic Structures and Photocatalytic Activities under Visible Light Irradiation of Lead Molybdate Replaced with Chromium(VI). <i>Bulletin of the Chemical Society of Japan</i> , <b>2007</b> , 80, 885-893	5.1	62
97	Water Splitting into H <sub>2</sub> and O <sub>2</sub> over Cs <sub>2</sub> Nb <sub>4</sub> O <sub>11</sub> Photocatalyst. <i>Chemistry Letters</i> , <b>2005</b> , 34, 54-55	1.7	62
96	Control of valence band potential and photocatalytic properties of Na <sub>x</sub> La <sub>1-x</sub> TaO <sub>3</sub> +2xN <sub>2</sub> O <sub>x</sub> oxynitride solid solutions. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 3667	13	54
95	Electrochemical approach to evaluate the mechanism of photocatalytic water splitting on oxide photocatalysts. <i>Journal of Solid State Chemistry</i> , <b>2004</b> , 177, 4205-4212	3.3	52
94	Undoped Layered Perovskite Oxynitride Li <sub>1-x</sub> La <sub>x</sub> O <sub>3</sub> N for Photocatalytic CO Reduction with Visible Light. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 8154-8158	16.4	51
93	Time-Resolved Infrared Absorption Study of NaTaO <sub>3</sub> Photocatalysts Doped with Alkali Earth Metals. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 13918-13923	3.8	50
92	Photocatalytic Water Splitting into H <sub>2</sub> and O <sub>2</sub> over K <sub>2</sub> LnTa <sub>5</sub> O <sub>15</sub> Powder. <i>Chemistry Letters</i> , <b>2000</b> , 29, 1212-1213	1.7	50

91	A Simple Preparation Method of Visible-Light-Driven BiVO <sub>4</sub> Photocatalysts From Oxide Starting Materials (Bi <sub>2</sub> O <sub>3</sub> and V <sub>2</sub> O <sub>5</sub> ) and Their Photocatalytic Activities. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , <b>2010</b> , 132,	2.3	48
90	Overall Water Splitting into H <sub>2</sub> and O <sub>2</sub> under UV Irradiation on NiO-loaded ZnNb <sub>2</sub> O <sub>6</sub> Photocatalysts Consisting of d <sub>10</sub> and d <sub>0</sub> Ions. <i>Chemistry Letters</i> , <b>1999</b> , 28, 1197-1198	1.7	48
89	Highly Efficient Water Splitting over K <sub>3</sub> Ta <sub>3</sub> B <sub>2</sub> O <sub>12</sub> Photocatalyst without Loading Cocatalyst. <i>Chemistry Letters</i> , <b>2006</b> , 35, 274-275	1.7	47
88	Eu <sup>2+</sup> -Activated CaSrSiO <sub>4</sub> : a New Red-Emitting Oxide Phosphor for White-Light-Emitting Diodes. <i>Applied Physics Express</i> , <b>2013</b> , 6, 072101	2.4	46
87	Photocatalytic Activities of Na <sub>2</sub> W <sub>4</sub> O <sub>13</sub> with Layered Structure. <i>Chemistry Letters</i> , <b>1997</b> , 26, 421-422	1.7	46
86	Cobalt Oxide Nanoclusters on Rutile Titania as Bifunctional Units for Water Oxidation Catalysis and Visible Light Absorption: Understanding the Structure-Activity Relationship. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 6114-6122	9.5	45
85	SnO-SnO <sub>2</sub> modified two-dimensional MXene Ti <sub>3</sub> C <sub>2</sub> T for acetone gas sensor working at room temperature. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 73, 128-138	9.1	39
84	Synthesis of SnNb <sub>2</sub> O <sub>6</sub> Nanoplates and Their Photocatalytic Properties. <i>Chemistry Letters</i> , <b>2006</b> , 35, 578-579	3.7	38
83	Site occupancy and luminescence properties of Ca <sub>3</sub> Ln(AlO) <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> :Ce <sup>3+</sup> , Tb <sup>3+</sup> , Mn <sup>2+</sup> (Ln = Y, Gd). <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 4578-4583	7.1	34
82	Hydrothermal synthesis of magnetite particles with uncommon crystal facets Peer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society. View all notes. <i>Journal of Asian Ceramic Societies</i> , <b>2014</b> , 2, 258-262	2.4	33
81	Photocatalytic water oxidation under visible light by valence band controlled oxynitride solid solutions LaTaON <sub>2</sub> BrTiO <sub>3</sub> . <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 11824-11829	13	32
80	Synthesis of Zn <sub>2</sub> SiO <sub>4</sub> :Mn <sup>2+</sup> by homogeneous precipitation using propylene glycol-modified silane. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 17272		30
79	Synthesis of Titanium Dioxide Nanocrystals with Controlled Crystal- and Micro-Structures from Titanium Complexes. <i>Nanomaterials and Nanotechnology</i> , <b>2013</b> , 3, 23	2.9	29
78	Photoluminescence Properties of Double Perovskite Tantalates Activated with Mn <sup>4+</sup> , AE <sub>2</sub> LaTaO <sub>6</sub> :Mn <sup>4+</sup> (AE = Ca, Sr, and Ba). <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 18837-18844	3.8	27
77	Time-resolved infrared spectroscopy of K <sub>3</sub> Ta <sub>3</sub> B <sub>2</sub> O <sub>12</sub> photocatalysts for water splitting. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 7883-6	3.4	25
76	Development of Various Metal Sulfide Photocatalysts Consisting of d <sub>0</sub> , d <sub>5</sub> , and d <sub>10</sub> Metal Ions for Sacrificial H <sub>2</sub> Evolution under Visible Light Irradiation. <i>Chemistry Letters</i> , <b>2017</b> , 46, 616-619	1.7	22
75	Alkali-assisted hydrothermal preparation of g-C <sub>3</sub> N <sub>4</sub> /rGO nanocomposites with highly enhanced photocatalytic NO <sub>x</sub> removal activity. <i>Applied Surface Science</i> , <b>2020</b> , 521, 146213	6.7	22
74	The hydrothermal and solvothermal synthesis of LiTaO <sub>3</sub> photocatalyst: Suppressing the deterioration of the water splitting activity without using a cocatalyst. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 5638-5643	6.7	21

73	A water splitting system using an organo-photocathode and titanium dioxide photoanode capable of bias-free H <sub>2</sub> and O <sub>2</sub> evolution. <i>Chemical Communications</i> , <b>2016</b> , 52, 7735-7	5.8	20
72	Z-scheme water splitting by microspherical Rh-doped SrTiO <sub>3</sub> photocatalysts prepared by a spray drying method. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 252, 222-229	21.8	19
71	Two-Dimensional Perovskite Oxynitride K <sub>1-x</sub> La <sub>x</sub> Ta <sub>1-x</sub> O <sub>3</sub> N with an H <sup>+</sup> /K <sup>+</sup> Exchangeability in Aqueous Solution Forming a Stable Photocatalyst for Visible-Light H <sub>2</sub> Evolution. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 9736-9743	16.4	19
70	Control of NaAlSiO <sub>4</sub> :Eu <sup>2+</sup> photoluminescence properties by charge-compensated aliovalent element substitutions. <i>Journal of Information Display</i> , <b>2012</b> , 13, 97-100	4.1	18
69	Exploration of New Phosphors Using a Mineral-Inspired Approach in Combination with Solution Parallel Synthesis. <i>Optics and Photonics Journal</i> , <b>2013</b> , 03, 5-12	0.3	18
68	Luminescence properties of BaZrSi <sub>3</sub> O <sub>9</sub> :Eu synthesized by an aqueous solution method. <i>Journal of Luminescence</i> , <b>2015</b> , 158, 328-332	3.8	16
67	Super stable (Ba,Sr)LuAl <sub>2</sub> Si <sub>2</sub> O <sub>2</sub> N <sub>5</sub> :Ce <sup>3+</sup> ,Eu <sup>2+</sup> phosphors. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 4510-4517	4.17	16
66	Undoped Layered Perovskite Oxynitride Li <sub>2</sub> LaTa <sub>2</sub> O <sub>6</sub> N for Photocatalytic CO <sub>2</sub> Reduction with Visible Light. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 8286-8290	3.6	16
65	Large Redshifts in Emission and Excitation from Eu <sup>2+</sup> -Activated Sr <sub>2</sub> SiO <sub>4</sub> and Ba <sub>2</sub> SiO <sub>4</sub> Phosphors Induced by Controlling Eu <sup>2+</sup> Occupancy on the Basis on Crystal-Site Engineering. <i>Optics and Photonics Journal</i> , <b>2013</b> , 03, 13-18	0.3	16
64	Photocatalytic activities of Cu <sub>3</sub> xLa <sub>1-x</sub> Ta <sub>7</sub> O <sub>19</sub> solid solutions for H <sub>2</sub> evolution under visible light irradiation. <i>Catalysis Science and Technology</i> , <b>2013</b> , 3, 3147	5.5	15
63	A Highly Luminous LiCaPO <sub>4</sub> :Eu <sup>2+</sup> Phosphor Synthesized by a Solution Method Employing a Water-Soluble Phosphate Ester. <i>Optics and Photonics Journal</i> , <b>2013</b> , 03, 13-18	0.3	15
62	Hierarchical structures of rutile exposing high-index facets. <i>Journal of Crystal Growth</i> , <b>2015</b> , 418, 86-91	1.6	14
61	Enhancement of luminescence properties of a KSrPO <sub>4</sub> :Eu <sup>2+</sup> phosphor prepared using a solution method with a water-soluble phosphate oligomer. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 5741	7.1	14
60	Tailoring of Deep-Red Luminescence in Ca <sub>2</sub> SiO <sub>4</sub> :Eu <sup>2+</sup> . <i>Angewandte Chemie</i> , <b>2014</b> , 126, 7890-7893	3.6	13
59	Lewis Acid and Base Catalysis of YNbO <sub>4</sub> Toward Aqueous-Phase Conversion of Hexose and Triose Sugars to Lactic Acid in Water. <i>ChemCatChem</i> , <b>2020</b> , 12, 350-359	5.2	13
58	Crystal structures and luminescence properties of Eu <sup>2+</sup> -activated new NaBa <sub>0.5</sub> Ca <sub>0.5</sub> PO <sub>4</sub> and NaBaTa(PO <sub>4</sub> ) <sub>3</sub> . <i>Dalton Transactions</i> , <b>2015</b> , 44, 1900-4	4.3	12
57	Orange Emission from (Ba <sub>1-x</sub> Sr <sub>x</sub> ) <sub>4</sub> Al <sub>2</sub> S <sub>7</sub> :Eu <sup>2+</sup> Thioaluminate Phosphors with Visible Light Excitation. <i>ECS Journal of Solid State Science and Technology</i> , <b>2013</b> , 2, R3107-R3111	2	12
56	Hydrothermal synthesis of hierarchical TiO <sub>2</sub> microspheres using a novel titanium complex coordinated by picolinic acid. <i>Journal of the Ceramic Society of Japan</i> , <b>2011</b> , 119, 513-516	1	12

55	A high-luminescence BaZrSi <sub>3</sub> O <sub>9</sub> :Eu <sup>2+</sup> blue-green-emitting phosphor: Synthesis and mechanism. <i>Journal of Luminescence</i> , <b>2017</b> , 181, 211-216	3.8	11
54	Synthesis of spindle and square bipyramid-shaped anatase-type titanium dioxide crystals by a solvothermal method using ethylenediamine. <i>Journal of the Ceramic Society of Japan</i> , <b>2012</b> , 120, 494-499	1	11
53	Highly Robust Oxynitride Phosphor against Thermal Oxidization and Hydrolysis. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 12286-12294	8.3	11
52	Synthesis and photocatalytic properties of tetragonal tungsten bronze type oxynitrides. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 206, 444-448	21.8	10
51	Improvement of hydrogen evolution under visible light over Zn <sub>1-x</sub> (CuGa) <sub>x</sub> Ga <sub>2</sub> S <sub>4</sub> photocatalysts by synthesis utilizing a polymerizable complex method. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 14239-14244	13.244	10
50	Large enhancement of photocatalytic activity by chemical etching of TiO <sub>2</sub> crystallized glass. <i>APL Materials</i> , <b>2014</b> , 2, 106103	5.7	10
49	Expansion of the photoresponse window of a BiVO photocatalyst by doping with chromium(vi).. <i>RSC Advances</i> , <b>2018</b> , 8, 38140-38145	3.7	10
48	Photoluminescence Properties of Layered Perovskite-Type Strontium Scandium Oxyfluoride Activated With Mn. <i>Frontiers in Chemistry</i> , <b>2018</b> , 6, 467	5	10
47	Design of crystal structures, morphologies and functionalities of titanium oxide using water-soluble complexes and molecular control agents. <i>Polymer Journal</i> , <b>2015</b> , 47, 78-83	2.7	9
46	Surface Engineering of 1T/2H-MoS <sub>2</sub> Nanoparticles by O <sub>2</sub> Plasma Irradiation as a Potential Humidity Sensor for Breathing and Skin Monitoring Applications. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 7835-7846	5.6	9
45	Insights into a selective synthesis of anatase, rutile, and brookite-type titanium dioxides by a hydrothermal treatment of titanium complexes. <i>Journal of Materials Research</i> , <b>2014</b> , 29, 90-97	2.5	9
44	Synthesis of an oxynitride-based green phosphor Ba <sub>3</sub> Si <sub>6</sub> O <sub>12</sub> N <sub>2</sub> :Eu <sup>2+</sup> via an aqueous-solution process, using propylene-glycol-modified silane. <i>Journal of Information Display</i> , <b>2012</b> , 13, 107-111	4.1	9
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41	Effects of the SrTiO support on visible-light water oxidation with CoO nanoparticles. <i>Dalton Transactions</i> , <b>2017</b> , 46, 16959-16966	4.3	8
40	Ce-Based Compounds Capable of Photoluminescence by Charge Transfer Excitation under Near-Ultraviolet-Visible Light. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 14524-14531	5.1	8
39	Effect of hydroxy and carboxy groups on anisotropic growth of rutile-type titania under hydrothermal conditions. <i>Journal of Asian Ceramic Societies</i> , <b>2017</b> , 5, 320-325	2.4	7
38	Discovery of Novel Delafossite-type Compounds Composed of Copper(I) Lithium Titanium with Photocatalytic Activity for H <sub>2</sub> Evolution under Visible Light. <i>Chemistry Letters</i> , <b>2015</b> , 44, 973-975	1.7	7



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34	Observation of visible light-driven water splitting by TiO <sub>2</sub> crystallized glass. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 22055-22058	6.7	6
33	The significance of phosphate source in the preparation of functional luminescent phosphate materials. <i>Journal of the Ceramic Society of Japan</i> , <b>2014</b> , 122, 626-629	1	6
32	Photocatalytic Water Splitting over LaTa <sub>7</sub> O <sub>19</sub> Composed of TaO <sub>7</sub> Pentagonal Bipyramids and TaO <sub>6</sub> Octahedra. <i>Chemistry Letters</i> , <b>2013</b> , 42, 744-746	1.7	6
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29	Growth of TiO <sub>2</sub> microspheres with a radially oriented configuration. <i>CrystEngComm</i> , <b>2017</b> , 19, 4832-4837	3.3	5
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22	B-site-ordered Double-perovskite Oxide Up-conversion Phosphors Doped with Yb and Ho, Er, or Tm. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , <b>2019</b> , 32, 593-596	0.7	4
21	Novel Titanium Complexes with a Reversible Structural Change on Solvent Adsorption and Desorption. <i>Chemistry Letters</i> , <b>2015</b> , 44, 1050-1052	1.7	3
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19	Synthesis of a Novel Bluish-Green Emitting Oxynitride Ca <sub>3</sub> Al <sub>8</sub> Si <sub>4</sub> O <sub>17</sub> N <sub>5</sub> Phosphor in a Solid Solution System. <i>Optics and Photonics Journal</i> , <b>2013</b> , 03, 29-33	3.5	3
18	Hydrothermal Synthesis of Pseudocubic Rutile-Type Titania Particles. <i>Ceramics</i> , <b>2019</b> , 2, 56-63	1.7	3
17	Structural Change in SrSiO <sub>3</sub> Induced by Introduction of Nitrogen. <i>Chemistry Letters</i> , <b>2018</b> , 47, 1327-1329	1.7	3
16	Synthesis of Ba <sub>1-x</sub> Y <sub>x</sub> Si <sub>2</sub> O <sub>5</sub> N and discussion based on structure analysis and DFT calculation. <i>Journal of Solid State Chemistry</i> , <b>2019</b> , 276, 266-271	3.3	2
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10	Synthesis of (Ca <sub>1-x</sub> Sr <sub>x</sub> ) <sub>4</sub> Si <sub>2</sub> O <sub>7</sub> F <sub>2</sub> oxyfluoride solid solutions and their photoluminescence properties activated by Eu <sup>2+</sup> ions. <i>Journal of the Ceramic Society of Japan</i> , <b>2014</b> , 122, 630-633	1	1
9	Synthesis of picolinate-iron(III) compounds through an aqueous solution process. <i>Journal of the Ceramic Society of Japan</i> , <b>2015</b> , 123, 751-755	1	1
8	Water Splitting into H <sub>2</sub> and O <sub>2</sub> over Cs <sub>2</sub> Nb <sub>4</sub> O <sub>11</sub> Photocatalyst.. <i>ChemInform</i> , <b>2005</b> , 36, no		1
7	Visible Light Response of Wide Band Gap Semiconductor Photocatalysts by Doping of Transition Metal Ions. Aiming at Water Splitting.. <i>Hyomen Kagaku</i> , <b>2003</b> , 24, 31-38		1
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4	Water-Dispersed Silicates and Water-Soluble Phosphates, and Their Use in Sol-Gel Synthesis of Silicate- and Phosphate-Based Materials <b>2016</b> , 1-27		1
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2	Fabrication of high-efficiency YAG:Ce <sup>3+</sup> phosphors via concurrent optimization of firing atmosphere and fluxing agent. <i>Optical Materials</i> , <b>2022</b> , 128, 112386	3.3	0

- 1 Water-Dispersed Silicates and Water-Soluble Phosphates, and Their Use in Sol-Gel Synthesis of Silicate- and Phosphate-Based Materials **2018**, 205-231