Byungwoo Park

List of Publications by Citations

189 papers	9,542 citations	49 h-index	90 g-index
201 ext. papers	10,218 ext. citations	6 avg, IF	5.97 L-index

#	Paper	IF	Citations
189	Novel LiCoO2Cathode Material with Al2O3Coating for a Li Ion Cell. *Chemistry of Materials*, **2000**, 12, 3788-3791	9.6	539
188	Critical Size of a Nano SnO2 Electrode for Li-Secondary Battery. *Chemistry of Materials*, **2005**, 17, 3297-3301	9.6	484
187	Two-Dimensional SnS2 Nanoplates with Extraordinary High Discharge Capacity for Lithium Ion Batteries. *Advanced Materials*, **2008**, 20, 4269-4273	24	477
186	Preparation and exceptional lithium anodic performance of porous carbon-coated ZnO quantum dots derived from a metal-organic framework. *Journal of the American Chemical Society*, **2013**, 135, 7394-7	16.4	418
185	Zero-Strain Intercalation Cathode for Rechargeable Li-Ion Cell. *Angewandte Chemie - International Edition*, **2001**, 40, 3367-3369	16.4	411
184	A breakthrough in the safety of lithium secondary batteries by coating the cathode material with AlPO4 nanoparticles. *Angewandte Chemie - International Edition*, **2003**, 42, 1618-21	16.4	306
183	Two-dimensional nanosheet crystals. *Angewandte Chemie - International Edition*, **2007**, 46, 8828-31	16.4	287
182	Novel SnS2-nanosheet anodes for lithium-ion batteries. *Journal of Power Sources*, **2007**, 167, 529-535	8.9	284
181	LiCoO[sub 2] Cathode Material That Does Not Show a Phase Transition from Hexagonal to Monoclinic Phase. *Journal of the Electrochemical Society*, **2001**, 148, A1110	3.9	201
180	Synthesis, Thermal, and Electrochemical Properties of AlPO[sub 4]-Coated LiNi[sub 0.8]Co[sub 0.1]Mn[sub 0.1]O[sub 2] Cathode Materials for a Li-Ion Cell. *Journal of the Electrochemical Society*, **2004**, 151, A1899	3.9	178
179	Suppression of Cobalt Dissolution from the LiCoO[sub 2] Cathodes with Various Metal-Oxide Coatings. *Journal of the Electrochemical Society*, **2003**, 150, A1723	3.9	168
178	A mesoporous/crystalline composite material containing tin phosphate for use as the anode in lithium-ion batteries. *Angewandte Chemie - International Edition*, **2004**, 43, 5987-90	16.4	134
177	Ultrathin zirconium disulfide nanodiscs. *Journal of the American Chemical Society*, **2011**, 133, 7636-9	16.4	133
176	The effect of TiCl4-treated TiO2 compact layer on the performance of dye-sensitized solar cell. *Current Applied Physics*, **2012**, 12, 737-741	2.6	130
175	Optical and electronic properties of post-annealed ZnO:Al thin films. *Applied Physics Letters*, **2010**, 96, 171902	3.4	127
174	Electrochemical Stability of Thin-Film LiCoO2Cathodes by Aluminum-Oxide Coating. *Chemistry of Materials*, **2003**, 15, 1505-1511	9.6	122
173	The effect of a blocking layer on the photovoltaic performance in CdS quantum-dot-sensitized solar cells. *Journal of Power Sources*, **2011**, 196, 10526-10531	8.9	103

172	High-Performance ZrO[sub 2]-Coated LiNiO[sub 2] Cathode Material. *Electrochemical and Solid-State Letters*, **2001**, 4, A159		103
171	Comparison of Overcharge Behavior of AlPO[sub 4]-Coated LiCoO[sub 2] and LiNi[sub 0.8]Co[sub 0.1]Mn[sub 0.1]O[sub 2] Cathode Materials in Li-Ion Cells. *Journal of the Electrochemical Society*, **2004**, 151, A1707	3.9	102
170	Comparison of Al2O3- and AlPO4-coated LiCoO2 cathode materials for a Li-ion cell. *Journal of Power Sources*, **2005**, 146, 58-64	8.9	97
169	Preparation and electrochemical/thermal properties of LiNi0.74Co0.26O2 cathode material. *Journal of Power Sources*, **2001**, 92, 35-39	8.9	93
168	Hydroxyl-Quenching Effects on the Photoluminescence Properties of SnO2:Eu3+ Nanoparticles. *Journal of Physical Chemistry C*, **2007**, 111, 4164-4167	3.8	89
167	Electrochemical performance of amorphous-silicon thin films for lithium rechargeable batteries. *Journal of Power Sources*, **2006**, 155, 391-394	8.9	88
166	Effect of P2O5 and AlPO4 Coating on LiCoO2 Cathode Material. *Chemistry of Materials*, **2003**, 15, 3190-3193	9.6	80
165	Review paper: Toward highly efficient quantum-dot- and dye-sensitized solar cells. *Current Applied Physics*, **2013**, 13, S2-S13	2.6	79
164	Effect of AlPO[sub 4]-Nanoparticle Coating Concentration on High-Cutoff-Voltage Electrochemical Performances in LiCoO[sub 2]. *Journal of the Electrochemical Society*, **2004**, 151, A801	3.9	77
163	The effects of 100 nm-diameter Au nanoparticles on dye-sensitized solar cells. *Applied Physics Letters*, **2011**, 99, 253107	3.4	75
162	Enhanced Structural Stability of o-LiMnO2 by Sol□el Coating of Al2O3. *Chemistry of Materials*, **2001**, 13, 18-20	9.6	74
161	Nanoparticle iron-phosphate anode material for Li-ion battery. *Applied Physics Letters*, **2004**, 85, 5875-5877	3.4	72
160	Complete blocking of Mn3+ ion dissolution from a LiMn2O4 spinel intercalation compound by Co3O4 coating. *Chemical Communications*, **2001**, 1074-1075	5.8	71
159	Effective wrapping of graphene on individual Li4Ti5O12 grains for high-rate Li-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 2023-2027	13	69
158	Investigation of electronic and optical properties in Al□a codoped ZnO thin films. *Current Applied Physics*, **2012**, 12, 628-631	2.6	69
157	The Effect of Al[sub 2]O[sub 3] Coating on the Cycle Life Performance in Thin-Film LiCoO[sub 2] Cathodes. *Journal of the Electrochemical Society*, **2002**, 149, A1337	3.9	67
156	Electrochemical Properties of Disordered-Carbon-Coated SnO[sub 2] Nanoparticles for Li Rechargeable Batteries. *Electrochemical and Solid-State Letters*, **2006**, 9, A408		66
155	Direct carbon-black coating on LiCoO2 cathode using surfactant for high-density Li-ion cell. *Journal of Power Sources*, **2005**, 139, 289-294	8.9	66

154	The role of a TiCl4 treatment on the performance of CdS quantum-dot-sensitized solar cells. *Journal of Power Sources*, **2012**, 220, 108-113	8.9	64
153	Synthesis and photoluminescence of Mn-doped zinc sulfide nanoparticles. *Applied Physics Letters*, **2007**, 90, 101910	3.4	64
152	Mixture Behavior and Microwave Dielectric Properties in the Low-fired TiO2□CuO System. *Japanese Journal of Applied Physics*, **2000**, 39, 2696-2700	1.4	63
151	The Effect of a Metal-Oxide Coating on the Cycling Behavior at 55□C in Orthorhombic LiMnO[sub 2] Cathode Materials. *Journal of the Electrochemical Society*, **2002**, 149, A288	3.9	60
150	Analysis of a-Si:H/TCO contact resistance for the Si heterojunction back-contact solar cell. *Solar Energy Materials and Solar Cells*, **2014**, 120, 412-416	6.4	55
149	The role of carbon incorporation in SnO2 nanoparticles for Li rechargeable batteries. *Journal of Power Sources*, **2012**, 211, 154-160	8.9	55
148	Enhanced surface hardness by boron implantation in Nitinol alloy. *Journal of Endodontics*, **1996**, 22, 543-6	4.7	55
147	Photoluminescence enhancement in CdS nanoparticles by surface-plasmon resonance. *Applied Physics Letters*, **2011**, 99, 041906	3.4	54
146	Correlation between local strain and cycle-life performance of AlPO4-coated LiCoO2 cathodes. *Journal of Power Sources*, **2004**, 126, 190-192	8.9	54
145	Single-layer graphene-wrapped Li4Ti5O12 anode with superior lithium storage capability. *Carbon*, **2017**, 114, 275-283	10.4	52
144	Correlation between strain and dielectric properties in ZrTiO4 thin films. *Applied Physics Letters*, **2000**, 76, 3043-3045	3.4	52
143	Breathable Carbon-Free Electrode: Black TiO2 with Hierarchically Ordered Porous Structure for Stable Li□2 Battery. *Advanced Energy Materials*, **2017**, 7, 1700814	21.8	50
142	Photoluminescence enhancement in CdS quantum dots by thermal annealing. *Nanoscale Research Letters*, **2012**, 7, 482	5	49
141	The effect of Al2O3-coating coverage on the electrochemical properties in LiCoO2 thin films. *Journal of Solid State Electrochemistry*, **2010**, 14, 1235-1240	2.6	49
140	Wrapping SnO2 with porosity-tuned graphene as a strategy for high-rate performance in lithium battery anodes. *Carbon*, **2015**, 85, 289-298	10.4	48
139	Synthesis and growth mechanisms of one-dimensional strontium hydroxyapatite nanostructures. *Inorganic Chemistry*, **2005**, 44, 9895-901	5.1	47
138	Highly luminescent surface-passivated ZnS:Mn nanoparticles by a simple one-step synthesis. *Applied Physics Letters*, **2008**, 93, 163118	3.4	45
137	Development of fluctuations into domains during ordering in Fe3Al. *Physical Review Letters*, **1992**, 68, 1742-1745	7.4	45

136	Interfacial Modification and Defect Passivation by the Cross-Linking Interlayer for Efficient and Stable CuSCN-Based Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 46818-46824	9.5	45
135	Nanoscale interface control for high-performance Li-ion batteries. *Electronic Materials Letters*, **2012**, 8, 91-105	2.9	44
134	Origins of Efficient Perovskite Solar Cells with Low-Temperature Processed SnO2 Electron Transport Layer. *ACS Applied Energy Materials*, **2019**, 2, 3554-3560	6.1	43
133	Graded bandgap structure for PbS/CdS/ZnS quantum-dot-sensitized solar cells with a PbxCd1⊠S interlayer. *Applied Physics Letters*, **2013**, 102, 183901	3.4	42
132	The Effect of AlPO[sub 4]-Coating Layer on the Electrochemical Properties in LiCoO[sub 2] Thin Films. *Journal of the Electrochemical Society*, **2006**, 153, A1773	3.9	42
131	Microwave dielectric properties of (1 ⊠x)Cu3Nb2O8⊠Zn3Nb2O8 ceramics. *Journal of Materials Research*, **2001**, 16, 1465-1470	2.5	42
130	Electronic Traps and Their Correlations to Perovskite Solar Cell Performance via Compositional and Thermal Annealing Controls. *ACS Applied Materials & Interfaces*, **2019**, 11, 6907-6917	9.5	41
129	Microstructural Evolution of Hybrid Perovskites Promoted by Chlorine and its Impact on the Performance of Solar Cell. *Scientific Reports*, **2019**, 9, 4803	4.9	40
128	Trigonal Na4Ti5O12Phase as an Intercalation Host for Rechargeable Batteries. *Journal of the Electrochemical Society*, **2012**, 159, A2016-A2023	3.9	40
127	Enhanced electrochemical properties of SnO2 anode by AlPO4 coating. *Electrochimica Acta*, **2004**, 49, 4405-4410	6.7	40
126	From Nanostructural Evolution to Dynamic Interplay of Constituents: Perspectives for Perovskite Solar Cells. *Advanced Materials*, **2018**, 30, e1704208	24	39
125	Evaluating the Optoelectronic Quality of Hybrid Perovskites by Conductive Atomic Force Microscopy with Noise Spectroscopy. *ACS Applied Materials & Interfaces*, **2016**, 8, 30985-30991	9.5	39
124	Effect of microstructures on the microwave dielectric properties of ZrTiO4 thin films. *Applied Physics Letters*, **2001**, 78, 2363-2365	3.4	39
123	Electrochemical characteristics of MgNi alloys as anode materials for secondary Li batteries. *Journal of Power Sources*, **2000**, 90, 59-63	8.9	39
122	Recent Progress in Inorganic Hole Transport Materials for Efficient and Stable Perovskite Solar Cells. *Electronic Materials Letters*, **2019**, 15, 505-524	2.9	38
121	Modification of Gold Catalysis with Aluminum Phosphate for Oxygen-Reduction Reaction. *Journal of Physical Chemistry C*, **2010**, 114, 3688-3692	3.8	38
120	Annealing-Temperature Effect on Various Cutoff-Voltage Electrochemical Performances in AlPO[sub 4]-Nanoparticle-Coated LiCoO[sub 2]. *Journal of the Electrochemical Society*, **2005**, 152, A32	3.9	38
119	Development of carbon-based cathodes for Li-air batteries: Present and future. *Electronic Materials Letters*, **2016**, 12, 551-567	2.9	37

118	Solvent and Intermediate Phase as Boosters for the Perovskite Transformation and Solar Cell Performance. *Scientific Reports*, **2016**, 6, 25648	4.9	36
117	Control of AlPO4-nanoparticle coating on LiCoO2 by using water or ethanol. *Electrochimica Acta*, **2005**, 50, 4182-4187	6.7	36
116	The construction of tandem dye-sensitized solar cells from chemically-derived nanoporous photoelectrodes. *Journal of Power Sources*, **2015**, 274, 937-942	8.9	34
115	Review paper: Semiconductor nanoparticles with surface passivation and surface plasmon. *Electronic Materials Letters*, **2011**, 7, 185-194	2.9	34
114	Enhancement of the electrochemical properties of o-LiMnO2 cathodes at elevated temperature by lithium and fluorine additions. *Journal of Power Sources*, **2006**, 154, 268-272	8.9	33
113	Bandgap grading and Al0.3Ga0.7As heterojunction emitter for highly efficient GaAs-based solar cells. *Solar Energy Materials and Solar Cells*, **2016**, 155, 264-272	6.4	33
112	Investigation of chlorine-mediated microstructural evolution of CH3NH3PbI3(Cl) grains for high optoelectronic responses. *Nano Energy*, **2016**, 25, 91-99	17.1	32
111	Surface-passivation effects on the photoluminescence enhancement in ZnS:Mn nanoparticles by ultraviolet irradiation with oxygen bubbling. *Applied Physics Letters*, **2010**, 96, 211908	3.4	32
110	Epitaxial growth of Cu (001) on Si (001): Mechanisms of orientation development and defect morphology. *Applied Physics Letters*, **1993**, 63, 2833-2835	3.4	32
109	An Aromatic Diamine Molecule as the A-Site Solute for Highly Durable and Efficient Perovskite Solar Cells. *Small Methods*, **2019**, 3, 1800361	12.8	32
108	Quantitative analyses of damp-heat-induced degradation in transparent conducting oxides. *Solar Energy Materials and Solar Cells*, **2014**, 122, 282-286	6.4	31
107	Effect of Al[sub 2]O[sub 3]-Coated o-LiMnO[sub 2] Cathodes Prepared at Various Temperatures on the 55°C Cycling Behavior. *Journal of the Electrochemical Society*, **2002**, 149, A127	3.9	31
106	Complementary surface modification by disordered carbon and reduced graphene oxide on SnO2 hollow spheres as an anode for Li-ion battery. *Carbon*, **2018**, 129, 342-348	10.4	31
105	Triamine-Based Aromatic Cation as a Novel Stabilizer for Efficient Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1905190	15.6	30
104	Iron-phosphate–platinum–carbon nanocomposites for enhanced electrocatalytic stability. *Applied Physics Letters*, **2007**, 91, 113101	3.4	30
103	Dielectric relaxation of atomic-layer-deposited HfO2 thin films from 1kHzto5GHz. *Applied Physics Letters*, **2005**, 87, 012901	3.4	30
102	X-ray measurements of ion mixing in amorphous Si/Ge artificial multilayers. *Journal of Applied Physics*, **1990**, 68, 4556-4560	2.5	30
101	Metal-phosphate coating on LiCoO2 cathodes with high cutoff voltages. *Materials Research Bulletin* , **2007**, 42, 1201-1211	5.1	29

100	Silver-nanoparticle dispersion from the consolidation of Ag-attached silica colloid. *Journal of Materials Research*, **2004**, 19, 1400-1407	2.5	29
99	Zero-Strain Intercalation Cathode for Rechargeable Li-Ion Cell. *Angewandte Chemie*, **2001**, 113, 3471-3473	3.6	29
98	Changes in the Lattice Constants of Thin-Film LiCoO[sub 2] Cathodes at the 4.2 V Charged State. *Journal of the Electrochemical Society*, **2004**, 151, A1063	3.9	28
97	Effect of excess Bi2O3 on the ferroelectric properties of SrBi2Ta2O9 ceramics. *Journal of Applied Physics*, **2000**, 88, 2825-2829	2.5	27
96	Insights on the delithiation/lithiation reactions of LixMn0.8Fe0.2PO4 mesocrystals in Li+ batteries by in situ techniques. *Nano Energy*, **2017**, 39, 371-379	17.1	26
95	Reduced graphene oxide/carbon double-coated 3-D porous ZnO aggregates as high-performance Li-ion anode materials. *Nanoscale Research Letters*, **2015**, 10, 204	5	26
94	The effects of ruthenium-oxidation states on Ru dissolution in PtRu thin-film electrodes. *Journal of Materials Research*, **2009**, 24, 2762-2766	2.5	26
93	The dependence of dielectric properties on the thickness of (Ba,Sr)TiO3 thin films. *Current Applied Physics*, **2007**, 7, 168-171	2.6	26
92	Nanostructured Platinum/Iron Phosphate Thin-Film Electrodes for Methanol Oxidation. *Electrochemical and Solid-State Letters*, **2006**, 9, E27		26
91	Ion-implantation modification of lithium phosphorus oxynitride thin-films. *Journal of Power Sources*, **2002**, 109, 214-219	8.9	26
90	Diffusivity of gold in amorphous silicon measured by the artificial multilayer technique. *Applied Physics Letters*, **1990**, 56, 2094-2096	3.4	26
89	Surface-plasmon-enhanced photoluminescence of CdS nanoparticles with Au/SiO2 nanocomposites. *Materials Research Bulletin*, **2012**, 47, 453-457	5.1	25
88	Uniform Cs2SnI6 Thin Films for Lead-Free and Stable Perovskite Optoelectronics via Hybrid Deposition Approaches. *Electronic Materials Letters*, **2019**, 15, 192-200	2.9	25
87	Electronic transport and carrier concentration in conductive ZnO:Ga thin films. *Current Applied Physics*, **2013**, 13, 415-418	2.6	24
86	Synthesis of metastable carbon-silicon-nitrogen compounds by ion implantation. *Journal of Electronic Materials*, **1996**, 25, 23-26	1.9	24
85	Integration of CdSe/CdSexTe1-x Type-II Heterojunction Nanorods into Hierarchically Porous TiO2 Electrode for Efficient Solar Energy Conversion. *Scientific Reports*, **2015**, 5, 17472	4.9	23
84	Surface-plasmon resonance for photoluminescence and solar-cell applications. *Electronic Materials Letters*, **2012**, 8, 351-364	2.9	23
83	The effect of nitrogen on the cycling performance in thin-film Si1−xNx anode. *Journal of Solid State Chemistry*, **2008**, 181, 2139-2142	3.3	23

82	Synchrotron-based x-ray absorption spectroscopy for the electronic structure of LixMn0.8Fe0.2PO4 mesocrystal in Li+ batteries. *Nano Energy*, **2017**, 31, 495-503	17.1	22
81	An effective oxidation approach for luminescence enhancement in CdS quantum dots by H2O2. *Nanoscale Research Letters*, **2012**, 7, 672	5	22
80	Facile Conversion Synthesis of Densely-Formed Branched ZnO-Nanowire Arrays for Quantum-Dot-Sensitized Solar Cells. *Electrochimica Acta*, **2015**, 167, 194-200	6.7	21
79	Aminosilane-Modified CuGaO2 Nanoparticles Incorporated with CuSCN as a Hole-Transport Layer for Efficient and Stable Perovskite Solar Cells. *Advanced Materials Interfaces*, **2019**, 6, 1901372	4.6	21
78	Enhanced rate capability of LiMn0.9Mg0.1PO4 nanoplates by reduced graphene oxide/carbon double coating for Li-ion batteries. *Current Applied Physics*, **2014**, 14, 725-730	2.6	21
77	The role of ZnO-coating-layer thickness on the recombination in CdS quantum-dot-sensitized solar cells. *Nano Energy*, **2013**, 2, 1218-1224	17.1	21
76	Crystallinity Dependence of Microwave Dielectric Properties in (Ba,Sr)TiO3Thin Films. *Japanese Journal of Applied Physics*, **2003**, 42, 1315-1319	1.4	21
75	Electronic Effect in Methanol Dehydrogenation on Pt Surfaces: Potential Control during Methanol Electrooxidation. *Journal of Physical Chemistry Letters*, **2013**, 4, 2931-2936	6.4	20
74	Tailoring the Mesoscopic TiO Layer: Concomitant Parameters for Enabling High-Performance Perovskite Solar Cells. *Nanoscale Research Letters*, **2017**, 12, 57	5	19
73	The effect of TiO2-coating layer on the performance in nanoporous ZnO-based dye-sensitized solar cells. *Journal of Power Sources*, **2013**, 232, 159-164	8.9	19
72	Organic-acid texturing of transparent electrodes toward broadband light trapping in thin-film solar cells. *Nano Energy*, **2015**, 17, 180-186	17.1	18
71	Oriented Hierarchical Porous TiO2 Nanowires on Ti Substrate: Evolution of Nanostructures for Dye-Sensitized Solar Cells. *Electrochimica Acta*, **2014**, 145, 231-236	6.7	18
70	Suppression of structural degradation of LiNi0.9Co0.1O2 cathode at 90 ℃ by AlPO4-nanoparticle coating. *Current Applied Physics*, **2007**, 7, 172-175	2.6	18
69	Electrochemical properties of tin phosphates with various mesopore ratios. *Journal of Power Sources*, **2007**, 172, 908-912	8.9	18
68	Recent advances in the transparent conducting ZnO for thin-film Si solar cells. *Electronic Materials Letters*, **2015**, 11, 917-930	2.9	17
67	Electrochemical Promotion of Oxygen Reduction on Gold with Aluminum Phosphate Overlayer. *Journal of Physical Chemistry C*, **2011**, 115, 7092-7096	3.8	17
66	The effect of implantation temperature on the surface hardness, elastic modulus and Raman scattering in amorphous carbon. *Applied Physics Letters*, **1997**, 70, 3104-3106	3.4	17
65	Nanostructural Effect of AlPO[sub 4]-Nanoparticle Coating on the Cycle-Life Performance in LiCoO[sub 2] Thin Films. *Electrochemical and Solid-State Letters*, **2007**, 10, A32		17

64	A Mesoporous/Crystalline Composite Material Containing Tin Phosphate for Use as the Anode in Lithium-Ion Batteries. *Angewandte Chemie*, **2004**, 116, 6113-6116	3.6	16
63	Influence of the Microstructures on the Dielectric Properties of ZrTiO4Thin Films at Microwave-Frequency Range. *Japanese Journal of Applied Physics*, **2001**, 40, 4599-4603	1.4	16
62	A Cu2O□CuSCN Nanocomposite as a Hole-Transport Material of Perovskite Solar Cells for Enhanced Carrier Transport and Suppressed Interfacial Degradation. *ACS Applied Energy Materials*, **2020**, 3, 7572-7579	6.1	16
61	CuCrO Nanoparticles Incorporated into PTAA as a Hole Transport Layer for 85 □C and Light Stabilities in Perovskite Solar Cells. *Nanomaterials*, **2020**, 10,	5.4	16
60	Synthesis of LiMn0.8Fe0.2PO4 Mesocrystals for High-Performance Li-Ion Cathode Materials. *Electrochimica Acta*, **2016**, 216, 203-210	6.7	16
59	Microwave dielectric relaxation of the polycrystalline (Ba,Sr)TiO3 thin films. *Applied Physics Letters*, **2005**, 86, 182904	3.4	15
58	Surface hardness enhancement in ion-implanted amorphous carbon. *Journal of Applied Physics*, **1996**, 80, 1480-1484	2.5	15
57	3D Meshlike Polyacrylamide Hydrogel as a Novel Binder System via in situ Polymerization for High-Performance Si-Based Electrode. *Advanced Materials Interfaces*, **2020**, 7, 1901475	4.6	15
56	Selective rear contact for Ga0.5In0.5P- and GaAs- based solar cells. *Solar Energy Materials and Solar Cells*, **2018**, 182, 348-353	6.4	14
55	Evaluation of graphene-wrapped LiFePO4 as novel cathode materials for Li-ion batteries. *RSC Advances*, **2016**, 6, 105081-105086	3.7	14
54	Facile synthesis of porous-carbon/LiFePO4 nanocomposites. *Journal of Nanoparticle Research*, **2012** , 14, 1	2.3	14
53	Nanostructural analysis of ZnO:Al thin films for carrier-transport mechanisms. *Current Applied Physics*, **2013**, 13, 775-778	2.6	13
52	Surface□plasmon-coupled photoluminescence from CdS nanoparticles with Au films. *Solid State Communications*, **2012**, 152, 1767-1770	1.6	13
51	Ion-beam mixing in energetic collision cascades: Thermal-spike model and experiments. *Journal of Materials Research*, **1999**, 14, 281-285	2.5	13
50	Photoconductive noise microscopy revealing quantitative effect of localized electronic traps on the perovskite-based solar cell performance. *Nano Energy*, **2018**, 43, 29-36	17.1	13
49	Route to Improving Photovoltaics Based on CdSe/CdSeTe Type-II Heterojunction Nanorods: The Effect of Morphology and Cosensitization on Carrier Recombination and Transport. *ACS Applied Materials & Interfaces*, **2017**, 9, 31931-31939	9.5	12
48	Methanol oxidation in nanostructured platinum/cerium-phosphate thin films. *Current Applied Physics*, **2011**, 11, S2-S5	2.6	12
47	Structural changes of Li3.1Mn0.91Cr1.09O4 cathode material. *Solid State Ionics*, **2001**, 138, 221-225	3.3	12

46	Dielectric Properties and Strain Analysis in Paraelectric ZrTiO4Thin Films Deposited by DC Magnetron Sputtering. *Japanese Journal of Applied Physics*, **2000**, 39, 4153-4157	1.4	12
45	Synergetic effect of double-step blocking layer for the perovskite solar cell. *Journal of Applied Physics*, **2017**, 122, 145106	2.5	11
44	Synergistic improvement of oxygen reduction reaction on gold/cerium-phosphate catalysts. *International Journal of Hydrogen Energy*, **2014**, 39, 10921-10926	6.7	11
43	Effects of iron-phosphate coating on Ru dissolution in the PtRu thin-film electrodes. *Journal of Materials Research*, **2009**, 24, 140-144	2.5	11
42	A Breakthrough in the Safety of Lithium Secondary Batteries by Coating the Cathode Material with AlPO4 Nanoparticles. *Angewandte Chemie*, **2003**, 115, 1656-1659	3.6	11
41	Efficient Type-II Heterojunction Nanorod Sensitized Solar Cells Realized by Controlled Synthesis of Core/Patchy-Shell Structure and CdS Cosensitization. *ACS Applied Materials & Interfaces*, **2019**, 11, 19104-19114	9.5	10
40	Nanoroughness control of Al-Doped ZnO for high efficiency Si thin-film solar cells. *Current Applied Physics*, **2015**, 15, 1353-1357	2.6	10
39	Methylammonium-chloride post-treatment on perovskite surface and its correlation to photovoltaic performance in the aspect of electronic traps. *Journal of Applied Physics*, **2019**, 126, 023101	2.5	10
38	Selective removal of nanopores by triphenylphosphine treatment on the natural graphite anode. *Electrochimica Acta*, **2019**, 326, 134993	6.7	10
37	Improving scattering layer through mixture of nanoporous spheres and nanoparticles in ZnO-based dye-sensitized solar cells. *Nanoscale Research Letters*, **2014**, 9, 295	5	10
36	A simple template-free Sputtering deposition and selective etchingSprocess for nanoporous thin films and its application to dye-sensitized solar cells. *Nanotechnology*, **2013**, 24, 365604	3.4	10
35	Electrochemical stability in cerium-phosphateÐoated LiCoO2 thin films. *Journal of Materials Research*, **2007**, 22, 688-694	2.5	10
34	Pt/AlPO4 nanocomposite thin-film electrodes for ethanol electrooxidation. *Materials Chemistry and Physics*, **2012**, 135, 188-192	4.4	9
33	Hardness and Modulus Properties in Ion-beam-modified Amorphous Carbon: Temperature and Dose Rate Dependences. *Journal of Materials Research*, **1997**, 12, 2057-2063	2.5	9
32	Reaction mechanisms of tridymite iron phosphate with lithium ions in the low-voltage range. *Electrochimica Acta*, **2007**, 53, 1843-1849	6.7	9
31	Effect of crystallinity on the dielectric loss of sputter-deposited (Ba,Sr)TiO3 thin films in the microwave range. *Journal of Materials Research*, **2003**, 18, 682-686	2.5	9
30	Comment on "Calculation and simulation of chemical-diffusion coefficients: The inadequacy of the mean-field theory". *Physical Review Letters*, **1992**, 68, 1438	7.4	9
29	Incorporation of Lithium Fluoride Restraining Thermal Degradation and Photodegradation of Organometal Halide Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 50418-50425	9.5	9

28	Understanding the photoluminescence mechanisms of nanophosphor surface. *Electronic Materials Letters*, **2009**, 5, 201-204	2.9	8
27	Optimum Morphology of Mixed-Olivine Mesocrystals for a Li-Ion Battery. *Inorganic Chemistry*, **2018**, 57, 5999-6009	5.1	7
26	Enhanced surface hardness in nitrogen-implanted silicon carbide. *Nuclear Instruments & Methods in Physics Research B*, **1996**, 118, 693-697	1.2	7
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