

Sang Il Seok

List of Publications by Year in descending order

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189
papers

53,778
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10979

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docs citations

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times ranked

27544
citing authors

#	ARTICLE	IF	CITATIONS
1	Solvent engineering for high-performance inorganic-organic hybrid perovskite solar cells. <i>Nature Materials</i> , 2014, 13, 897-903.	13.3	5,796
2	High-performance photovoltaic perovskite layers fabricated through intramolecular exchange. <i>Science</i> , 2015, 348, 1234-1237.	6.0	5,529
3	Compositional engineering of perovskite materials for high-performance solar cells. <i>Nature</i> , 2015, 517, 476-480.	13.7	5,478
4	Iodide management in formamidinium-lead-halide-based perovskite layers for efficient solar cells. <i>Science</i> , 2017, 356, 1376-1379.	6.0	4,721
5	Chemical Management for Colorful, Efficient, and Stable Inorganic-Organic Hybrid Nanostructured Solar Cells. <i>Nano Letters</i> , 2013, 13, 1764-1769.	4.5	4,144
6	Efficient inorganic-organic hybrid heterojunction solar cells containing perovskite compound and polymeric hole conductors. <i>Nature Photonics</i> , 2013, 7, 486-491.	15.6	2,423
7	Perovskite solar cells with atomically coherent interlayers on SnO ₂ electrodes. <i>Nature</i> , 2021, 598, 444-450.	13.7	2,065
8	A fluorene-terminated hole-transporting material for highly efficient and stable perovskite solar cells. <i>Nature Energy</i> , 2018, 3, 682-689.	19.8	1,856
9	Challenges for commercializing perovskite solar cells. <i>Science</i> , 2018, 361, .	6.0	1,327
10	Colloidally prepared La-doped BaSnO ₃ electrodes for efficient, photostable perovskite solar cells. <i>Science</i> , 2017, 356, 167-171.	6.0	1,045
11	Efficient, stable solar cells by using inherent bandgap of δ -phase formamidinium lead iodide. <i>Science</i> , 2019, 366, 749-753.	6.0	936
12	Impact of strain relaxation on performance of δ -formamidinium lead iodide perovskite solar cells. <i>Science</i> , 2020, 370, 108-112.	6.0	932
13	<i>o</i> -Methoxy Substituents in Spiro-OMeTAD for Efficient Inorganic-Organic Hybrid Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2014, 136, 7837-7840.	6.6	702
14	Voltage output of efficient perovskite solar cells with high open-circuit voltage and fill factor. <i>Energy and Environmental Science</i> , 2014, 7, 2614-2618.	15.6	692
15	Fabrication of Efficient Formamidinium Tin Iodide Perovskite Solar Cells through SnF ₂ -Pyrazine Complex. <i>Journal of the American Chemical Society</i> , 2016, 138, 3974-3977.	6.6	658
16	Benefits of very thin PCBM and LiF layers for solution-processed δ -perovskite solar cells. <i>Energy and Environmental Science</i> , 2014, 7, 2642-2646.	15.6	622
17	Perovskite precursor solution chemistry: from fundamentals to photovoltaic applications. <i>Chemical Society Reviews</i> , 2019, 48, 2011-2038.	18.7	526
18	High-Performance Nanostructured Inorganic-Organic Heterojunction Solar Cells. <i>Nano Letters</i> , 2010, 10, 2609-2612.	4.5	520

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19	Efficient Inorganic-Organic Hybrid Perovskite Solar Cells Based on Pyrene Arylamine Derivatives as Hole-Transporting Materials. <i>Journal of the American Chemical Society</i> , 2013, 135, 19087-19090.	6.6	512
20	Thermal Behavior of Methylammonium Lead-Trihalide Perovskite Photovoltaic Light Harvesters. <i>Chemistry of Materials</i> , 2014, 26, 6160-6164.	3.2	502
21	Efficient CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells Employing Nanostructured p-Type NiO Electrode Formed by a Pulsed Laser Deposition. <i>Advanced Materials</i> , 2015, 27, 4013-4019.	11.1	485
22	Nanocomposites of Ferroelectric Polymers with TiO ₂ Nanoparticles Exhibiting Significantly Enhanced Electrical Energy Density. <i>Advanced Materials</i> , 2009, 21, 217-221.	11.1	471
23	Highly Improved Sb ₂ S ₃ Sensitized Inorganic-Organic Heterojunction Solar Cells and Quantification of Traps by Deep-Level Transient Spectroscopy. <i>Advanced Functional Materials</i> , 2014, 24, 3587-3592.	7.8	454
24	High-performance flexible perovskite solar cells exploiting Zn ₂ SnO ₄ prepared in solution below 100 °C. <i>Nature Communications</i> , 2015, 6, 7410.	5.8	417
25	Beneficial Effects of PbI ₂ Incorporated in Organo-Lead Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1502104.	10.2	387
26	Critical Role of Grain Boundaries for Ion Migration in Formamidinium and Methylammonium Lead Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1600330.	10.2	360
27	CdSe Quantum Dot-Sensitized Solar Cells Exceeding Efficiency 1% at Full-Sun Intensity. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11600-11608.	1.5	339
28	Electrical Energy Storage in Ferroelectric Polymer Nanocomposites Containing Surface-Functionalized BaTiO ₃ Nanoparticles. <i>Chemistry of Materials</i> , 2008, 20, 6304-6306.	3.2	339
29	Methodologies toward Highly Efficient Perovskite Solar Cells. <i>Small</i> , 2018, 14, e1704177.	5.2	315
30	Rational Strategies for Efficient Perovskite Solar Cells. <i>Accounts of Chemical Research</i> , 2016, 49, 562-572.	7.6	311
31	Surface Engineering of Ambient-Air-Processed Cesium Lead Triiodide Layers for Efficient Solar Cells. <i>Joule</i> , 2021, 5, 183-196.	11.7	308
32	Nanostructured TiO ₂ /CH ₃ NH ₃ PbI ₃ heterojunction solar cells employing spiro-OMeTAD/Co-complex as hole-transporting material. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11842.	5.2	301
33	Intrinsic Instability of Inorganic-Organic Hybrid Halide Perovskite Materials. <i>Advanced Materials</i> , 2019, 31, e1805337.	11.1	278
34	Understanding how excess lead iodide precursor improves halide perovskite solar cell performance. <i>Nature Communications</i> , 2018, 9, 3301.	5.8	271
35	Regenerative PbS and CdS Quantum Dot Sensitized Solar Cells with a Cobalt Complex as Hole Mediator. <i>Langmuir</i> , 2009, 25, 7602-7608.	1.6	270
36	Toward Interaction of Sensitizer and Functional Moieties in Hole-Transporting Materials for Efficient Semiconductor-Sensitized Solar Cells. <i>Nano Letters</i> , 2011, 11, 4789-4793.	4.5	243

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37	Panchromatic Photon-Harvesting by Hole-Conducting Materials in Inorganic/Organic Heterojunction Sensitized-Solar Cell through the Formation of Nanostructured Electron Channels. <i>Nano Letters</i> , 2012, 12, 1863-1867.	4.5	221
38	Optimal Interfacial Engineering with Different Length of Alkylammonium Halide for Efficient and Stable Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1902740.	10.2	209
39	Rethinking the A cation in halide perovskites. <i>Science</i> , 2022, 375, eabj1186.	6.0	207
40	Metal Oxide Charge Transport Layers for Efficient and Stable Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1900455.	7.8	186
41	From Flat to Nanostructured Photovoltaics: Balance between Thickness of the Absorber and Charge Screening in Sensitized Solar Cells. <i>ACS Nano</i> , 2012, 6, 873-880.	7.3	170
42	Engineering interface structures between lead halide perovskite and copper phthalocyanine for efficient and stable perovskite solar cells. <i>Energy and Environmental Science</i> , 2017, 10, 2109-2116.	15.6	169
43	Fabrication of metal-oxide-free $\text{CH}_3\text{NH}_3\text{PbI}_3$ perovskite solar cells processed at low temperature. <i>Journal of Materials Chemistry A</i> , 2015, 3, 3271-3275.	5.2	162
44	Structural features and their functions in surfactant-armoured methylammonium lead iodide perovskites for highly efficient and stable solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 2188-2197.	15.6	162
45	Reducing Carrier Density in Formamidinium Tin Perovskites and Its Beneficial Effects on Stability and Efficiency of Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2018, 3, 46-53.	8.8	158
46	Stabilization of formamidinium lead triiodide δ -phase with isopropylammonium chloride for perovskite solar cells. <i>Nature Energy</i> , 2021, 6, 419-428.	19.8	157
47	Thermal Stability of CuSCN Hole Conductor-Based Perovskite Solar Cells. <i>ChemSusChem</i> , 2016, 9, 2592-2596.	3.6	154
48	Sb_2Se_3 -Sensitized Inorganic/Organic Heterojunction Solar Cells Fabricated Using a Single-Source Precursor. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1329-1333.	7.2	145
49	Efficient Sb_2S_3 -Sensitized Solar Cells Via Single-Step Deposition of Sb_2S_3 Using S/Sb-Ratio-Controlled SbCl_3 -Thiourea Complex Solution. <i>Advanced Functional Materials</i> , 2015, 25, 2892-2898.	7.8	145
50	A Low-Temperature Thin-Film Encapsulation for Enhanced Stability of a Highly Efficient Perovskite Solar Cell. <i>Advanced Energy Materials</i> , 2018, 8, 1701928.	10.2	136
51	Mixed Sulfur and Iodide-Based Lead-Free Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 872-875.	6.6	126
52	CdS or CdSe decorated TiO ₂ nanotube arrays from spray pyrolysis deposition: use in photoelectrochemical cells. <i>Chemical Communications</i> , 2010, 46, 2385.	2.2	124
53	Efficient Inorganic/Organic Heterojunction Solar Cells Employing $\text{Sb}_2(\text{S}_x\text{Se}_{1-x})_3$ Graded-Composition Sensitizers. <i>Advanced Energy Materials</i> , 2014, 4, 1301680.	10.2	123
54	Spectral splitting photovoltaics using perovskite and wideband dye-sensitized solar cells. <i>Nature Communications</i> , 2015, 6, 8834.	5.8	122

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55	Energy-level engineering of the electron transporting layer for improving open-circuit voltage in dye and perovskite-based solar cells. <i>Energy and Environmental Science</i> , 2019, 12, 958-964.	15.6	116
56	Lead-free perovskite solar cells enabled by hetero-valent substitutes. <i>Energy and Environmental Science</i> , 2020, 13, 2363-2385.	15.6	109
57	Molecular aspects of organic cations affecting the humidity stability of perovskites. <i>Energy and Environmental Science</i> , 2020, 13, 805-820.	15.6	104
58	Unveiling the Relationship between the Perovskite Precursor Solution and the Resulting Device Performance. <i>Journal of the American Chemical Society</i> , 2020, 142, 6251-6260.	6.6	103
59	Indolo[3,2-b]indole-based crystalline hole-transporting material for highly efficient perovskite solar cells. <i>Chemical Science</i> , 2017, 8, 734-741.	3.7	102
60	All solid state multiply layered PbS colloidal quantum-dot-sensitized photovoltaic cells. <i>Energy and Environmental Science</i> , 2011, 4, 4181.	15.6	93
61	Tailoring of Electron-Collecting Oxide Nanoparticulate Layer for Flexible Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1845-1851.	2.1	93
62	Mutual Insight on Ferroelectrics and Hybrid Halide Perovskites: A Platform for Future Multifunctional Energy Conversion. <i>Advanced Materials</i> , 2019, 31, e1807376.	11.1	91
63	Fabrication of CuInTe_2 and CuInTe_2Se Ternary Gradient Quantum Dots and Their Application to Solar Cells. <i>ACS Nano</i> , 2013, 7, 4756-4763.	7.3	86
64	Efficient Nanostructured TiO_2/SnS Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1901343.	10.2	86
65	Efficient perovskite solar mini-modules fabricated via bar-coating using 2-methoxyethanol-based formamidinium lead tri-iodide precursor solution. <i>Joule</i> , 2021, 5, 2420-2436.	11.7	85
66	Effective Electron Blocking of CuPCaD -Doped Spiro-OMeTAD for Highly Efficient Inorganic-Organic Hybrid Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1501320.	10.2	84
67	Stabilization of Precursor Solution and Perovskite Layer by Addition of Sulfur. <i>Advanced Energy Materials</i> , 2019, 9, 1803476.	10.2	81
68	Efficient room temperature aqueous Sb_2S_3 synthesis for inorganic-organic sensitized solar cells with 5.1% efficiencies. <i>Chemical Communications</i> , 2015, 51, 8640-8643.	2.2	78
69	Efficient Solar Cells Based on Light-Harvesting Antimony Sulfoiodide. <i>Advanced Energy Materials</i> , 2018, 8, 1701901.	10.2	76
70	Facile preparation of large aspect ratio ellipsoidal anatase TiO_2 nanoparticles and their application to dye-sensitized solar cell. <i>Electrochemistry Communications</i> , 2009, 11, 909-912.	2.3	73
71	CuSbS_2 -sensitized Inorganic-Organic Heterojunction Solar Cells Fabricated Using a Metal-Thiourea Complex Solution. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4005-4009.	7.2	72
72	NiFeOx decorated Ge-hematite/perovskite for an efficient water splitting system. <i>Nature Communications</i> , 2021, 12, 4309.	5.8	71

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73	A chemical precursor for depositing Sb ₂ S ₃ onto mesoporous TiO ₂ layers in nonaqueous media and its application to solar cells. Dalton Transactions, 2012, 41, 11569.	1.6	68
74	Spatial Distribution of Lead Iodide and Local Passivation on Organo-Lead Halide Perovskite. ACS Applied Materials & Interfaces, 2017, 9, 6072-6078.	4.0	62
75	Morphological and phase evolution of TiO ₂ nanocrystals prepared from peroxotitanate complex aqueous solution: Influence of acetic acid. Journal of Solid State Chemistry, 2009, 182, 749-756.	1.4	59
76	Enhancing the Performance of Sensitized Solar Cells with PbS/CH ₃ NH ₃ Pb ₃ Core/Shell Quantum Dots. Journal of Physical Chemistry Letters, 2014, 5, 2015-2020.	2.1	59
77	Nanochannel-Assisted Perovskite Nanowires: From Growth Mechanisms to Photodetector Applications. ACS Nano, 2018, 12, 8406-8414.	7.3	56
78	Performance improvement of Sb ₂ S ₃ -sensitized solar cell by introducing hole buffer layer in cobalt complex electrolyte. Energy and Environmental Science, 2011, 4, 2799.	15.6	54
79	Exploring wide bandgap metal oxides for perovskite solar cells. APL Materials, 2019, 7, .	2.2	54
80	Performance enhancement through post-treatments of CdS-sensitized solar cells fabricated by spray pyrolysis deposition. ACS Applied Materials & Interfaces, 2010, 2, 1648-1652.	4.0	51
81	Quantum-Dot-Sensitized Solar Cells Fabricated by the Combined Process of the Direct Attachment of Colloidal CdSe Quantum Dots Having a ZnS Glue Layer and Spray Pyrolysis Deposition. Langmuir, 2010, 26, 18576-18580.	1.6	50
82	Improved Photovoltaic Response of Nanocrystalline CdS-Sensitized Solar Cells through Interface Control. ACS Applied Materials & Interfaces, 2010, 2, 1343-1348.	4.0	49
83	Hole-conducting mediator for stable Sb ₂ S ₃ -sensitized photoelectrochemical solar cells. Journal of Materials Chemistry, 2012, 22, 1107-1111.	6.7	49
84	Well-Organized Mesoporous TiO ₂ Photoelectrodes by Block Copolymer-Induced Sol-Gel Assembly for Inorganic-Organic Hybrid Perovskite Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16688-16693.	1.5	49
85	Efficient HgTe colloidal quantum dot-sensitized near-infrared photovoltaic cells. Nanoscale, 2012, 4, 1581.	2.8	47
86	Ligand-dependent particle size control of PbSe quantum dots. Journal of Colloid and Interface Science, 2007, 310, 163-166.	5.0	45
87	Sb ₂ S ₃ -Sensitized Photoelectrochemical Cells: Open Circuit Voltage Enhancement through the Introduction of Poly-3-hexylthiophene Interlayer. Journal of Physical Chemistry C, 2012, 116, 20717-20721.	1.5	45
88	Controllable synthesis of single crystalline Sn-based oxides and their application in perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 79-86.	5.2	45
89	TiO ₂ Colloid-Spray Coated Electron-Transporting Layers for Efficient Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2001799.	10.2	45
90	Regulating the Surface Passivation and Residual Strain in Pure Tin Perovskite Films. ACS Energy Letters, 2021, 6, 3555-3562.	8.8	45

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91	Photoelectrochemical solar cells fabricated from porous CdSe and CdS layers. <i>Electrochimica Acta</i> , 2010, 55, 5665-5669.	2.6	44
92	Carbazole-Based Spiro[fluorene-9,9'-xanthene] as an Efficient Hole-Transporting Material for Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 28246-28252.	4.0	43
93	TiO ₂ nanoparticles formed in silica sol-gel matrix. <i>Materials Chemistry and Physics</i> , 2004, 86, 176-179.	2.0	42
94	Enhanced Moisture Stability by Butyldimethylsulfonium Cation in Perovskite Solar Cells. <i>Advanced Science</i> , 2020, 7, 1901840.	5.6	42
95	Preparation and luminescence properties of LaPO ₄ :Er,Yb nanoparticles. <i>Journal of Luminescence</i> , 2005, 114, 307-313.	1.5	40
96	Efficient Solar Cells Employing Light-Harvesting Sb _{0.67} Bi _{0.33} SI. <i>Advanced Materials</i> , 2019, 31, e1808344.	11.1	40
97	Precursor-driven selective synthesis of hexagonal chalcocite (Cu ₂ S) nanocrystals: structural, optical, electrical and photocatalytic properties. <i>New Journal of Chemistry</i> , 2014, 38, 4774-4782.	1.4	38
98	Peptide-templating dye-sensitized solar cells. <i>Nanotechnology</i> , 2010, 21, 185601.	1.3	36
99	Air-stable and efficient inorganic-organic heterojunction solar cells using PbS colloidal quantum dots co-capped by 1-dodecanethiol and oleic acid. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 14999.	1.3	36
100	Two-terminal mechanical perovskite/silicon tandem solar cells with transparent conductive adhesives. <i>Nano Energy</i> , 2019, 65, 104044.	8.2	36
101	Efficient and Stable Antimony Seleniodide Solar Cells. <i>Advanced Science</i> , 2021, 8, 2003172.	5.6	36
102	Preparation of corrosion protective coatings on galvanized iron from aqueous inorganic-organic hybrid sols by sol-gel method. <i>Surface and Coatings Technology</i> , 2006, 200, 3468-3472.	2.2	35
103	High-yield synthesis of quantum-confined CdS nanorods using a new dimeric cadmium(II) complex of S-benzylidithiocarbamate as single-source molecular precursor. <i>Solid State Sciences</i> , 2010, 12, 532-535.	1.5	35
104	Synthesis, spectroscopic characterization and thermal behavior of cadmium(II) complexes of S-methyldithiocarbamate (SMDTC) and S-benzylidithiocarbamate (SBDTC): X-ray crystal structure of [Cd(SMDTC) ₃] · 2NO ₃ . <i>Polyhedron</i> , 2008, 27, 3433-3438.	1.0	34
105	CdSe-sensitized inorganic-organic heterojunction solar cells: The effect of molecular dipole interface modification and surface passivation. <i>Organic Electronics</i> , 2012, 13, 975-979.	1.4	33
106	Steps toward efficient inorganic-organic hybrid perovskite solar cells. <i>MRS Bulletin</i> , 2015, 40, 648-653.	1.7	33
107	Cu ₂ S-deposited mesoporous NiO photocathode for a solar cell. <i>Chemical Physics Letters</i> , 2009, 477, 345-348.	1.2	32
108	SnO ₂ -TiO ₂ Hybrid Electron Transport Layer for Efficient and Flexible Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2022, 7, 1864-1870.	8.8	32

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109	Stabilization of Lead-Tin-Alloyed Inorganic-Organic Halide Perovskite Quantum Dots. ACS Nano, 2018, 12, 12129-12139.	7.3	31
110	Efficient Antimony-Based Solar Cells by Enhanced Charge Transfer. Small Methods, 2020, 4, 1900698.	4.6	30
111	Polymethyl Methacrylate as an Interlayer Between the Halide Perovskite and Copper Phthalocyanine Layers for Stable and Efficient Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	30
112	Optical properties of organic/inorganic nanocomposite sol-gel films containing LaPO ₄ :Er,Yb nanocrystals. Optical Materials, 2006, 28, 374-379.	1.7	29
113	Bandgap engineered monodisperse and stable mercury telluride quantum dots and their application for near-infrared photodetection. Journal of Materials Chemistry, 2011, 21, 15232.	6.7	29
114	Quaternary semiconductor Cu ₂ FeSnS ₄ nanoparticles as an alternative to Pt catalysts. RSC Advances, 2013, 3, 24918.	1.7	29
115	Heteroleptic Tin-Antimony Sulfoiodide for Stable and Lead-free Solar Cells. Matter, 2020, 3, 1701-1713.	5.0	29
116	Near-infrared photodetection based on PbS colloidal quantum dots/organic hole conductor. Organic Electronics, 2010, 11, 696-699.	1.4	28
117	Improved air stability of PbS-sensitized solar cell by incorporating ethanedithiol during spin-assisted successive ionic layer adsorption and reaction. Organic Electronics, 2012, 13, 2352-2357.	1.4	28
118	Non-hydrolytic sol-gel synthesis of epoxysilane-based inorganic-organic hybrid resins. Materials Chemistry and Physics, 2008, 112, 1008-1014.	2.0	25
119	Core/shell silica-based in-situ microencapsulation: A self-templating method. Chemical Communications, 2006, , 189-190.	2.2	24
120	Colloidal TiO ₂ nanocrystals prepared from peroxotitanium complex solutions: Phase evolution from different precursors. Journal of Colloid and Interface Science, 2010, 346, 66-71.	5.0	24
121	Facile synthesis of nanocrystalline wurtzite Cu-In-S by amine-assisted decomposition of precursors. Journal of Solid State Chemistry, 2010, 183, 1872-1877.	1.4	24
122	Porous CdS-sensitized electrochemical solar cells. Electrochimica Acta, 2011, 56, 2087-2091.	2.6	24
123	Preparation of Nanosized Rutile TiO ₂ from an Aqueous Peroxotitanate Solution. Journal of the American Ceramic Society, 2006, 89, 1147-1149.	1.9	23
124	The effect of heat treatment temperature on the microstructure and magnetic properties of Ba ₂ Co ₂ Fe ₁₂ O ₂₂ (Co ₂ Y) prepared by sol-gel method. Materials Letters, 2006, 60, 2718-2722.	1.3	23
125	Near-infrared responsive PbS-sensitized photovoltaic photodetectors fabricated by the spin-assisted successive ionic layer adsorption and reaction method. Nanotechnology, 2011, 22, 395502.	1.3	22
126	Enhancing the device performance of Sb ₂ S ₃ -sensitized heterojunction solar cells by embedding Au nanoparticles in the hole-conducting polymer layer. Physical Chemistry Chemical Physics, 2012, 14, 3622.	1.3	22

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127	Synthesis of nanocrystalline CdS from cadmium(II) complex of S-benzyl dithiocarbazate as a precursor. <i>Solid State Sciences</i> , 2010, 12, 1741-1747.	1.5	21
128	Solvent-assisted growth of Sb ₂ Se ₃ nanocompounds from a single-source precursor under mild reaction conditions. <i>CrystEngComm</i> , 2011, 13, 3767.	1.3	21
129	Halide perovskite materials and devices. <i>MRS Bulletin</i> , 2020, 45, 427-430.	1.7	21
130	Synthesis and characterization of cerium substituted hematite by sol-gel method. <i>Materials Letters</i> , 2005, 59, 3783-3787.	1.3	20
131	Defect states in hybrid solar cells consisting of Sb ₂ S ₃ quantum dots and TiO ₂ nanoparticles. <i>Applied Physics Letters</i> , 2013, 103, 023901.	1.5	20
132	Nanostructured Heterojunction Solar Cells Based on Pb ₂ SbS ₃ : Linking Lead Halide Perovskites and Metal Chalcogenides. <i>ACS Energy Letters</i> , 2018, 3, 2376-2382.	8.8	20
133	Wet-chemical synthesis of crystalline BaTiO ₃ from stable chelated titanium complex: Formation mechanism and dispersibility in organic solvents. <i>Journal of Colloid and Interface Science</i> , 2006, 300, 569-576.	5.0	19
134	ZnSe colloidal nanoparticles synthesized by solvothermal method in the presence of ZrCl ₄ . <i>Journal of Colloid and Interface Science</i> , 2008, 322, 473-477.	5.0	19
135	Synthesis, spectroscopy and thermal behavior of new lead(II) complexes derived from S-methyl/benzyl dithiocarbazates (SMDTC/SBDTC): X-ray crystal structure of [Pb(SMDTC)(NO ₃) ₂]. <i>Inorganica Chimica Acta</i> , 2009, 362, 2603-2608.	1.2	19
136	Encapsulation of Water-Soluble Dye in Spherical Sol-Gel Silica Matrices. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 27, 355-361.	1.1	17
137	Near infrared luminescence properties of nanohybrid film prepared from LaPO ₄ :Er ³⁺ /LaPO ₄ core/shell nanoparticles and silica-based resin. <i>Optical Materials</i> , 2008, 31, 201-205.	1.7	17
138	Nanocrystalline copper sulfide of varying morphologies and stoichiometries in a low temperature solvothermal process using a new single-source molecular precursor. <i>Solid State Sciences</i> , 2012, 14, 1126-1132.	1.5	17
139	PbS Colloidal Quantum Dot Sensitized Inorganic-Organic Hybrid Solar Cells with Radial-Directional Charge Transport. <i>ChemPhysChem</i> , 2014, 15, 1024-1027.	1.0	17
140	Analysis of crystalline phases and integration modelling of charge quenching yields in hybrid lead halide perovskite solar cell materials. <i>Nano Energy</i> , 2017, 40, 596-606.	8.2	17
141	Effects of reactant concentration and OH ⁻ ions on the formation of nanocrystalline BaTiO ₃ in solution. <i>Materials Research Bulletin</i> , 2007, 42, 497-504.	2.7	16
142	Sol-gel microencapsulation of hydrophilic active compounds from the modified silicon alkoxides: The control of pore and particle size. <i>Materials Science and Engineering C</i> , 2008, 28, 1183-1188.	3.8	16
143	Synthesis of uniform PS-b-P2VP nanoparticles via reprecipitation and their use as sacrificial templates for inorganic hollow nanoparticles. <i>Journal of Materials Chemistry</i> , 2012, 22, 8772.	6.7	16
144	One-step synthesis of TOP capped PbSe pyramidal nanocrystals. <i>Materials Chemistry and Physics</i> , 2006, 96, 154-157.	2.0	15

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145	Dimethylformamide-free synthesis and fabrication of lead halide perovskite solar cells from electrodeposited PbS precursor films. <i>Chemical Engineering Journal</i> , 2021, 411, 128460.	6.6	15
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