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Inorganic caesium lead iodide perovskite solar cells

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1230	Inverted Perovskite Solar Cells: Progresses and Perspectives. 2016 , 6, 1600457		294
1229	UV Degradation and Recovery of Perovskite Solar Cells. 2016 , 6, 38150		195
1228	Research Update: Behind the high efficiency of hybrid perovskite solar cells. 2016 , 4, 091505		36
1227	Fully inorganic cesium lead halide perovskites with improved stability for tandem solar cells. 2016 ,		2
1226	Research Update: Strategies for improving the stability of perovskite solar cells. 2016 , 4, 091503		106
1225	Progress in emerging solution-processed thin film solar cells [Part II: Perovskite solar cells. 2016 , 62, 1012-1031		93
1224	The synthesis, structure and electronic properties of a lead-free hybrid inorganic-organic double perovskite $(\text{MA})_2\text{KBiCl}_6$ (MA = methylammonium). 2016 , 3, 328-332		221
1223	Polymer-Free Films of Inorganic Halide Perovskite Nanocrystals as UV-to-White Color-Conversion Layers in LEDs. 2016 , 28, 2902-2906		136
1222	High Chloride Doping Levels Stabilize the Perovskite Phase of Cesium Lead Iodide. 2016 , 16, 3563-70		208
1221	Compact layer influence on hysteresis effect in organic-inorganic hybrid perovskite solar cells. 2016 , 68, 40-44		18
1220	Electronic, optical and elastic properties of cubic perovskite CsPbI_3 : Using first principles study. 2016 , 127, 11433-11443		47
1219	Room temperature single-photon emission and lasing for all-inorganic colloidal perovskite quantum dots. 2016 , 28, 462-468		88
1218	Electric Field- and Strain-Induced Rashba Effect in Hybrid Halide Perovskites. 2016 , 7, 3683-9		74
1217	Recent progress on stability issues of organic-inorganic hybrid lead perovskite-based solar cells. 2016 , 6, 89356-89366		57
1216	Printable Solar Cells from Advanced Solution-Processible Materials. 2016 , 1, 197-219		50

1215	Quantum dot-induced phase stabilization of CsPbI_3 perovskite for high-efficiency photovoltaics. 2016 , 354, 92-95		1786
1214	Photoluminescent Nanocrystals in a Multicomponent Aluminoborosilicate Glass. 2016 , 120, 24925-24931		
1213	Additive-assisted construction of all-inorganic CsSnI_2 mesoscopic perovskite solar cells with superior thermal stability up to 473 K. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17104-17110	13	186
1212	Solvent Engineering for Ambient-Air-Processed, Phase-Stable CsPbI_3 in Perovskite Solar Cells. 2016 , 7, 3603-8		272
1211	Heterojunction-Depleted Lead-Free Perovskite Solar Cells with Coarse-Grained B-CsSnI_3 Thin Films. 2016 , 6, 1601130		162
1210	Room Temperature Phase Transition in Methylammonium Lead Iodide Perovskite Thin Films Induced by Hydrohalic Acid Additives. 2016 , 9, 2656-2665		43
1209	Strategic improvement of the long-term stability of perovskite materials and perovskite solar cells. 2016 , 18, 27026-27050		116
1208	Atomic structure of metal-halide perovskites from first principles: The chicken-and-egg paradox of the organic-inorganic interaction. 2016 , 94,		53
1207	Effect of Cation Rotation on Charge Dynamics in Hybrid Lead Halide Perovskites. 2016 , 120, 16577-16585		46
1206	Forthcoming perspectives of photoelectrochromic devices: a critical review. 2016 , 9, 2682-2719		103
1205	Metal halide perovskites for energy applications. 2016 , 1,		528
1204	Photon Transport in One-Dimensional Incommensurately Epitaxial CsPbX_3 Arrays. 2016 , 16, 7974-7981		102
1203	Colloidal lead halide perovskite nanocrystals: synthesis, optical properties and applications. 2016 , 8, e328-e328		304
1202	Cs^+ incorporation into $\text{CH}_3\text{NH}_3\text{PbI}_3$ perovskite: substitution limit and stability enhancement. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17819-17827	13	78
1201	Cesium lead halide (CsPbX_3 , X = Cl, Br, I) perovskite quantum dots-synthesis, properties, and applications: a review of their present status. 2016 , 6, 042001		48
1200	Structural engineering using rubidium iodide as a dopant under excess lead iodide conditions for high efficiency and stable perovskites. 2016 , 30, 330-340		106
1199	Defects in perovskite-halides and their effects in solar cells. 2016 , 1,		621
1198	Hole Transport Layer Free Inorganic CsPbI_2Br Perovskite Solar Cell by Dual Source Thermal Evaporation. 2016 , 6, 1502202		317

1197	Transformation of Sintered CsPbBr ₃ Nanocrystals to Cubic CsPbI ₃ and Gradient CsPbBr _x I _{3-x} through Halide Exchange. 2016 , 138, 8603-11	269
1196	Intriguing Optoelectronic Properties of Metal Halide Perovskites. 2016 , 116, 12956-13008	987
1195	Role of Cations on the Electronic Transport and Optical Properties of Lead-Iodide Perovskites. 2016 , 120, 16259-16270	43
1194	Is CH ₃ NH ₃ PbI ₃ Polar?. 2016 , 7, 2412-9	116
1193	Defect Tolerance to Intolerance in the Vacancy-Ordered Double Perovskite Semiconductors Cs ₂ SnI ₆ and Cs ₂ TeI ₆ . 2016 , 138, 8453-64	264
1192	Controlled orientation of perovskite films through mixed cations toward high performance perovskite solar cells. 2016 , 27, 87-94	102
1191	Effects of Light and Electron Beam Irradiation on Halide Perovskites and Their Solar Cells. 2016 , 49, 347-54	117
1190	Strain-Induced Ferroelectric Topological Insulator. 2016 , 16, 1663-8	67
1189	Interfacial Oxygen Vacancies as a Potential Cause of Hysteresis in Perovskite Solar Cells. 2016 , 28, 802-812	102
1188	Structure and Growth Control of Organic-Inorganic Halide Perovskites for Optoelectronics: From Polycrystalline Films to Single Crystals. 2016 , 3, 1500392	152
1187	Cesium Lead Halide Perovskites with Improved Stability for Tandem Solar Cells. 2016 , 7, 746-51	788
1186	Fluorescence Blinking and Photoactivation of All-Inorganic Perovskite Nanocrystals CsPbBr ₃ and CsPbBr ₂ I. 2016 , 7, 266-71	121
1185	Stabilizing Perovskite Structures by Tuning Tolerance Factor: Formation of Formamidinium and Cesium Lead Iodide Solid-State Alloys. 2016 , 28, 284-292	1186
1184	Organometal halide perovskite thin films and solar cells by vapor deposition. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 6693-6713	13 177
1183	Relationships between Lead Halide Perovskite Thin-Film Fabrication, Morphology, and Performance in Solar Cells. 2016 , 138, 463-70	192
1182	Impact of iodide substitution on the physical properties and stability of cesium lead halide perovskite thin films CsPbBr _{3-x} I _x (0 ≤ x ≤ 1). 2017 , 702, 404-409	41
1181	Flexible All-Inorganic Perovskite CsPbBr Nonvolatile Memory Device. 2017 , 9, 6171-6176	140
1180	All Inorganic Halide Perovskites Nanosystem: Synthesis, Structural Features, Optical Properties and Optoelectronic Applications. 2017 , 13, 1603996	438

1179	An effective method of predicting perovskite solar cell lifetime—Case study on planar CH ₃ NH ₃ PbI ₃ and HC(NH ₂) ₂ PbI ₃ perovskite solar cells and hole transfer materials of spiro-OMeTAD and PTAA. 2017 , 162, 41-46	61
1178	Structural, electronic and optical properties of CsPbX ₃ (X=Cl, Br, I) for energy storage and hybrid solar cell applications. 2017 , 705, 828-839	119
1177	Probing the Intrinsic Thermal and Photochemical Stability of Hybrid and Inorganic Lead Halide Perovskites. 2017 , 8, 1211-1218	160
1176	Elucidating the effect of the lead iodide complexation degree behind the morphology and performance of perovskite solar cells. 2017 , 9, 3889-3897	20
1175	Stabilization of the Perovskite Phase of Formamidinium Lead Triiodide by Methylammonium, Cs, and/or Rb Doping. 2017 , 8, 1191-1196	96
1174	Dismantling the "Red Wall" of Colloidal Perovskites: Highly Luminescent Formamidinium and Formamidinium-Cesium Lead Iodide Nanocrystals. 2017 , 11, 3119-3134	291
1173	Nearly Monodisperse Insulator CsPbX (X = Cl, Br, I) Nanocrystals, Their Mixed Halide Compositions, and Their Transformation into CsPbX Nanocrystals. 2017 , 17, 1924-1930	378
1172	Structural, optical, and electrical properties of phase-controlled cesium lead iodide nanowires. 2017 , 10, 1107-1114	101
1171	Inorganic Rubidium Cation as an Enhancer for Photovoltaic Performance and Moisture Stability of HC(NH ₂) ₂ PbI ₃ Perovskite Solar Cells. 2017 , 27, 1605988	148
1170	Unbalanced Hole and Electron Diffusion in Lead Bromide Perovskites. 2017 , 17, 1727-1732	75
1169	Neutral and Charged Exciton Fine Structure in Single Lead Halide Perovskite Nanocrystals Revealed by Magneto-optical Spectroscopy. 2017 , 17, 2895-2901	164
1168	Potassium Incorporation for Enhanced Performance and Stability of Fully Inorganic Cesium Lead Halide Perovskite Solar Cells. 2017 , 17, 2028-2033	371
1167	Cesium lead iodide solar cells controlled by annealing temperature. 2017 , 19, 6257-6263	61
1166	Quantitative Phase-Change Thermodynamics and Metastability of Perovskite-Phase Cesium Lead Iodide. 2017 , 8, 1278-1282	152
1165	Lead Halide Perovskites: Challenges and Opportunities in Advanced Synthesis and Spectroscopy. 2017 , 2, 906-914	63
1164	Progress in Tandem Solar Cells Based on Hybrid Organic/Inorganic Perovskites. 2017 , 7, 1602400	101
1163	Low-toxic metal halide perovskites: opportunities and future challenges. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 11436-11449	13 102
1162	Formation of hybrid ABX perovskite compounds for solar cell application: first-principles calculations of effective ionic radii and determination of tolerance factors. 2017 , 46, 3500-3509	89

1161	Improved Charge Collection in Highly Efficient CsPbBr ₂ Solar Cells with Light-Induced Dealloying. 2017 , 2, 1043-1049		87
1160	Air-stable CsPb _{1-x} BixBr ₃ (0 ≤ x << 1) perovskite crystals: optoelectronic and photostriction properties. 2017 , 5, 4931-4939		76
1159	Stable ultra-fast broad-bandwidth photodetectors based on CsPbI ₃ perovskite and NaYF ₄ :Yb,Er quantum dots. 2017 , 9, 6278-6285		84
1158	Efficient Red Perovskite Light-Emitting Diodes Based on Solution-Processed Multiple Quantum Wells. 2017 , 29, 1606600		129
1157	Topological nature in cubic phase of perovskite CsPbI ₃ : By DFT. 2017 , 259, 10-15		27
1156	Perovskite Tandem Solar Cells. 2017 , 7, 1602761		138
1155	Additive engineering for highly efficient organic-inorganic halide perovskite solar cells: recent advances and perspectives. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12602-12652	13	249
1154	Low temperature synthesis of CsPbI ₃ sub-micrometer wires with tailored emission band for flexible X-ray phosphors applications. 2017 , 188, 454-459		6
1153	Cl Pre-Intercalation in the Inorganic Framework for Efficient and Stable FA Cs PbI (Cl) Perovskite Solar Cells. 2017 , 13, 1700484		88
1152	Lasing characteristics of single-crystalline CsPbCl ₃ perovskite microcavities under multiphoton excitation. 2017 , 50, 225101		16
1151	Strong Electron-Phonon Coupling and Self-Trapped Excitons in the Defect Halide Perovskites A ₃ M ₂ I ₉ (A = Cs, Rb; M = Bi, Sb). 2017 , 29, 4129-4145		344
1150	Combinatorial screening of halide perovskite thin films and solar cells by mask-defined IR laser molecular beam epitaxy. 2017 , 18, 307-315		18
1149	Structural Stability, Vibrational Properties, and Photoluminescence in CsSnI ₃ Perovskite upon the Addition of SnF ₂ . 2017 , 56, 84-91		78
1148	Stabilität von Perowskit-Solarzellen: Einfluss der Substitution von A-Kation und X-Anion. 2017 , 129, 1210-1233		24
1147	Ambipolar Triple Cation Perovskite Field Effect Transistors and Inverters. 2017 , 29, 1602940		89
1146	Vacancy dipole interactions and the correlation with monovalent cation dependent ion movement in lead halide perovskite solar cell materials. 2017 , 38, 537-543		28
1145	First-Principles Prediction of a Stable Hexagonal Phase of CH ₃ NH ₃ PbI ₃ . 2017 , 29, 6003-6011		40
1144	Chemical tuning of dynamic cation off-centering in the cubic phases of hybrid tin and lead halide perovskites. 2017 , 8, 5628-5635		69

1143	Inorganic CsPbI ₃ Perovskite-Based Solar Cells: A Choice for a Tandem Device. 2017 , 1, 1700048		199
1142	Fully-Inorganic Trihalide Perovskite Nanocrystals: A New Research Frontier of Optoelectronic Materials. 2017 , 29, 1700775		183
1141	PbCl ₂ -tuned inorganic cubic CsPbBr ₃ (Cl) perovskite solar cells with enhanced electron lifetime, diffusion length and photovoltaic performance. 2017 , 360, 11-20		64
1140	Crystallization Kinetics and Morphology Control of Formamidinium-Cesium Mixed-Cation Lead Mixed-Halide Perovskite via Tunability of the Colloidal Precursor Solution. 2017 , 29, 1607039		197
1139	Investigation of Interfacial Charge Transfer in Solution Processed Cs ₂ SnI ₆ Thin Films. 2017 , 121, 13092-13100		47
1138	Highly efficient and stable low-temperature processed ZnO solar cells with triple cation perovskite absorber. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 13439-13447	13	71
1137	Impact of the Halide Cage on the Electronic Properties of Fully Inorganic Cesium Lead Halide Perovskites. 2017 , 2, 1621-1627		125
1136	Unveiling the Crystal Formation of Cesium Lead Mixed-Halide Perovskites for Efficient and Stable Solar Cells. 2017 , 8, 2936-2940		144
1135	Annealing effects on CsPbI ₃ -based planar heterojunction perovskite solar cells formed by vacuum deposition method. 2017 , 56, 04CS11		27
1134	Rubidium Multication Perovskite with Optimized Bandgap for Perovskite-Silicon Tandem with over 26% Efficiency. 2017 , 7, 1700228		378
1133	Exploring the Photovoltaic Performance of All-Inorganic AgPbI/PbI Blends. 2017 , 8, 1651-1656		22
1132	Polymeric hybrid iodoplumbates and iodobismuthates containing mono- and bisalkylated derivatives of 1,2-bis(4-pyridyl)ethylene: Structural and optical features. 2017 , 462, 323-328		8
1131	Beyond Colloidal Cesium Lead Halide Perovskite Nanocrystals: Analogous Metal Halides and Doping. 2017 , 2, 1089-1098		221
1130	Triple-cation mixed-halide perovskites: towards efficient, annealing-free and air-stable solar cells enabled by Pb(SCN) additive. 2017 , 7, 46193		92
1129	Towards enabling stable lead halide perovskite solar cells; interplay between structural, environmental, and thermal stability. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 11483-11500	13	241
1128	Universal rules for visible-light absorption in hybrid perovskite materials. 2017 , 121, 115501		61
1127	Surface passivation of mixed-halide perovskite CsPb(BrI) nanocrystals by selective etching for improved stability. 2017 , 9, 7391-7396		58
1126	Enhancement of thermal stability for perovskite solar cells through cesium doping. 2017 , 7, 17473-17479		140

1125	Solution processing of air-stable molecular semiconducting iodosalts, Cs ₂ SnI ₆ Br _x , for potential solar cell applications. 2017 , 1, 710-724		123
1124	Mixed cation hybrid lead halide perovskites with enhanced performance and stability. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 11450-11461	13	123
1123	Performance Enhancement of Lead-Free Tin-Based Perovskite Solar Cells with Reducing Atmosphere-Assisted Dispersible Additive. 2017 , 2, 897-903		216
1122	Inorganic cesium lead halide CsPbX ₃ nanowires for long-term stable solar cells. 2017 , 60, 285-294		42
1121	Inorganic Lead Halide Perovskite Single Crystals: Phase-Selective Low-Temperature Growth, Carrier Transport Properties, and Self-Powered Photodetection. 2017 , 5, 1600704		277
1120	Sequential Introduction of Cations Deriving Large-Grain Cs FA Pbl Thin Film for Planar Hybrid Solar Cells: Insight into Phase-Segregation and Thermal-Healing Behavior. 2017 , 13, 1603225		56
1119	Functionality-Directed Screening of Pb-Free Hybrid Organic-Inorganic Perovskites with Desired Intrinsic Photovoltaic Functionalities. 2017 , 29, 524-538		110
1118	Tailoring metal halide perovskites through metal substitution: influence on photovoltaic and material properties. 2017 , 10, 236-246		185
1117	Highly Efficient All-Inorganic Planar Heterojunction Perovskite Solar Cells Produced by Thermal Coevaporation of CsI and Pbl. 2017 , 8, 67-72		214
1116	Dimension engineering on cesium lead iodide for efficient and stable perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 2066-2072	13	157
1115	Vapor-Phase Epitaxial Growth of Aligned Nanowire Networks of Cesium Lead Halide Perovskites (CsPbX, X = Cl, Br, I). 2017 , 17, 460-466		199
1114	Interpretation of inverted photocurrent transients in organic lead halide perovskite solar cells: proof of the field screening by mobile ions and determination of the space charge layer widths. 2017 , 10, 192-204		113
1113	Searching for promising new perovskite-based photovoltaic absorbers: the importance of electronic dimensionality. 2017 , 4, 206-216		406
1112	Photovoltaic mixed-cation lead mixed-halide perovskites: links between crystallinity, photo-stability and electronic properties. 2017 , 10, 361-369		362
1111	Measurement and modelling of dark current decay transients in perovskite solar cells. 2017 , 5, 452-462		51
1110	Investigation of Energy Levels and Crystal Structures of Cesium Lead Halides and Their Application in Full-Color Light-Emitting Diodes. 2017 , 3, 1600448		60
1109	CsPbBr ₃ Solar Cells: Controlled Film Growth through Layer-by-Layer Quantum Dot Deposition. 2017 , 29, 9767-9774		136
1108	Temperature-Dependent Photoluminescence of Cesium Lead Halide Perovskite Quantum Dots: Splitting of the Photoluminescence Peaks of CsPbBr ₃ and CsPb(Br/I) ₃ Quantum Dots at Low Temperature. 2017 , 121, 26054-26062		83

1107	Towards lead-free perovskite photovoltaics and optoelectronics by ab-initio simulations. 2017 , 7, 14025	133
1106	Enhanced mobility CsPbI quantum dot arrays for record-efficiency, high-voltage photovoltaic cells. 2017 , 3, eaao4204	636
1105	Bication lead iodide 2D perovskite component to stabilize inorganic CsPbI_3 perovskite phase for high-efficiency solar cells. 2017 , 3, e1700841	450
1104	Colloidal Synthesis of Air-Stable Alloyed CsSnPbI Perovskite Nanocrystals for Use in Solar Cells. 2017 , 139, 16708-16719	240
1103	Universal Dynamics of Molecular Reorientation in Hybrid Lead Iodide Perovskites. 2017 , 139, 16875-16884	103
1102	Facile hydrothermal synthesis and characterization of cesium-doped PbI ₂ nanostructures for optoelectronic, radiation detection and photocatalytic applications. 2017 , 19, 1	53
1101	First-principles investigations on the mechanical, thermal, electronic, and optical properties of the defect perovskites Cs ₂ SnX ₆ (X = Cl, Br, I). 2017 , 26, 096301	26
1100	Slow-Photon-Effect-Induced Photoelectrical-Conversion Efficiency Enhancement for Carbon-Quantum-Dot-Sensitized Inorganic CsPbBr Inverse Opal Perovskite Solar Cells. 2017 , 29, 1703682	97
1099	High Performance Metal Halide Perovskite Light-Emitting Diode: From Material Design to Device Optimization. 2017 , 13, 1701770	167
1098	Slow hot carrier cooling in cesium lead iodide perovskites. 2017 , 111, 153903	44
1097	Unveiling the Influence of pH on the Crystallization of Hybrid Perovskites, Delivering Low Voltage Loss Photovoltaics. 2017 , 1, 328-343	104
1096	ABX ₃ Perovskites for Tandem Solar Cells. 2017 , 1, 769-793	125
1095	The Effect of Stoichiometry on the Stability of Inorganic Cesium Lead Mixed-Halide Perovskites Solar Cells. 2017 , 121, 19642-19649	83
1094	Precise Composition Tailoring of Mixed-Cation Hybrid Perovskites for Efficient Solar Cells by Mixture Design Methods. 2017 , 11, 8804-8813	44
1093	Novel rubidium lead chloride nanocrystals: synthesis and characterization. 2017 , 1, 021002	8
1092	A review on low dimensional metal halides: Vapor phase epitaxy and physical properties. 2017 , 32, 3992-4024	14
1091	All-Inorganic Halide Perovskites for Optoelectronics: Progress and Prospects. 2017 , 1, 1700086	134
1090	Impact of Rubidium and Cesium Cations on the Moisture Stability of Multiple-Cation Mixed-Halide Perovskites. 2017 , 2, 2212-2218	130

1089	Bismuth Incorporation Stabilized CsPbI_3 for Fully Inorganic Perovskite Solar Cells. 2017 , 2, 2219-2227		368
1088	CO Plasma-Treated TiO Film as an Effective Electron Transport Layer for High-Performance Planar Perovskite Solar Cells. 2017 , 9, 33989-33996		30
1087	Robust Cesium Lead Halide Perovskite Microcubes for Frequency Upconversion Lasing. 2017 , 5, 1700419		53
1086	Azetidinium lead iodide for perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 20658-20665	13	37
1085	Ultra-thin MoOx as cathode buffer layer for the improvement of all-inorganic CsPbI ₂ Br ₂ perovskite solar cells. 2017 , 41, 75-83		153
1084	Highly Luminescent Phase-Stable CsPbI Perovskite Quantum Dots Achieving Near 100% Absolute Photoluminescence Quantum Yield. 2017 , 11, 10373-10383		556
1083	Engineering interface structures between lead halide perovskite and copper phthalocyanine for efficient and stable perovskite solar cells. 2017 , 10, 2109-2116		147
1082	CsPbSnI ₃ Based All-Inorganic Perovskite Solar Cells with Exceptional Efficiency and Stability. 2017 , 139, 14009-14012		353
1081	Materials chemistry approaches to the control of the optical features of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 20561-20578	13	27
1080	Slow Electron-Hole Recombination in Lead Iodide Perovskites Does Not Require a Molecular Dipole. 2017 , 2, 2239-2244		65
1079	Selective Stabilization and Photophysical Properties of Metastable Perovskite Polymorphs of CsPbI ₃ in Thin Films. 2017 , 29, 8385-8394		144
1078	Enhanced efficiency and environmental stability of planar perovskite solar cells by suppressing photocatalytic decomposition. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 17368-17378	13	58
1077	Enhanced Moisture Stability of Cesium-Containing Compositional Perovskites by a Feasible Interfacial Engineering. 2017 , 4, 1700598		49
1076	A Hybrid Perovskite Solar Cell Modified With Copper Indium Sulfide Nanocrystals to Enhance Hole Transport and Moisture Stability. 2017 , 1, 1700078		16
1075	Solution synthesis and phase control of inorganic perovskites for high-performance optoelectronic devices. 2017 , 9, 11841-11845		55
1074	TiO ₂ /RbPbI ₃ halide perovskite solar cells. 2017 , 172, 44-54		32
1073	All Inorganic Cesium Lead Iodide Perovskite Nanowires with Stabilized Cubic Phase at Room Temperature and Nanowire Array-Based Photodetectors. 2017 , 17, 4951-4957		169
1072	A-Site Cation Effect on Growth Thermodynamics and Photoconductive Properties in Ultrapure Lead Iodine Perovskite Monocrystalline Wires. 2017 , 9, 25985-25994		9

1071	High-Temperature Ionic Epitaxy of Halide Perovskite Thin Film and the Hidden Carrier Dynamics. 2017 , 29, 1702643	56
1070	Phase Segregation Enhanced Ion Movement in Efficient Inorganic CsPbI ₂ Br ₂ Solar Cells. 2017 , 7, 1700946	253
1069	Vapour-Deposited Cesium Lead Iodide Perovskites: Microsecond Charge Carrier Lifetimes and Enhanced Photovoltaic Performance. 2017 , 2, 1901-1908	104
1068	Memristive property's effects on the I-V characteristics of perovskite solar cells. 2017 , 7, 6025	6
1067	Hole Transfer in Dye-Sensitized Cesium Lead Halide Perovskite Photovoltaics: Effect of Interfacial Bonding. 2017 , 121, 20113-20125	11
1066	Lead Halide Perovskite Nanocrystals in the Research Spotlight: Stability and Defect Tolerance. 2017 , 2, 2071-2083	656
1065	Photoelectrochemical Solar Cells with Semiconductor Nanoparticles and Liquid Electrolytes: a Review. 2017 , 53, 145-179	5
1064	Behavior of Methylammonium Dipoles in MAPbX (X = Br and I). 2017 , 8, 4113-4121	76
1063	Shallow trapping vs. deep polarons in a hybrid lead halide perovskite, CH ₃ NH ₃ PbI ₃ . 2017 , 19, 27184-27190	15
1062	Light-Independent Ionic Transport in Inorganic Perovskite and Ultrastable Cs-Based Perovskite Solar Cells. 2017 , 8, 4122-4128	186
1061	Globularity-Selected Large Molecules for a New Generation of Multication Perovskites. 2017 , 29, 1702005	67
1060	Processing Solvent-Dependent Electronic and Structural Properties of Cesium Lead Triiodide Thin Films. 2017 , 8, 4172-4176	22
1059	Improved Reproducibility and Intercalation Control of Efficient Planar Inorganic Perovskite Solar Cells by Simple Alternate Vacuum Deposition of PbI ₂ and CsI. 2017 , 2, 4464-4469	37
1058	Zero-dimensional methylammonium iodo bismuthate solar cells and synergistic interactions with silicon nanocrystals. 2017 , 9, 18759-18771	17
1057	Fabrication of CsFAPbI ₃ Mixed-Cation Perovskites via Gas-Phase-Assisted Compositional Modulation for Efficient and Stable Photovoltaic Devices. 2017 , 9, 42708-42716	36
1056	Enhancing moisture-tolerance and photovoltaic performances of FAPbI ₃ by bismuth incorporation. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 25258-25265	13 37
1055	Capturing the Sun: A Review of the Challenges and Perspectives of Perovskite Solar Cells. 2017 , 7, 1700264	235
1054	Interplay between Iodide and Tin Vacancies in CsSnI ₃ Perovskite Solar Cells. 2017 , 121, 16447-16453	49

1053	Spatially-resolved nanoscale measurements of grain boundary enhanced photocurrent in inorganic CsPbBr ₃ perovskite films. 2017 , 171, 205-212	32
1052	Progress on Perovskite Materials and Solar Cells with Mixed Cations and Halide Anions. 2017 , 9, 30197-30246	339
1051	A high-performance photodetector based on an inorganic perovskite/ZnO heterostructure. 2017 , 5, 6115-6122	79
1050	Chemical vapor deposition growth of single-crystalline cesium lead halide microplatelets and heterostructures for optoelectronic applications. 2017 , 10, 1223-1233	75
1049	Chemical Approaches to Addressing the Instability and Toxicity of Lead-Halide Perovskite Absorbers. 2017 , 56, 46-55	186
1048	Direct-indirect character of the bandgap in methylammonium lead iodide perovskite. 2017 , 16, 115-120	298
1047	Beyond methylammonium lead iodide: prospects for the emergent field of ns containing solar absorbers. 2016 , 53, 20-44	280
1046	Stability of Perovskite Solar Cells: A Prospective on the Substitution of the A Cation and X Anion. 2017 , 56, 1190-1212	376
1045	Stabilizing the cubic perovskite phase of CsPbI nanocrystals by using an alkyl phosphinic acid. 2016 , 53, 232-235	194
1044	Main-Group Halide Semiconductors Derived from Perovskite: Distinguishing Chemical, Structural, and Electronic Aspects. 2017 , 56, 11-25	36
1043	Room temperature preparation of β -phase CsSn _{1-x} Pb _x I ₃ films for hole-transport in solid-state dye-sensitized solar cells. 2018 , 29, 7811-7819	
1042	Fast anion-exchange from CsPbI ₃ to CsPbBr ₃ via Br ₂ -vapor-assisted deposition for air-stable all-inorganic perovskite solar cells. 2018 , 343, 146-154	62
1041	All-Inorganic CsPbI ₃ Perovskite Solar Cells with High Efficiency Exceeding 13. 2018 , 140, 3825-3828	401
1040	Mixed halide hybrid perovskites: a paradigm shift in photovoltaics. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 5507-5537	13 80
1039	Enhanced performance via partial lead replacement with calcium for a CsPbI ₃ perovskite solar cell exceeding 13% power conversion efficiency. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 5580-5586	13 162
1038	Perovskite seeding growth of formamidinium-lead-iodide-based perovskites for efficient and stable solar cells. 2018 , 9, 1607	218
1037	The synergistic effect of non-stoichiometry and Sb-doping on air-stable β -CsPbI ₃ for efficient carbon-based perovskite solar cells. 2018 , 10, 9996-10004	112
1036	Low Temperature Solution-Processable Cesium Lead Bromide Microcrystals for Light Conversion. 2018 , 18, 3161-3166	10

1035	Electronic implications of organic nitrogen lone pairs in lead iodide perovskites. 2018 , 6, 4765-4768	1
1034	Colorful, bandgap-tunable, and air-stable CsPb(I _x Br _{1-x}) ₃ inorganic perovskite films via a novel sequential chemical vapor deposition. 2018 , 44, 12783-12788	21
1033	Reduced Efficiency Roll-Off and Enhanced Stability in Perovskite Light-Emitting Diodes with Multiple Quantum Wells. 2018 , 9, 2038-2042	45
1032	Lead Halide Perovskites in Thin Film Photovoltaics: Background and Perspectives. 2018 , 91, 1058-1068	73
1031	Innovatively Continuous Mass Production Couette-taylor Flow: Pure Inorganic Green-Emitting CsPbBr Perovskite Microcrystal for display technology. 2018 , 8, 2009	21
1030	Electronic Properties of Cs-Based Halide Perovskites: An Ab Initio Study. 2018 , 215, 1700941	4
1029	Low-dimensional halide perovskites: review and issues. 2018 , 6, 2189-2209	113
1028	Inorganic Perovskite Solar Cells: A Rapidly Growing Field. 2018 , 2, 1700188	154
1027	Stability and Performance of CsPbI ₃ Thin Films and Solar Cell Devices. 2018 , 10, 3750-3760	95
1026	Ultrafast selective extraction of hot holes from cesium lead iodide perovskite films. 2018 , 27, 1170-1174	12
1025	Influence of chromium hyperdoping on the electronic structure of CH ₃ NH ₃ PbI ₃ perovskite: a first-principles insight. 2018 , 8, 2511	13
1024	All-Inorganic CsPbI ₃ Perovskite Phase-Stabilized by Poly(ethylene oxide) for Red-Light-Emitting Diodes. 2018 , 28, 1706401	127
1023	Progress in perovskite solar cells based on ZnO nanostructures. 2018 , 163, 289-306	66
1022	Amide-Catalyzed Phase-Selective Crystallization Reduces Defect Density in Wide-Bandgap Perovskites. 2018 , 30, e1706275	62
1021	Thermochromic halide perovskite solar cells. 2018 , 17, 261-267	436
1020	3D/2D Interface Profiling for Record Efficiency All-Inorganic CsPbBr ₂ Perovskite Solar Cells with Superior Stability. 2018 , 8, 1703246	256
1019	Intrinsic Point Defects in Inorganic Cesium Lead Iodide Perovskite CsPbI ₃ . 2018 , 122, 1345-1350	101
1018	Shape- and Trap-Controlled Nanocrystals for Giant-Performance Improvement of All-Inorganic Perovskite Photodetectors. 2018 , 35, 1700363	23

1017	Photovoltaic Performance of Vapor-Assisted Solution-Processed Layer Polymorph of CsSbI. 2018 , 10, 2566-2573		84
1016	Air-Stable Cesium Lead Iodide Perovskite for Ultra-Low Operating Voltage Resistive Switching. 2018 , 28, 1705783		130
1015	A Facile Low Temperature Fabrication of High Performance CsPbI ₂ Br All-Inorganic Perovskite Solar Cells. 2018 , 2, 1700180		124
1014	Recent advances of flexible perovskite solar cells. 2018 , 27, 673-689		54
1013	Polymer-Passivated Inorganic Cesium Lead Mixed-Halide Perovskites for Stable and Efficient Solar Cells with High Open-Circuit Voltage over 1.3 V. 2018 , 30, 1705393		328
1012	Can B-Site Doping or Alloying Improve Thermal- and Phase-Stability of All-Inorganic CsPbX ₃ (X = Cl, Br, I) Perovskites?. 2018 , 3, 286-289		277
1011	□-Graphene Crosslinked CsPbI ₃ Quantum Dots for High Efficiency Solar Cells with Much Improved Stability. 2018 , 8, 1800007		167
1010	Reflectivity Effects on Pump-Probe Spectra of Lead Halide Perovskites: Comparing Thin Films versus Nanocrystals. 2018 , 12, 5719-5725		25
1009	Pressure Response of Photoluminescence in Cesium Lead Iodide Perovskite Nanocrystals. 2018 , 122, 11024-11030		29
1008	Metal replacement in perovskite solar cell materials: chemical bonding effects and optoelectronic properties. 2018 , 2, 1430-1445		57
1007	The effect of oxygen on the efficiency of planar p-i-n metal halide perovskite solar cells with a PEDOT:PSS hole transport layer. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 6882-6890	13	25
1006	Highly Efficient Spectrally Stable Red Perovskite Light-Emitting Diodes. 2018 , 30, e1707093		142
1005	Atomic and Electronic Structure of Two-Dimensional Inorganic Halide Perovskites A _{n+1} M _n X _{3n+1} (n = 1̄, A = Cs, M = Pb and Sn, and X = Cl, Br, and I) from ab Initio Calculations. 2018 , 122, 7464-7473		19
1004	Computational Study of Structural and Electronic Properties of Lead-Free CsMI ₃ Perovskites (M = Ge, Sn, Pb, Mg, Ca, Sr, and Ba). 2018 , 122, 7838-7848		45
1003	Solvent engineering for efficient inverted perovskite solar cells based on inorganic CsPbI ₂ Br light absorber. 2018 , 8, 125-133		95
1002	Efficient Bifacial Semitransparent Perovskite Solar Cells Using Ag/VO as Transparent Anodes. 2018 , 10, 12731-12739		39
1001	The study of colloidal lead bromide perovskite nanocrystals and its application in hybrid solar cells. 2018 , 8, 715-721		1
1000	Inkjet printable-photoactive all inorganic perovskite films with long effective photocarrier lifetimes. 2018 , 30, 18LT02		11

999	Halide Composition Controls Electron-Hole Recombination in Cesium-Lead Halide Perovskite Quantum Dots: A Time Domain Ab Initio Study. 2018 , 9, 1872-1879	87
998	Anharmonicity and Disorder in the Black Phases of Cesium Lead Iodide Used for Stable Inorganic Perovskite Solar Cells. 2018 , 12, 3477-3486	359
997	Perovskite Solar Absorbers: Materials by Design. 2018 , 2, 1700316	78
996	Surface passivation engineering strategy to fully-inorganic cubic CsPbI perovskites for high-performance solar cells. 2018 , 9, 1076	391
995	Tunable cathodoluminescence over the entire visible window from all-inorganic perovskite CsPbX ₃ 1D architecture. 2018 , 6, 3322-3333	45
994	Tailored dimensionality to regulate the phase stability of inorganic cesium lead iodide perovskites. 2018 , 10, 6318-6322	84
993	Enhanced stabilization of inorganic cesium lead triiodide (CsPbI ₃) perovskite quantum dots with tri-octylphosphine. 2018 , 11, 762-768	74
992	Role of organic cations on hybrid halide perovskite CH ₃ NH ₃ PbI ₃ surfaces. 2018 , 258, 488-494	9
991	Exploring the Stability of Novel Wide Bandgap Perovskites by a Robot Based High Throughput Approach. 2018 , 8, 1701543	55
990	Facile synthesis of thermally stable CsPbBr ₃ perovskite quantum dot-inorganic SiO ₂ composites and their application to white light-emitting diodes with wide color gamut. 2018 , 149, 246-252	66
989	Carrier dynamics in CsPbI ₃ perovskite microcrystals synthesized in solution phase. 2018 , 29, 699-702	5
988	All-Inorganic Metal Halide Perovskite Nanostructures: From Photophysics to Light-Emitting Applications. 2018 , 2, 1700252	66
987	Preparation of mixed-ion and inorganic perovskite films using water and isopropanol as solvents for solar cell applications. 2018 , 2, 606-615	23
986	The Degradation and Blinking of Single CsPbI ₃ Perovskite Quantum Dots. 2018 , 122, 13407-13415	76
985	First principles investigation on pressure induced phase transition and photocatalytic properties in RbPbCl ₃ . 2018 , 143, 403-410	5
984	The influence of perovskite layer and hole transport material on the temperature stability about perovskite solar cells. 2018 , 159, 914-919	27
983	Revealing the Chemistry between Band Gap and Binding Energy for Lead-/Tin-Based Trihalide Perovskite Solar Cell Semiconductors. 2018 , 11, 449-463	22
982	The thermal stability and consolidation of perovskite variant Cs ₂ SnCl ₆ using spark plasma sintering. 2018 , 101, 2060-2065	12

981	Cation engineering on lead iodide perovskites for stable and high-performance photovoltaic applications. 2018 , 27, 1017-1039		27
980	Lead-Free Hybrid Perovskite Absorbers for Viable Application: Can We Eat the Cake and Have It too?. 2018 , 5, 1700331		171
979	Pressure-induced phase transformation of CsPbI ₃ by X-ray diffraction and Raman spectroscopy. 2018 , 91, 38-47		42
978	Highly efficient wide-color-gamut QD-emissive LCDs using red and green perovskite core/shell QDs. 2018 , 6, 13023-13033		43
977	Low-temperature-processed inorganic perovskite solar cells via solvent engineering with enhanced mass transport. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 23602-23609	13	49
976	The role of interface between electron transport layer and perovskite in halogen migration and stabilizing perovskite solar cells with Cs ₄ SnO ₄ . <i>Journal of Materials Chemistry A</i> , 2018 , 6, 23797-23804	13	13
975	Myths and reality of HPbI in halide perovskite solar cells. 2018 , 9, 4785		159
974	Polymer-Assisted In Situ Growth of All-Inorganic Perovskite Nanocrystal Film for Efficient and Stable Pure-Red Light-Emitting Devices. 2018 , 10, 42564-42572		62
973	Perovskite Solar Cells: Promises and Challenges. 2018 , 261-356		1
972	Major Impediment to Highly Efficient, Stable and Low-Cost Perovskite Solar Cells. 2018 , 8, 964		18
971	The Impact of Nano- and Microstructure on the Stability of Perovskite Solar Cells. 2018 , 14, e1802573		33
970	Stable, Efficient Red Perovskite Light-Emitting Diodes by (□)CsPbI ₃ Phase Engineering. 2018 , 28, 1804285		78
969	Study on charge transfer mechanism and dielectric relaxation of cesium lead bromide (CsPbBr ₃). 2018 , 124, 124102		19
968	Highly efficient flexible solar cells based on a room-temperature processed inorganic perovskite. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20365-20373	13	27
967	Efficient and Stable Inorganic Perovskite Solar Cells Manufactured by Pulsed Flash Infrared Annealing. 2018 , 8, 1802060		78
966	Bifunctional Stabilization of All-Inorganic ECsPbI Perovskite for 17% Efficiency Photovoltaics. 2018 , 140, 12345-12348		434
965	Effect of metal doping on the visible light absorption, electronic structure and mechanical properties of non-toxic metal halide CsGeCl ₂ . 2018 , 8, 33010-33018		32
964	Perovskite Quantum Dot Photovoltaic Materials beyond the Reach of Thin Films: Full-Range Tuning of A-Site Cation Composition. 2018 , 12, 10327-10337		110

963	Effects of Hydroiodic Acid Concentration on the Properties of CsPbI Perovskite Solar Cells. 2018 , 3, 11937-11944		
962	All-Inorganic Perovskite Nanocrystals with a Stellar Set of Stabilities and Their Use in White Light-Emitting Diodes. 2018 , 10, 37267-37276		59
961	General Synthesis Principles for Ruddlesden-Popper Hybrid Perovskite Halides from a Dynamic Equilibrium. 2018 , 30, 8606-8614		25
960	Synergy of Hydrophobic Surface Capping and Lattice Contraction for Stable and High-Efficiency Inorganic CsPbI ₂ Br Perovskite Solar Cells. 2018 , 2, 1800216		53
959	CsBr-Induced Stable CsPbI ₃ (x) 2018 , 10, 38183-38192		53
958	Iodine-Optimized Interface for Inorganic CsPbI ₃ Perovskite Solar Cell to Attain High Stabilized Efficiency Exceeding 14. 2018 , 5, 1801123		76
957	All-inorganic cesium lead iodide perovskite solar cells with stabilized efficiency beyond 15. 2018 , 9, 4544		296
956	Phase stabilization of all-inorganic perovskite materials for photovoltaics. 2018 , 11, 141-145		3
955	Enhancing Stability and Photostability of CsPbI ₃ by Reducing Its Dimensionality. 2018 , 30, 8017-8024		46
954	Intermolecular Exchange Boosts Efficiency of Air-Stable, Carbon-Based All-Inorganic Planar CsPbI ₂ Br Perovskite Solar Cells to Over 9%. 2018 , 8, 1802080		173
953	Stabilization of δ -CsPbI ₃ in Ambient Room Temperature Conditions by Incorporating Eu into CsPbI ₃ . 2018 , 30, 6668-6674		143
952	All-Perovskite Emission Architecture for White Light-Emitting Diodes. 2018 , 12, 10486-10492		61
951	Building bridges between halide perovskite nanocrystals and thin-film solar cells. 2018 , 2, 2381-2397		31
950	A first-principles study on the chemical stability of inorganic perovskite solid solutions Cs _{1-x} Rb _x PbI ₃ at finite temperature and pressure. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 17994-18002 ¹³		35
949	Tolerance factors of hybrid organic-inorganic perovskites: recent improvements and current state of research. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 21785-21793	13	40
948	Surface Ligand Management for Stable FAPbI ₃ Perovskite Quantum Dot Solar Cells. 2018 , 2, 1866-1878		114
947	Triple cation additive NH ₃ +C ₂ H ₄ NH ₂ +C ₂ H ₄ NH ₃ ⁺ -induced phase-stable inorganic δ -CsPbI ₃ perovskite films for use in solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18258-18266	13	55
946	Flexible Linearly Polarized Photodetectors Based on All-Inorganic Perovskite CsPbI ₃ Nanowires. 2018 , 6, 1800679		53

945	Trap state passivation and photoactivation in wide band gap inorganic perovskite semiconductors. 2018 , 20, 25476-25481		11
944	Rich Chemistry in Inorganic Halide Perovskite Nanostructures. 2018 , 30, e1802856		81
943	First-principles study on the material properties of the inorganic perovskite $Rb_{1-x}Cs_xPbI_3$ for solar cell applications. 2018 , 98,		35
942	Room Temperature Processing of Inorganic Perovskite Films to Enable Flexible Solar Cells. 2018 , 6, 272-279		29
941	Caesium for Perovskite Solar Cells: An Overview. 2018 , 24, 12183-12205		100
940	Phase Behavior and Polymorphism of Formamidinium Lead Iodide. 2018 , 30, 3768-3778		67
939	Size-tunable CsPbBr perovskite ring arrays for lasing. 2018 , 10, 10383-10388		17
938	Reduced-Dimensional δ -CsPbX ₃ Perovskites for Efficient and Stable Photovoltaics. 2018 , 2, 1356-1368		255
937	All-Inorganic Perovskite Nanocrystals: Microscopy Insights in Structure and Optical Properties. 2018 , 6, 1800289		19
936	Fabrication of planar heterojunction CsPbBr ₂ I perovskite solar cells using ZnO as an electron transport layer and improved solar energy conversion efficiency. 2018 , 42, 14104-14110		38
935	Interface engineering using a perovskite derivative phase for efficient and stable CsPbBr ₃ solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 14255-14261	13	93
934	Role of Additives on the Performance of CsPbI ₃ Solar Cells. 2018 , 122, 15903-15910		18
933	Interface Engineering for All-Inorganic CsPbI ₃ Br Perovskite Solar Cells with Efficiency over 14. 2018 , 30, e1802509		269
932	Reset Voltage-Dependent Multilevel Resistive Switching Behavior in CsPbBi I Perovskite-Based Memory Device. 2018 , 10, 24620-24626		51
931	Cubic or Orthorhombic? Revealing the Crystal Structure of Metastable Black-Phase CsPbI ₃ by Theory and Experiment. 2018 , 3, 1787-1794		292
930	All-Inorganic CsPb _{1-x} GexI ₂ Br Perovskite with Enhanced Phase Stability and Photovoltaic Performance. 2018 , 130, 12927-12931		17
929	Tetrahedrite (Cu ₁₂ Sb ₄ S ₁₃) Ternary Inorganic Hole Conductor for Ambient Processed Stable Perovskite Solar Cells. 2018 , 1, 4227-4234		14
928	Recent advances toward practical use of halide perovskite nanocrystals. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 21729-21746	13	62

927	Crystal Phases and Thermal Stability of Co-evaporated CsPbX (X = I, Br) Thin Films. 2018 , 9, 4808-4813	76
926	Efficient planar CsPbBr ₃ perovskite solar cells by dual-source vacuum evaporation. 2018 , 187, 1-8	107
925	First-Principles Investigation on the Electronic and Mechanical Properties of Cs-Doped CH _{3NH₃PbI₃ 2018, 11,}	15
924	Modelling Hysteresis in Perovskite Solar Cells. 2018 , 267-278	
923	All-Inorganic CsPb Ge I Br Perovskite with Enhanced Phase Stability and Photovoltaic Performance. 2018 , 57, 12745-12749	127
922	Progress in tailoring perovskite based solar cells through compositional engineering: Materials properties, photovoltaic performance and critical issues. 2018 , 9, 440-486	40
921	Analysing the Prospects of Perovskite Solar Cells within the Purview of Recent Scientific Advancements. 2018 , 8, 242	9
920	Efficient CsPbI ₃ Photovoltaics with Surface Terminated Organic Cations. 2018 , 2, 2065-2075	210
919	Highly Air-Stable Carbon-Based CsPbI ₃ Perovskite Solar Cells with a Broadened Optical Spectrum. 2018 , 3, 1824-1831	183
918	The Impact of Hybrid Compositional Film/Structure on Organic-Inorganic Perovskite Solar Cells. 2018 , 8,	20
917	In Situ Grain Boundary Functionalization for Stable and Efficient Inorganic CsPbI ₂ Br Perovskite Solar Cells. 2018 , 8, 1801050	149
916	Correlating nano black spots and optical stability in mixed halide perovskite quantum dots. 2018 , 6, 7803-7813	15
915	Lead free halide perovskite Cs ₃ Bi ₂ I ₉ bulk crystals grown by a low temperature solution method. 2018 , 20, 4935-4941	34
914	A Green Anti-Solvent Process for High Performance Carbon-Based CsPbI ₂ Br All-Inorganic Perovskite Solar Cell. 2018 , 2, 1800139	98
913	Inorganic CsPb _{1-x} Sn _x IBr ₂ for Efficient Wide-Bandgap Perovskite Solar Cells. 2018 , 8, 1800525	154
912	Toward charge extraction in all-inorganic perovskite solar cells by interfacial engineering. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 21999-22004	13 54
911	Phase-Stable CsPbI Nanocrystals: The Reaction Temperature Matters. 2018 , 57, 9083-9087	112
910	Dependence of halide composition on the stability of highly efficient all-inorganic cesium lead halide perovskite quantum dot solar cells. 2018 , 185, 28-35	62

909	Highly Stable All-Inorganic Perovskite Solar Cells Processed at Low Temperature. 2018 , 2, 1800075		58
908	Exploration of Near-Infrared-Emissive Colloidal Multinary Lead Halide Perovskite Nanocrystals Using an Automated Microfluidic Platform. 2018 , 12, 5504-5517		99
907	Graded Bandgap CsPbI ₂ +Br _{1-x} Perovskite Solar Cells with a Stabilized Efficiency of 14.4%. 2018 , 2, 1500-1510	249	
906	Dynamic symmetry breaking and spin splitting in metal halide perovskites. 2018 , 98,		38
905	Impact of cesium on the phase and device stability of triple cation Pb ₃ double halide perovskite films and solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 17426-17436	13	22
904	Studying the Effect of MoO ₃ in Hole-Conductor-Free Perovskite Solar Cells. 2018 , 3, 2240-2245		24
903	Thermodynamically Stable Orthorhombic δ -CsPbI ₃ Thin Films for High-Performance Photovoltaics. 2018 , 140, 11716-11725		206
902	Lattice Dynamics and Thermal Stability of Cubic-Phase CsPbI ₃ Quantum Dots. 2018 , 9, 4915-4920		25
901	Temperature-assisted crystallization for inorganic CsPbI ₂ Br perovskite solar cells to attain high stabilized efficiency 14.81%. 2018 , 52, 408-415		148
900	Surface Trap States Passivation for High-Performance Inorganic Perovskite Solar Cells. 2018 , 2, 1800188		86
899	Phase-Stable CsPbI ₃ Nanocrystals: The Reaction Temperature Matters. 2018 , 130, 9221-9225		13
898	Solvent-controlled growth of inorganic perovskite films in dry environment for efficient and stable solar cells. 2018 , 9, 2225		427
897	High-Bandgap Perovskite Materials for Multijunction Solar Cells. 2018 , 2, 1421-1436		133
896	A fluorine-modulated bulk-phase heterojunction and tolerance factor for enhanced performance and structure stability of cesium lead halide perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 13263-13270	13	45
895	Highly efficient solar cells based on Cl incorporated tri-cation perovskite materials. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 13725-13734	13	37
894	High-Voltage-Efficiency Inorganic Perovskite Solar Cells in a Wide Solution-Processing Window. 2018 , 9, 3646-3653		54
893	Biexciton Generation and Dissociation Dynamics in Formamidinium- and Chloride-Doped Cesium Lead Iodide Perovskite Nanocrystals. 2018 , 9, 3673-3679		25
892	Methodologies toward Efficient and Stable Cesium Lead Halide Perovskite-Based Solar Cells. 2018 , 5, 1800509		38

891	Tailored CsPbX ₃ Nanorods for Electron-Emission Nanodevices. 2019 , 2, 5942-5951	14
890	Nature of the excited state in lead iodide perovskite materials: Time-dependent charge density response and the role of the monovalent cation. 2019 , 100,	7
889	Thermodynamically stabilized δ CsPbI ₃ -based perovskite solar cells with efficiencies >18. 2019 , 365, 591-595	644
888	Structured crystallization for efficient all-inorganic perovskite solar cells with high phase stability. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20390-20397	13 19
887	Effect of Surface Ligand on Charge Separation and Recombination at CsPbI ₃ Perovskite Quantum Dot/TiO ₂ Interfaces. 2019 , 123, 21415-21421	12
886	Controllable synthesis of CsPbI ₃ nanorods with tunable photoluminescence emission.. 2019 , 9, 24928-24934	8
885	CsPb(I Br) _{1-x} solar cells. 2019 , 64, 1532-1539	92
884	Space-Confined Growth of Individual Wide Bandgap Single Crystal CsPbCl ₃ Microplatelet for Near-Ultraviolet Photodetection. 2019 , 15, e1902618	41
883	Single-phase alkylammonium cesium lead iodide quasi-2D perovskites for color-tunable and spectrum-stable red LEDs. 2019 , 11, 16907-16918	14
882	Fabrication of Efficient and Stable CsPbI ₃ Perovskite Solar Cells through Cation Exchange Process. 2019 , 9, 1901685	67
881	Efficient Semitransparent CsPbI ₃ Quantum Dots Photovoltaics Using a Graphene Electrode. 2019 , 3, 1900449	35
880	Stabilization of all-inorganic δ CsPbI ₃ perovskite by Bi or Sb doping. 2019 , 6, 105529	4
879	A strategy for improving the performance of perovskite red light-emitting diodes by controlling the growth of perovskite crystal. 2019 , 7, 11887-11895	6
878	Two-step growth of CsPbI _{3-x} Br _x films employing dynamic CsBr treatment: toward all-inorganic perovskite photovoltaics with enhanced stability. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 18488-18498 ¹³	32
877	Metal Cations in Efficient Perovskite Solar Cells: Progress and Perspective. 2019 , 31, e1902037	48
876	Searching for stability at lower dimensions: current trends and future prospects of layered perovskite solar cells. 2019 , 12, 2860-2889	76
875	The effect of the magnitude and direction of the dipoles of organic cations on the electronic structure of hybrid halide perovskites. 2019 , 21, 16564-16572	10
874	Rational Core-shell Design of Open Air Low Temperature In Situ Processable CsPbI ₃ Quasi-Nanocrystals for Stabilized p-i-n Solar Cells. 2019 , 9, 1901787	41

873	High Efficiency (16.37%) of Cesium Bromide Passivated All-Inorganic CsPbI ₂ Br Perovskite Solar Cells. 2019 , 3, 1900254	68
872	Kinetically Stable Single Crystals of Perovskite-Phase CsPbI ₃ . 2019 , 141, 11435-11439	86
871	Thermal unequilibrium of strained black CsPbI ₃ thin films. 2019 , 365, 679-684	272
870	Quantum Dot Based Solar Cells: Role of Nanoarchitectures, Perovskite Quantum Dots, and Charge-Transporting Layers. 2019 , 12, 4724-4753	17
869	Ascorbic Acid-Assisted Stabilization of β -Phase CsPbI ₃ Perovskite for Efficient and Stable Photovoltaic Devices. 2019 , 3, 1900287	17
868	Enhanced efficiency and stability of perovskite solar cells by partial replacement of CH ₃ NH ₃ ⁺ with inorganic Cs ⁺ in CH ₃ NH ₃ PbI ₃ perovskite absorber layer. 2019 , 572, 1-11	8
867	Sm ³⁺ -doped CsPbBr ₃ NCs glass: A luminescent material for potential use in lighting engineering. 2019 , 45, 22688-22693	12
866	Tuning electronic and optical properties of CsPbI ₃ by applying strain: A first-principles theoretical study. 2019 , 732, 136642	21
865	Water-stable all-inorganic CsPb _{1-x} Sn _x Br ₂ I perovskite quantum dots encapsulated in paraffin for white light-emitting diodes. 2019 , 806, 1022-1028	9
864	Cesium Lead Mixed-Halide Perovskites for Low-Energy Loss Solar Cells with Efficiency Beyond 17%. 2019 , 31, 6231-6238	50
863	Optimisation of annealing temperature for low temperature processed inverted structure Caesium Formamidinium Lead Triiodide perovskite solar cells. 2019 , 102, 104580	15
862	Inorganic CsPbI ₃ Perovskites toward High-Efficiency Photovoltaics. 2019 , 2, 73-78	27
861	Interfacial TiO ₂ atomic layer deposition triggers simultaneous crystallization control and band alignment for efficient CsPbI ₂ Br ₂ perovskite solar cell. 2019 , 74, 103-109	21
860	Inverted All-Inorganic CsPbI ₂ Br Perovskite Solar Cells with Promoted Efficiency and Stability by Nickel Incorporation. 2019 , 31, 9032-9039	54
859	Review on Recent Progress of All-Inorganic Metal Halide Perovskites and Solar Cells. 2019 , 31, e1902851	191
858	A 0D/3D Heterostructured All-Inorganic Halide Perovskite Solar Cell with High Performance and Enhanced Phase Stability. 2019 , 31, e1904735	77
857	Cesium Lead Inorganic Solar Cell with Efficiency beyond 18% via Reduced Charge Recombination. 2019 , 31, e1905143	138
856	Ruddlesden-Popper 2D Component to Stabilize β -CsPbI ₃ Perovskite Phase for Stable and Efficient Photovoltaics. 2019 , 9, 1902529	74

855	The Role of Dimethylammonium Iodide in CsPbI Perovskite Fabrication: Additive or Dopant?. 2019 , 58, 16691-16696	264
854	Europium and Acetate Co-doping Strategy for Developing Stable and Efficient CsPbI Br Perovskite Solar Cells. 2019 , 15, e1904387	61
853	Dopant-Free Squaraine-Based Polymeric Hole-Transporting Materials with Comprehensive Passivation Effects for Efficient All-Inorganic Perovskite Solar Cells. 2019 , 131, 17888-17894	10
852	The Role of Dimethylammonium Iodide in CsPbI ₃ Perovskite Fabrication: Additive or Dopant?. 2019 , 131, 16844-16849	32
851	Nanostructured Perovskite Solar Cells. 2019 , 9,	9
850	Organic salt mediated growth of phase pure and stable all-inorganic CsPbX ₃ (X = I, Br) perovskites for efficient photovoltaics. 2019 , 64, 1773-1779	29
849	Core-Shell ZnO@SnO Nanoparticles for Efficient Inorganic Perovskite Solar Cells. 2019 , 141, 17610-17616	69
848	Managing Energy Loss in Inorganic Lead Halide Perovskites Solar Cells. 2019 , 6, 1901136	11
847	A Tailored Nickel Oxide Hole-Transporting Layer to Improve the Long-Term Thermal Stability of Inorganic Perovskite Solar Cells. 2019 , 3, 1900346	22
846	Hot-substrate deposition of all-inorganic perovskite films for low-temperature processed high-efficiency solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 2773-2779	13 49
845	Solution-Processed Inorganic Perovskite Flexible Photodetectors with High Performance. 2019 , 14, 284	12
844	Dopant-Free Squaraine-Based Polymeric Hole-Transporting Materials with Comprehensive Passivation Effects for Efficient All-Inorganic Perovskite Solar Cells. 2019 , 58, 17724-17730	83
843	Thermal Stability of the Black Perovskite Phase in Cesium Lead Iodide Nanocrystals Under Humid Conditions. 2019 , 31, 9750-9758	20
842	Defect-Engineering-Enabled High-Efficiency All-Inorganic Perovskite Solar Cells. 2019 , 31, e1903448	75
841	Anion Distribution, Structural Distortion, and Symmetry-Driven Optical Band Gap Bowing in Mixed Halide CsSnX Vacancy Ordered Double Perovskites. 2019 , 31, 9430-9444	32
840	Asymmetric Strain-Introduced Interface Effect on the Electronic and Optical Properties of the CsPbI ₃ /SnS van der Waals Heterostructure. 2019 , 6, 1901330	9
839	Transient Resistive Switching for Nonvolatile Memory Based on Water-Soluble Cs ₄ PbBr ₆ Perovskite Films. 2019 , 13, 1900397	14
838	Spray-Coated Colloidal Perovskite Quantum Dot Films for Highly Efficient Solar Cells. 2019 , 29, 1906615	69

837	Rhenium diselenide as the broadband saturable absorber for the nanosecond passively Q-switched thulium solid-state lasers. 2019 , 88, 630-634		7
836	Microcavity enhancement of low-frequency Raman scattering from a CsPbI ₃ thin film. 2019 , 50, 1672-1678		4
835	A thermally stable, barium-stabilized δ -CsPbI ₃ perovskite for optoelectronic devices. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 21740-21746	13	22
834	Database-driven high-throughput study of coating materials for hybrid perovskites. 2019 , 21, 083018		4
833	. 2019 , 7, 90999-91008		5
832	Enhanced stability of guanidinium-based organic-inorganic hybrid lead triiodides in resistance switching. 2019 , 7, 081107		10
831	Green Photoluminescence of Perovskite CsPb(Br I) Nanocrystals for Wide Color Gamut Displays. 2019 , 4, 15067-15073		7
830	Inverted planar perovskite solar cells based on CsI-doped PEDOT:PSS with efficiency beyond 20% and small energy loss. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 21662-21667	13	40
829	Energetics, Structures, and Phase Transitions of Cubic and Orthorhombic Cesium Lead Iodide (CsPbI) Polymorphs. 2019 , 141, 14501-14504		52
828	Inorganic perovskite solar cells: an emerging member of the photovoltaic community. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 21036-21068	13	93
827	Cs-Doped TiO ₂ Nanorod Array Enhances Electron Injection and Transport in Carbon-Based CsPbI ₃ Perovskite Solar Cells. 2019 , 7, 16927-16932		19
826	Pathways toward high-performance inorganic perovskite solar cells: challenges and strategies. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20494-20518	13	44
825	Expanding the Light Harvesting of CsPbI ₃ Br to Near Infrared by Integrating with Organic Bulk Heterojunction for Efficient and Stable Solar Cells. 2019 , 11, 37991-37998		15
824	Role of Ligand-Ligand Interactions in the Stabilization of Thin Layers of Tin Bromide Perovskite: An Ab Initio Study of the Atomic and Electronic Structure, and Optical Properties. 2019 , 123, 25176-25184		10
823	Skillfully deflecting the question: a small amount of piperazine-1,4-dium iodide radically enhances the thermal stability of CsPbI ₃ perovskite. 2019 , 7, 11757-11763		17
822	Gd ³⁺ -Doped δ -CsPbI ₃ Nanocrystals with Better Phase Stability and Optical Properties. 2019 , 123, 24865-24872		32
821	Temperature-driven anion migration in gradient halide perovskites. 2019 , 151, 134703		19
820	Electronic and optical properties of two propounded compound in photovoltaic applications, CsPbI ₃ and CH ₃ NH ₃ PbI ₃ : By DFT. 2019 , 199, 163360		3

819	Enhancing the Phase Stability of Inorganic CsPbI ₃ by the Bication-Conjugated Organic Molecule for Efficient Perovskite Solar Cells. 2019 , 11, 37720-37725		36
818	Advances in modelling and simulation of halide perovskites for solar cell applications. 2019 , 1, 022001		36
817	The first-principle study of mechanical, optical and thermoelectric properties of SnZrO ₃ and SnHfO ₃ for renewable energy applications. 2019 , 292, 17-23		24
816	All-inorganic lead-free perovskites for optoelectronic applications. 2019 , 3, 365-375		77
815	Dielectric and ferroic properties of metal halide perovskites. 2019 , 7, 010901		108
814	Photocatalytic and Photoelectrochemical Degradation of Organic Compounds with All-Inorganic Metal Halide Perovskite Quantum Dots. 2019 , 10, 630-636		77
813	Stability progress of perovskite solar cells dependent on the crystalline structure: From 3D ABX ₃ to 2D Ruddlesden-Popper perovskite absorbers. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5898-5933	13	70
812	Development of wide bandgap perovskites for next-generation low-cost CdTe tandem solar cells. 2019 , 199, 388-397		19
811	Chlorine doping for black CsPbI ₃ solar cells with stabilized efficiency beyond 16%. 2019 , 58, 175-182		124
810	Direct synthesis of cubic phase CsPbI ₃ nanowires. 2019 , 21, 1389-1396		22
809	Enhancement in lifespan of halide perovskite solar cells. 2019 , 12, 865-886		110
808	Low-temperature processed inorganic perovskites for flexible detectors with a broadband photoresponse. 2019 , 11, 2871-2877		57
807	Polymeric iodobismuthates {[BiI ₁₀]} and {[BiI ₄]} with N-heterocyclic cations: promising perovskite-like photoactive materials for electronic devices. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5957-5966	13	40
806	Achievable high Voc of carbon based all-inorganic CsPbI ₃ perovskite solar cells through interface engineering. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 1227-1232	13	88
805	All-inorganic cesium lead halide perovskite nanocrystals: synthesis, surface engineering and applications. 2019 , 7, 757-789		146
804	Lead-Free Tin-Based Perovskite Solar Cells: Strategies Toward High Performance. 2019 , 3, 1900213		33
803	Bifunctional Dye Molecule in All-Inorganic CsPbI ₃ Perovskite Solar Cells with Efficiency Exceeding 10%. 2019 , 3, 1900212		51
802	14.1% CsPbI ₃ Perovskite Quantum Dot Solar Cells via Cesium Cation Passivation. 2019 , 9, 1900721		179

801	Improved thermal stability of photoluminescence in CsPbBr microcrystals/CsPbBr nanocrystals. 2019 , 554, 133-141	23
800	Cation Alloying Delocalizes Polarons in Lead Halide Perovskites. 2019 , 10, 3516-3524	26
799	Recent progress of inorganic perovskite solar cells. 2019 , 12, 2375-2405	271
798	Stabilizing the black phase of cesium lead halide inorganic perovskite for efficient solar cells. 2019 , 62, 810-821	26
797	Quantitative phase analysis on Cs- and Rb-doped FAPbI ₃ and corresponding solar cell efficiency simulations. 2019 , 188, 224-229	5
796	Chemical Vapor Transport Deposition of Stable Cubic CsPbI ₃ Optical Films on the Porous Alumina Substrate. 2019 , 4, 1973-1979	
795	Pb-Bi Binary Metal All-Inorganic Absorber Layer for Stability Enhancement in Perovskite Solar Cells. 2019 , 6, 1900517	16
794	Inorganic CsPbI ₂ Br ₂ -Based Perovskite Solar Cells: Fabrication Technique Modification and Efficiency Improvement. 2019 , 3, 1900135	37
793	Two-Terminal Perovskites Tandem Solar Cells: Recent Advances and Perspectives. 2019 , 3, 1900080	32
792	Thermal Disorder and Bond Anharmonicity in Cesium Lead Iodide Studied by Neutron Total Scattering and the Reverse Monte Carlo Method. 2019 , 123, 14934-14940	8
791	Synthetic Evolution of Colloidal Metal Halide Perovskite Nanocrystals. 2019 , 35, 11609-11628	23
790	TBAB additive for inorganic CsPbI _{2.4} Br _{0.6} perovskite solar cells with efficiency beyond 15%. 2019 , 7, 7207-7211	12
789	Improving the Stability and Monodispersity of Layered Cesium Lead Iodide Perovskite Thin Films by Tuning Crystallization Dynamics. 2019 , 31, 4990-4998	13
788	Absolute energy level positions in tin- and lead-based halide perovskites. 2019 , 10, 2560	195
787	Surface stabilized cubic phase of CsPbI ₃ and CsPbBr ₃ at room temperature. 2019 , 28, 056402	10
786	Emerging inorganic solar cell efficiency tables (Version 1). 2019 , 1, 032001	39
785	Low-temperature processing of optimally polymer-wrapped β -CsPbI ₃ for self-powered flexible photo-detector application. 2019 , 7, 6986-6996	27
784	Pb-Reduced CsPb _{0.9} Zn _{0.1} I ₂ Br Thin Films for Efficient Perovskite Solar Cells. 2019 , 9, 1900896	96

783	Colloidal metal halide perovskite nanocrystals: a promising juggernaut in photovoltaic applications. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14357-14379	13	19
782	Tunable electronic structures and high efficiency obtained by introducing superalkali and superhalogen into AMX ₃ -type perovskites. 2019 , 429, 120-126		37
781	Solvent-Free Aerosol Deposition for Highly Luminescent and Thermally Stable Perovskite-Ceramic Nanocomposite Film. 2019 , 6, 1900359		21
780	Unique characteristics of 2D Ruddlesden-Popper (2DRP) perovskite for future photovoltaic application. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 13860-13872	13	49
779	Inorganic and Layered Perovskites for Optoelectronic Devices. 2019 , 31, e1807095		67
778	Low Temperature Synthesis of Stable CsPbI_3 Perovskite Layers for Solar Cells Obtained by High Throughput Experimentation. 2019 , 9, 1900555		73
777	Improving the phase stability of inorganic lead halide perovskites through K/Rb doping. 2019 , 12, 051017		3
776	Preparation of Tortuous 3D CsPbI_3 Films at Low Temperature by CaI_2 as Dopant for Highly Efficient Perovskite Solar Cells. 2019 , 29, 1808986		43
775	A Novel Route for Fabrication of Stable CsPbI_3 Perovskite Thin Film by Thermal Evaporation. 2019 , 4, 5091-5096		2
774	Improved phase stability of the CsPbI_3 perovskite via organic cation doping. 2019 , 21, 11175-11180		34
773	Unveiling Property of Hydrolysis-Derived DMAPbI for Perovskite Devices: Composition Engineering, Defect Mitigation, and Stability Optimization. 2019 , 15, 165-172		66
772	Sodium Doping Pushes the Efficiency of Carbon-Based CsPbI_3 Perovskite Solar Cells to 10.7. 2019 , 15, 156-164		53
771	Perovskite solar cell resilience to fast neutrons. 2019 , 3, 2561-2566		21
770	Manipulating the Mixed-Perovskite Crystallization Pathway Unveiled by In Situ GIWAXS. 2019 , 31, e1901284		84
769	Bandgap alignment of CsPbI_3 perovskites with synergistically enhanced stability and optical performance via B-site minor doping. 2019 , 61, 389-396		37
768	Perovskite Solar Cells Processed by Solution Nanotechnology. 2019 , 119-174		
767	Resistive switching behavior of organic-metallic halide perovskites $\text{CH}_3\text{NH}_3\text{Pb}_1\text{Bi Br}_3$. 2019 , 70, 252-257		9
766	High Performance Inverted Planar MAPbI_3 Perovskite Solar Cells with a Simple Annealing Process. 2019 , 5, 715-722		4

765	Vacancy-Driven Stabilization of the Cubic Perovskite Polymorph of CsPbI ₃ . 2019 , 123, 9735-9744	32
764	Effective atomic numbers, electron densities and gamma rays buildup factors of inorganic metal halide cubic perovskites CsBX ₃ (B = Sn, Ge; X = I, Br, Cl). 2019 , 159, 195-206	30
763	Complete Suppression of Detrimental Polymorph Transitions in All-Inorganic Perovskites via Nanoconfinement. 2019 , 2, 2948-2955	11
762	First principle studies on structure, magneto-electronic and elastic properties of photovoltaic semiconductor halide (RbGeI ₃) and ferromagnetic half metal oxide (RbDyO ₃). 2019 , 19, e00381	4
761	Anti-solvent assisted multi-step deposition for efficient and stable carbon-based CsPbI ₂ Br all-inorganic perovskite solar cell. 2019 , 59, 553-559	81
760	Investigation of Rbx(MA) _{1-x} PbI ₃ (x = 0, 0.1, 0.3, 0.5, 0.75, 1) perovskites as a potential source of P- and N-type materials for PN-junction solar cell. 2019 , 125, 1	6
759	Highly luminescent CsPbX ₃ (X=Cl, Br, I) perovskite nanocrystals with tunable photoluminescence properties. 2019 , 789, 392-399	21
758	Chemical stability and instability of inorganic halide perovskites. 2019 , 12, 1495-1511	335
757	First-Principles Study of Ferroelastic Twins in Halide Perovskites. 2019 , 10, 1416-1421	18
756	Anorganische CsPbX ₃ -Perowskit-Solarzellen: Fortschritte und Perspektiven. 2019 , 131, 15742-15765	15
755	All-Inorganic CsPbX Perovskite Solar Cells: Progress and Prospects. 2019 , 58, 15596-15618	272
754	Tuning the electronic structures of all-inorganic lead halide perovskite CsPbI ₃ via heterovalent doping: A first-principles investigation. 2019 , 722, 90-95	8
753	In situ growth of CsPbI ₃ on carbon nanofibers via electrospinning. 2019 , 723, 11-15	5
752	Silver Iodide Induced Resistive Switching in CsPbI ₃ Perovskite-Based Memory Device. 2019 , 6, 1802071	41
751	Untapped Potentials of Inorganic Metal Halide Perovskite Solar Cells. 2019 , 3, 938-955	131
750	Recent Challenges in Perovskite Solar Cells Toward Enhanced Stability, Less Toxicity, and Large-Area Mass Production. 2019 , 6, 1801758	36
749	Materials Discovery of Stable and Nontoxic Halide Perovskite Materials for High-Efficiency Solar Cells. 2019 , 29, 1804354	34
748	Solution-Processable Perovskite Solar Cells toward Commercialization: Progress and Challenges. 2019 , 29, 1807661	87

747	Ultrafast carrier dynamics of metal halide perovskite nanocrystals and perovskite-composites. 2019 , 11, 9796-9818	51
746	Research progress in lead-less or lead-free three-dimensional perovskite absorber materials for solar cells. 2019 , 26, 387-403	13
745	Efficient inverted all inorganic CsPbI ₃ planar solar cells via twice-coating in air condition. 2019 , 426, 61-66	4
744	CsPbI _{2.69} Br _{0.31} solar cells from low-temperature fabrication. 2019 , 3, 1139-1142	14
743	Vacuum deposition of CsPbI ₃ layers on textured Si for Perovskite/Si tandem solar cells. 2019 , 58, SBBF06	14
742	Dual Interfacial Design for Efficient CsPbI Br Perovskite Solar Cells with Improved Photostability. 2019 , 31, e1901152	248
741	Interface-Modification-Induced Gradient Energy Band for Highly Efficient CsPbI ₂ Br ₂ Perovskite Solar Cells. 2019 , 9, 1803785	138
740	Postsynthesis Spontaneous Coalescence of Mixed-Halide Perovskite Nanocubes into Phase-Stable Single-Crystalline Uniform Luminescent Nanowires. 2019 , 10, 1805-1812	28
739	First-principles calculations of iodine-related point defects in CsPbI. 2019 , 21, 7841-7846	17
738	Moisture assisted CsPbBr ₃ film growth for high-efficiency, all-inorganic solar cells prepared by a multiple sequential vacuum deposition method. 2019 , 98, 39-43	24
737	Strain-Mediated Phase Stabilization: A New Strategy for Ultrastable α -CsPbI Perovskite by Nanoconfined Growth. 2019 , 15, e1900219	48
736	Quantitative chemical analysis of perovskite deposition using spin coating. 2019 , 2, 100011	2
735	On the Current-Voltage Hysteresis in Perovskite Solar Cells: Dependence on Perovskite Composition and Methods to Remove Hysteresis. 2019 , 31, e1805214	214
734	Intrinsic Instability of Inorganic-Organic Hybrid Halide Perovskite Materials. 2019 , 31, e1805337	175
733	Perovskite Photovoltaics: The Significant Role of Ligands in Film Formation, Passivation, and Stability. 2019 , 31, e1805702	143
732	Fundamental Understanding of Photocurrent Hysteresis in Perovskite Solar Cells. 2019 , 9, 1803017	148
731	Synthesis of ligand-free, large scale with high quality all-inorganic CsPbI ₃ and CsPb ₂ Br ₅ nanocrystals and fabrication of all-inorganic perovskite solar cells. 2019 , 787, 17-26	30
730	Thermo-optical correlation for room temperature synthesis: cold-sintered lead halides. 2019 , 30, 6071-6081	8

729	Postsynthesis Mn-doping in CsPbI nanocrystals to stabilize the black perovskite phase. 2019 , 11, 4278-4286	90
728	Nitrogen-doped graphene quantum dots for 80% photoluminescence quantum yield for inorganic ECsPbI3 perovskite solar cells with efficiency beyond 16%. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5740-5747	13 73
727	Inorganic, Organic, and Perovskite Halides with Nanotechnology for High Light Yield X- and γ Scintillators. 2019 , 9, 88	79
726	Optical Management with Nanoparticles for a Light Conversion Efficiency Enhancement in Inorganic ECsPbI Solar Cells. 2019 , 19, 1796-1804	45
725	Halide Perovskite Photovoltaics: Background, Status, and Future Prospects. 2019 , 119, 3036-3103	1189
724	A Scalable Methylamine Gas Healing Strategy for High-Efficiency Inorganic Perovskite Solar Cells. 2019 , 58, 5587-5591	82
723	A Scalable Methylamine Gas Healing Strategy for High-Efficiency Inorganic Perovskite Solar Cells. 2019 , 131, 5643-5647	15
722	Enhanced optical absorption and efficient cascade electron extraction based on energy band alignment double absorbers perovskite solar cells. 2019 , 194, 168-176	12
721	Pyrrolidinium lead iodide from crystallography: a new perovskite with low bandgap and good water resistance. 2019 , 55, 3251-3253	23
720	Hybrid perovskites for device applications. 2019 , 211-256	8
719	RbAgBiBr: A Lead-Free Visible Light Absorbing Halide Semiconductor with Improved Stability. 2019 , 58, 4446-4455	20
718	Organic-free indium-doped cesium lead iodide perovskite for solar cell application. 2019 , 14, 1385-1387	2
717	Inorganic cesium-lead mixed halide perovskite p-i-n solar cells deposited using layer-by-layer vacuum deposition technique. 2019 ,	
716	The effect of hydroiodic (HI) acid on the optoelectronic properties of CsPbI3 films and their photovoltaic performance. 2019 ,	
715	Lead-free perovskite thin film solar cells from binary sources. 2019 ,	3
714	Improvement of open-circuit voltage of poly(3,4-ethylenedioxythiophene): Poly(styrenesulfonate)/ECsPbI3 based device by mixing different concentrations of hydrochloric acid and hydroiodic acid additives. 2019 , 257, 126667	3
713	Highly crystalline CsPbI3Br films for efficient perovskite solar cells compositional engineering.. 2019 , 9, 30534-30540	5
712	Exciton spectra of Cs1-xRbxPbCl3 solid solution thin films. 2019 , 45, 1122-1126	

711	Influence of Ni doping in a lead-halide and a lead-free halide perovskites for optoelectronic applications. 2019 , 9, 125321		28
710	Anomalous variable-temperature photoluminescence of CsPbBr perovskite quantum dots embedded into an organic solid. 2019 , 11, 20942-20948		6
709	High-Quality Conformal Homogeneous All-Vacuum Deposited CsPbCl Thin Films and Their UV Photodiode Applications. 2019 , 11, 47054-47062		21
708	CsPbI Nanotube Photodetectors with High Detectivity. 2019 , 15, e1905253		23
707	Inorganic halide perovskite materials and solar cells. 2019 , 7, 120702		11
706	Lead Sulfide Quantum Dots as a Bifunctional Layer for Efficient and Stable All-Inorganic Cesium Lead Iodide Perovskite Solar Cells. 2019 , 4, 13143-13148		6
705	The humidity-insensitive fabrication of efficient CsPbI ₃ solar cells in ambient air. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 26776-26784	13	35
704	Halide-Perovskite Resonant Nanophotonics. 2019 , 7, 1800784		98
703	Study on charge transportation and scaling behavior of CsPbI ₃ microwires. 2019 , 45, 6012-6020		11
702	Structurally Reconstructed CsPbI ₂ Br Perovskite for Highly Stable and Square-Centimeter All-Inorganic Perovskite Solar Cells. 2019 , 9, 1803572		149
701	Structural and Optical Properties of Cs ₂ AgBiBr ₆ Double Perovskite. 2019 , 4, 299-305		78
700	All-inorganic perovskite Cs ₄ PbBr ₆ thin films in optoelectronic resistive switching memory devices with a logic application. 2019 , 45, 5724-5730		21
699	Sn-doped CsPbBr ₃ QDs glasses with excellent stability and optical properties for WLED. 2019 , 361, 937-944		62
698	Cs/MAPbI ₃ composite formation and its influence on optical properties. 2019 , 783, 935-942		9
697	Highly efficient semitransparent CsPbI ₂ Br ₂ perovskite solar cells via low-temperature processed In ₂ S ₃ as electron-transport-layer. 2019 , 57, 718-727		157
696	Metals doped cesium based all inorganic perovskite solar cells: Investigations on Structural, morphological and optical properties. 2019 , 179, 151-163		16
695	Efficient and Hole-Transporting-Layer-Free CsPbI Br Planar Heterojunction Perovskite Solar Cells through Rubidium Passivation. 2019 , 12, 983-989		64
694	High Efficiency Blue and Green Light-Emitting Diodes Using RuddlesdenPopper Inorganic Mixed Halide Perovskites with Butylammonium Interlayers. 2019 , 31, 83-89		171

693	Metal Halide Perovskite Materials for Solar Cells with Long-Term Stability. 2019 , 9, 1802671	72
692	Investigation of optical and dielectric properties of CsPbI ₃ inorganic lead iodide perovskite thin film. 2019 , 96, 538-542	33
691	Effective mass and optical properties of orthorhombic Al _{1-x} In _x FeO ₃ perovskite: An ab-initio study. 2019 , 159, 222-227	4
690	Poly (ethylene glycol) stabilized synthesis of inorganic cesium lead iodide polycrystalline light-absorber for perovskite solar cell. 2019 , 240, 132-135	7
689	Progress and challenges in perovskite photovoltaics from single- to multi-junction cells. 2019 , 12, 70-94	50
688	A Review: Thermal Stability of Methylammonium Lead Halide Based Perovskite Solar Cells. 2019 , 9, 188	102
687	All-Inorganic Perovskite CsPbI ₂ Br Through Co-evaporation for Planar Heterojunction Solar Cells. 2019 , 15, 56-60	21
686	Grain Engineering for Perovskite/Silicon Monolithic Tandem Solar Cells with Efficiency of 25.4%. 2019 , 3, 177-190	227
685	Europium-Doped CsPbI ₂ Br for Stable and Highly Efficient Inorganic Perovskite Solar Cells. 2019 , 3, 205-214	290
684	Synthetic Approaches for Halide Perovskite Thin Films. 2019 , 119, 3193-3295	293
683	Inorganic CsPbI ₂ Br Perovskite Solar Cells: The Progress and Perspective. 2019 , 3, 1800239	160
682	Operation Mechanism of Perovskite Quantum Dot Solar Cells Probed by Impedance Spectroscopy. 2019 , 4, 251-258	65
681	Mixed Halide Perovskite Solar Cells: Progress and Challenges. 2020 , 45, 85-112	23
680	Facile method for the preparation of high-performance photodetectors with a GQDs/perovskite bilayer heterostructure. 2020 , 76, 105444	11
679	Recent progress on cesium lead/tin halide-based inorganic perovskites for stable and efficient solar cells: A review. 2020 , 204, 110212	36
678	High stability of silica-wrapped CsPbBr ₃ perovskite quantum dots for light emitting application. 2020 , 46, 3882-3888	34
677	Tin Halide Perovskite (ASnX ₃) Solar Cells: A Comprehensive Guide toward the Highest Power Conversion Efficiency. 2020 , 10, 1902467	73
676	A Review on Additives for Halide Perovskite Solar Cells. 2020 , 10, 1902492	131

675	NH4Cl-Modified ZnO for High-Performance CsPbI ₂ Br ₂ Perovskite Solar Cells via Low-Temperature Process. 2020 , 4, 1900363	126
674	Strategies Toward Extending the Near-Infrared Photovoltaic Response of Perovskite Solar Cells. 2020 , 4, 1900280	8
673	The development of all-inorganic CsPbX ₃ perovskite solar cells. 2020 , 55, 464-479	27
672	Stability of all-inorganic perovskite solar cells. 2020 , 67, 104249	77
671	Photoexcited hot and cold electron and hole dynamics at FAPbI ₃ perovskite quantum dots/metal oxide heterojunctions used for stable perovskite quantum dot solar cells. 2020 , 67, 104267	25
670	Efficient all-inorganic CsPbI ₂ Br perovskite solar cell with carbon electrode by revealing crystallization kinetics and improving crystal quality. 2020 , 447, 227389	26
669	Diammonium-Cesium Lead Halide Perovskite with Phase-Segregated Interpenetrating Morphology for Photovoltaics. 2020 , 11, 747-754	9
668	Computational prediction of structural, electronic, and optical properties and phase stability of double perovskites KSnX (X = I, Br, Cl).. 2019 , 10, 201-209	30
667	Cesium-Containing Methylammonium Lead Iodide Light Absorber for Planar Perovskite Solar Cells. 2020 , 20, 1008-1012	2
666	Designing solar-cell absorber materials through computational high-throughput screening. 2020 , 29, 028803	3
665	High-sensitivity X-ray detectors based on solution-grown caesium lead bromide single crystals. 2020 , 8, 1248-1256	58
664	Visualizing and Suppressing Nonradiative Losses in High Open-Circuit Voltage n-i-p-Type CsPbI ₃ Perovskite Solar Cells. 2020 , 5, 271-279	24
663	Insight into the Improved Phase Stability of CsPbI ₃ from First-Principles Calculations. 2020 , 5, 893-896	21
662	Bionic Detectors Based on Low-Bandgap Inorganic Perovskite for Selective NIR-I Photon Detection and Imaging. 2020 , 32, e1905362	45
661	Chemical Approaches for Stabilizing Perovskite Solar Cells. 2020 , 10, 1903249	88
660	Low-Temperature Preparation of CsPbI ₂ Br for Efficient and Stable Perovskite Solar Cells. 2020 , 3, 1076-1081	9
659	All-Inorganic Perovskite Solar Cells: Energetics, Key Challenges, and Strategies toward Commercialization. 2020 , 5, 290-320	101
658	Theoretical study of structural stability, electronic and optical properties of MA _{1-x} Cs _x PbI ₃ for photovoltaic applications. 2020 , 13, 011007	1

657	Chemical Composition and Phase Evolution in DMAI-Derived Inorganic Perovskite Solar Cells. 2020 , 5, 263-270	51
656	Unravelling the Photocatalytic Behavior of All-Inorganic Mixed Halide Perovskites: The Role of Surface Chemical States. 2020 , 12, 914-924	33
655	Improved open-circuit voltage and ambient stability of CsPbI ₂ Br perovskite solar cells by incorporating CH ₃ NH ₃ Cl. 2020 , 39, 131-138	10
654	Simultaneous Improved Performance and Thermal Stability of Planar Metal Ion Incorporated CsPbI ₂ Br All-Inorganic Perovskite Solar Cells Based on MgZnO Nanocrystalline Electron Transporting Layer. 2020 , 10, 1902708	41
653	Synthesis and optical applications of low dimensional metal-halide perovskites. 2020 , 31, 152002	20
652	Ion Migration: A Double-Edged Sword for Halide-Perovskite-Based Electronic Devices. 2020 , 4, 1900552	67
651	Improvement in the stability of CsPbI ₃ nanowires enabled by lattice immobilization through the PbO anchor in SBA-15. 2020 , 7, 4572-4579	3
650	Organic Ligands Armored ZnO Enhances Efficiency and Stability of CsPbI ₃ Perovskite Solar Cells. 2020 , 7, 2000421	22
649	Inverted CsPbI ₂ Br perovskite solar cells with enhanced efficiency and stability in ambient atmosphere via formamidinium incorporation. 2020 , 218, 110741	13
648	Tailoring In Situ Healing and Stabilizing Post-Treatment Agent for High-Performance Inverted CsPbI ₃ Perovskite Solar Cells with Efficiency of 16.67%. 2020 , 5, 3314-3321	30
647	Tuning the Surface-Passivating Ligand Anchoring Position Enables Phase Robustness in CsPbI ₃ Perovskite Quantum Dot Solar Cells. 2020 , 5, 3322-3329	46
646	Low temperature preparation of all-inorganic CsPbI ₃ perovskite solar cells with ethanediamine as additive. 2020 , 87, 105940	8
645	Advances in Phase Stability of Cesium Lead Halide Perovskites. 2020 , 4, 2000495	5
644	Perovskite Termination-Dependent Charge Transport Behaviors of the CsPbI ₃ /Black Phosphorus van der Waals Heterostructure. 2020 , 37, 107301	5
643	Emerging inorganic compound thin film photovoltaic materials: Progress, challenges and strategies. 2020 , 41, 120-142	37
642	Performance enhancement of CsPbI ₂ Br perovskite solar cells via stoichiometric control and interface engineering. 2020 , 211, 654-660	6
641	Liquid-like Interfaces Mediate Structural Phase Transitions in Lead Halide Perovskites. 2020 , 3, 534-545	21
640	Methylammonium Iodide-Mediated Controlled Crystal Growth of CsPbI ₃ Films for Efficient and Stable All-Inorganic Perovskite Solar Cells. 2020 , 12, 36228-36236	17

639	Perovskite-Based Tandem Solar Cells: Get the Most Out of the Sun. 2020 , 30, 2001904	31
638	Thermodynamic Stabilization of Mixed-Halide Perovskites against Phase Segregation. 2020 , 1, 100120	27
637	Resistive Switching in Nonperovskite-Phase CsPbI Film-Based Memory Devices. 2020 , 12, 9409-9420	10
636	RbCs(MAFA)PbI ₃ perovskite solar cell with 22.81% efficiency using the precise ions cascade regulation. 2020 , 530, 147240	18
635	Atomistic Origins of Enhanced Band Gap, Miscibility, and Oxidation Resistance in $\text{CsPb}_{1-x}\text{Sn}_x\text{I}_3$ Mixed Perovskite. 2020 , 124, 26124-26133	5
634	Stabilizing CsPbI_3 Perovskite via Phenylethylammonium for Efficient Solar Cells with Open-Circuit Voltage over 1.3V. 2020 , 16, e2005246	24
633	The dark exciton ground state promotes photon-pair emission in individual perovskite nanocrystals. 2020 , 11, 6001	27
632	Structural, Electronic, and Optical Properties of CsPb(BrCl) Perovskite: First-Principles Study with PBE-GGA and mBJ-GGA Methods. 2020 , 13,	6
631	Searching for stable perovskite solar cell materials using materials genome techniques and high-throughput calculations. 2020 , 8, 12012-12035	11
630	The effect of organic cation doping on the stability and optoelectronic properties of CsPbI_3 . 2020 , 290, 121577	4
629	Inorganic perovskite solar cells based on carbon electrodes. 2020 , 77, 105160	26
628	Optical and dielectric properties of lead perovskite and iodoplumbate complexes: an ab initio study. 2020 , 22, 18423-18434	5
627	Inhibition of Phase Segregation in Cesium Lead Mixed-Halide Perovskites by B-Site Doping. 2020 , 23, 101415	9
626	Artemisinin (ART)-Induced Perovskite/perovskite/bilayer structured photovoltaics. 2020 , 78, 105133	11
625	High-Efficiency Perovskite Solar Cells. 2020 , 120, 7867-7918	587
624	Illumination-Induced Phase Segregation and Suppressed Solubility Limit in Br-Rich Mixed-Halide Inorganic Perovskites. 2020 , 12, 38376-38385	15
623	Controllable optical emission wavelength in all-inorganic halide perovskite alloy microplates grown by two-step chemical vapor deposition. 2020 , 13, 2939-2949	12
622	Ink Engineering of Inkjet Printing Perovskite. 2020 , 12, 39082-39091	33

621	Photoinduced Phase Segregation Leading to Evident Open-Circuit Voltage Loss in Efficient Inorganic CsPbI ₃ Solar Cells. 2020 , 11, 7035-7041	17
620	The compositional engineering of organic/inorganic hybrid perovskites for high-performance perovskite solar cells. 2020 , 3, 727-750	4
619	The J _V Hysteresis Behavior and Solutions in Perovskite Solar Cells. 2020 , 4, 2000586	12
618	Improving the performances of CsPbBr ₃ solar cells fabricated in ambient condition. 2020 , 31, 21154-21167	5
617	Size Modulation and Heterovalent Doping Facilitated Hybrid Organic and Perovskite Quantum Dot Bulk Heterojunction Solar Cells. 2020 , 3, 11359-11367	10
616	High efficiently CsPbBr ₃ perovskite solar cells fabricated by multi-step spin coating method. 2020 , 211, 1223-1229	17
615	Dependence of phase transitions on halide ratio in inorganic CsPb(BrxI _{1-x}) ₃ perovskite thin films obtained from high-throughput experimentation. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 22626-22631 ¹³	8
614	High-Efficiency Solution-Processed Two-Terminal Hybrid Tandem Solar Cells Using Spectrally Matched Inorganic and Organic Photoactive Materials. 2020 , 10, 2001188	15
613	Optoelectronic properties of facile synthesized orthorhombic cesium lead bromide (CsPbBr ₃). 2020 , 31, 17100-17109	3
612	Energy Upconversion in Rare-Earth-Doped Tin-Based Double Halo Perovskites, A ₂ SnCl ₆ (A = K, Rb, and Cs). 2020 , 2020, 4295-4302	4
611	Chemically Stable Black Phase CsPbI ₃ Inorganic Perovskites for High-Efficiency Photovoltaics. 2020 , 32, e2001025	48
610	Additive Engineering Toward High-Performance CsPbI ₃ Perovskite Solar Cells. 2020 , 4, 2000380	14
609	Intermediate-phase-assisted low-temperature formation of CsPbI ₃ films for high-efficiency deep-red light-emitting devices. 2020 , 11, 4736	27
608	Doping in inorganic perovskite for photovoltaic application. 2020 , 78, 105354	23
607	Enhancing the light-emitting performance and stability in CsPbBr ₃ perovskite quantum dots via simultaneous doping and surface passivation. 2020 , 8, 14439-14445	13
606	Highly Stable All-Inorganic CsPbI ₃ Perovskite Solar Cells with 11.30% Efficiency Using Crystal Interface Passivation. 2020 , 3, 8249-8256	15
605	Printable CsPbI ₃ Perovskite Solar Cells with PCE of 19% via an Additive Strategy. 2020 , 32, e2001243	88
604	Phase Transitions and Anion Exchange in All-Inorganic Halide Perovskites. 2020 , 1, 3-15	36

603	Room-Temperature Vacuum Deposition of CsPbI ₂ Br Perovskite Films from Multiple Sources and Mixed Halide Precursors. 2020 , 32, 8641-8652	17
602	Metal-Organic Framework Materials for Perovskite Solar Cells. 2020 , 12,	22
601	Why choosing the right partner is important: stabilization of ternary CsGUAFAPI perovskites. 2020 , 22, 20880-20890	2
600	Efficient and Stable All-Inorganic Perovskite Solar Cells. 2020 , 4, 2000408	18
599	Semiconducting to metallic transition with outstanding optoelectronic properties of CsSnCl perovskite under pressure. 2020 , 10, 14391	18
598	Introducing Ion Migration and Light-Induced Secondary Ion Redistribution for Phase-Stable and High-Efficiency Inorganic Perovskite Solar Cells. 2020 , 12, 40364-40371	12
597	Effects of ZnI ₂ doping on the performance of methylammonium-free perovskite solar cells. 2020 , 128, 043102	7
596	Stable CsPbI ₃ Nanocrystals Modified by Tetra-n-butylammonium Iodide for Light-Emitting Diodes. 2020 , 3, 9260-9267	4
595	The properties, photovoltaic performance and stability of visible to near-IR all inorganic perovskites. 2020 , 1, 1920-1929	2
594	Structural regulation and optical behavior of three-dimensional metal halide perovskites under pressure. 2020 , 8, 12755-12767	9
593	All-Inorganic CsPbI _x Br _{3-x} Perovskite Solar Cells: Crystal Anisotropy Effect. 2020 , 3, 2000055	14
592	Flexible and stretchable inorganic solar cells: Progress, challenges, and opportunities. 2020 , 7, 1	3
591	Fiber Electronics. 2020 ,	1
590	Highly Efficient and Air-Stable Heterostructured Perovskite Quantum Dot Solar Cells Using a Solid-State Cation-Exchange Reaction. 2020 , 12, 57124-57133	8
589	Perovskite quantum dot solar cells: Mapping interfacial energetics for improving charge separation. 2020 , 78, 105319	17
588	Fast and low temperature processed CsPbI ₃ perovskite solar cells with ZnO as electron transport layer. 2020 , 480, 229134	4
587	High Phase Stability in CsPbI ₃ Enabled by Pb-I Octahedra Anchors for Efficient Inorganic Perovskite Photovoltaics. 2020 , 32, e2000186	52
586	A review: crystal growth for high-performance all-inorganic perovskite solar cells. 2020 , 13, 1971-1996	78

585	High-humidity processed perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 10481-10518	13	32
584	The Role of Dimethylammonium in Bandgap Modulation for Stable Halide Perovskites. 2020 , 5, 1856-1864		39
583	2D-3D CsPbICl ₂ -CsPbIBr Mixed-Dimensional Films for All-Inorganic Perovskite Solar Cells with Enhanced Efficiency and Stability. 2020 , 11, 4138-4146		26
582	Surface Plasmon Resonance Effect Enhanced CsPbBr ₃ Inverse Opals for High-Performance Inorganic Perovskite Solar Cells. 2020 , 7, 1901885		10
581	Mn Doping of CsPbI ₃ Film Towards High-Efficiency Solar Cell. 2020 , 3, 5190-5197		25
580	Stable and efficient full-printable solar cells using inorganic metal oxide framework and inorganic perovskites. 2020 , 20, 100644		7
579	Novel 3D photoactive direct bandgap perovskites CsBiPbX ₆ : Ab initio structure and electronic properties. 2020 , 183, 109819		1
578	Composition Engineering of All-Inorganic Perovskite Film for Efficient and Operationally Stable Solar Cells. 2020 , 30, 2001764		42
577	A new perspective on lone pair dynamics in halide perovskites. 2020 , 8, 050902		8
576	Progress toward Applications of Perovskite Solar Cells. 2020 , 34, 6624-6633		11
575	Metal Halide Perovskites in Quantum Dot Solar Cells: Progress and Prospects. 2020 , 4, 1160-1185		117
574	First principle studies of rubidium lead halides towards photovoltaic application. 2020 , 24, 101190		2
573	Stabilization of Black Perovskite Phase in FAPbI ₃ and CsPbI ₃ . 2020 , 5, 1974-1985		109
572	One-step solution synthesis and stability study of inorganic perovskite semiconductor Cs ₂ SnI ₆ . 2020 , 204, 429-439		12
571	MAPbBr Perovskite Quantum Dots for Application in Semitransparent Photovoltaics. 2020 , 12, 27307-27315		34
570	Elastic and electronic origins of strain stabilized photovoltaic MAPbI ₃ . 2020 , 22, 12706-12712		7
569	Interface Modulator of Ultrathin Magnesium Oxide for Low-Temperature-Processed Inorganic CsPbIBr ₂ Perovskite Solar Cells with Efficiency Over 11%. 2020 , 4, 2000226		63
568	Efficient modelling of ion structure and dynamics in inorganic metal halide perovskites. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 11824-11836	13	9

567	Ligand & band gap engineering: tailoring the protocol synthesis for achieving high-quality CsPbI quantum dots. 2020 , 12, 14194-14203	23
566	Challenges and strategies relating to device function layers and their integration toward high-performance inorganic perovskite solar cells. 2020 , 12, 14369-14404	43
565	Hydrophobic stabilizer-anchored fully inorganic perovskite quantum dots enhance moisture resistance and photovoltaic performance. 2020 , 75, 104985	36
564	Stable, Bromine-Free, Tetragonal Perovskites with 1.7 eV Bandgaps via A-Site Cation Substitution. 2020 , 2, 869-872	9
563	Cs Pbl -Mediated Synthesis of Thermodynamically Stable FA Cs Pbl Perovskite Solar Cells. 2020 , 32, e2001054	21
562	Perovskite semiconductors for direct X-ray detection and imaging. 2020 , 41, 051204	30
561	Black phosphorus quantum dots as an effective perovskite interfacial modification layer for efficient low-temperature processed all-inorganic CsPbI ₂ Br perovskite solar cells. 2020 , 206, 793-798	8
560	Structurally Reinforced All-Inorganic CsPbI ₂ Br Perovskite by Nonionic Polymer via Coordination and Hydrogen Bonds. 2020 , 4, 2000216	17
559	A surface modifier enhances the performance of the all-inorganic CsPbI ₂ Br perovskite solar cells with efficiencies approaching 15. 2020 , 22, 17847-17856	9
558	Understanding the Performance-Limiting Factors of Cs ₂ AgBiBr ₆ Double-Perovskite Solar Cells. 2020 , 5, 2200-2207	84
557	Hexagonal Stacking Faults Act as Hole-Blocking Layers in Lead Halide Perovskites. 2020 , 5, 2231-2233	8
556	The underappreciated lone pair in halide perovskites underpins their unusual properties. 2020 , 45, 467-477	53
555	Computational Investigation of the Folded and Unfolded Band Structure and Structural and Optical Properties of CsPb(I _{1-x} Br _x) ₃ Perovskites. 2020 , 10, 342	4
554	Micro- and Nanopatterning of Halide Perovskites Where Crystal Engineering for Emerging Photoelectronics Meets Integrated Device Array Technology. 2020 , 32, e2000597	31
553	All-inorganic perovskite CsPbI ₂ Br as a promising photovoltaic absorber: a first-principles study. 2020 , 132, 1	4
552	TinLead Alloying for Efficient and Stable All-Inorganic Perovskite Solar Cells. 2020 , 32, 2782-2794	33
551	Shining Light on the Photoluminescence Properties of Metal Halide Perovskites. 2020 , 30, 1910004	58
550	Recent Advances in Improving Phase Stability of Perovskite Solar Cells. 2020 , 4, 1900877	35

549	How the strain effects decreases the band gap energy in the CsPbX ₃ perovskite compounds?. 2020 , 93, 455-469	3
548	Field emission behaviors of CsPbI ₃ nanobelts. 2020 , 8, 5156-5162	5
547	Unveiling the Effects of Hydrolysis-Derived DMAI/DMAPI Intermediate Compound on the Performance of CsPbI Solar Cells. 2020 , 7, 1902868	54
546	First principle-based calculations of the optoelectronic features of 2 x 2 x 2 CsPb(I _{1-x} Br _x) ₃ perovskite. 2020 , 140, 106474	6
545	∞CsPbI Bilayers via One-Step Deposition for Efficient and Stable All-Inorganic Perovskite Solar Cells. 2020 , 32, e2002632	41
544	Perovskite solar cells stability enhancement via analytical fabrication conditions. 2020 , 267, 116443	2
543	Redox-inactive samarium(III) acetylacetonate as dopant enabling cation substitution and interfacial passivation for efficient and stable CsPbI ₂ Br perovskite solar cells. 2020 , 8, 071102	8
542	The correlation between phase transition and photoluminescence properties of CsPbX (X= Cl, Br, I) perovskite nanocrystals. 2020 , 2, 4390-4394	8
541	Easy Strategy to Enhance Thermal Stability of Planar PSCs by Perovskite Defect Passivation and Low-Temperature Carbon-Based Electrode. 2020 , 12, 32536-32547	15
540	Interdigital Photodetector with stabilized ∞phase CsPbI ₃ using polyethylene oxide. 2020 , 5, 2537-2543	2
539	Understanding the Instability of the Halide Perovskite CsPbI through Temperature-Dependent Structural Analysis. 2020 , 32, e2001069	54
538	Suppression of Iodide Ion Migration via SbS Interfacial Modification for Stable Inorganic Perovskite Solar Cells. 2020 , 12, 12867-12873	23
537	First-principles investigation on the stability and material properties of all-inorganic cesium lead iodide perovskites CsPbI ₃ polymorphs. 2020 , 585, 412118	19
536	Over 1 th electron-hole diffusion lengths in CsPbI ₂ Br for high efficient solar cells. 2020 , 454, 227913	18
535	Quasi-2D halide perovskites for resistive switching devices with ON/OFF ratios above 109. 2020 , 12, 37	37
534	A pressure-assisted annealing method for high quality CsPbBr film deposited by sequential thermal evaporation.. 2020 , 10, 8905-8909	9
533	Narrowing band gap and enhanced visible-light absorption of metal-doped non-toxic CsSnCl metal halides for potential optoelectronic applications.. 2020 , 10, 7817-7827	20
532	Simulated development and optimized performance of CsPbI ₃ based all-inorganic perovskite solar cells. 2020 , 198, 454-460	27

531	Electron-enriched thione enables strong Pb-S interaction for stabilizing high quality CsPbI perovskite films with low-temperature processing. 2020 , 11, 3132-3140	17
530	Photoluminescence Loss and Recovery of CsPbI Quantum Dots Originated from Chemical Equilibrium Shift of Oleylammonium. 2020 , 12, 11769-11777	14
529	Stability of Perovskite Light Sources: Status and Challenges. 2020 , 8, 1902012	26
528	Approaches for thermodynamically stabilized CsPbI ₃ solar cells. 2020 , 71, 104634	70
527	Atomistic Origins of the Limited Phase Stability of Cs+-Rich FAxCs(1-x)PbI ₃ Mixtures. 2020 , 32, 2605-2614	14
526	Phase Behavior and Substitution Limit of Mixed Cesium-Formamidinium Lead Triiodide Perovskites. 2020 , 32, 2282-2291	14
525	Correlating the Composition-Dependent Structural and Electronic Dynamics of Inorganic Mixed Halide Perovskites. 2020 , 32, 2470-2481	14
524	Dopant-Free Organic Hole-Transporting Material for Efficient and Stable Inverted All-Inorganic and Hybrid Perovskite Solar Cells. 2020 , 32, e1908011	120
523	Excellent Moisture Stability and Efficiency of Inverted All-Inorganic CsPbIBr Perovskite Solar Cells through Molecule Interface Engineering. 2020 , 12, 13931-13940	31
522	Enhanced moisture stability of cesium lead iodide perovskite solar cells - a first-principles molecular dynamics study. 2020 , 22, 5693-5701	14
521	Suppressed phase transition of a Rb/K incorporated inorganic perovskite with a water-repelling surface. 2020 , 12, 6571-6581	7
520	Comprehensive Elucidation of Grain Boundary Behavior in All-Inorganic Halide Perovskites by Scanning Probe Microscopy. 2020 , 7, 1901521	10
519	Rare-earth-containing perovskite nanomaterials: design, synthesis, properties and applications. 2020 , 49, 1109-1143	96
518	Progress on the controllable synthesis of all-inorganic halide perovskite nanocrystals and their optoelectronic applications. 2020 , 41, 011201	9
517	Coupling halide perovskites with different materials: From doping to nanocomposites, beyond photovoltaics. 2020 , 110, 100639	27
516	Below 200 °C Fabrication Strategy of Black-Phase CsPbI ₃ Film for Ambient-Air-Stable Solar Cells. 2020 , 4, 2000014	22
515	Orthorhombic CsPbI ₃ perovskites: Thickness-dependent structural, optical and vibrational properties. 2020 , 23, e00453	5
514	Polymer-Assisted Nanoimprinting for Environment- and Phase-Stable Perovskite Nanopatterns. 2020 , 14, 1645-1655	26

513	First-principles comparative study of perfect and defective CsPbX (X = Br, I) crystals. 2020 , 22, 3914-3920		18
512	Room-Temperature Partial Conversion of FAPbI_3 Perovskite Phase via PbI_2 Solvation Enables High-Performance Solar Cells. 2020 , 30, 1907442		27
511	Local Order and Rotational Dynamics in Mixed A-Cation Lead Iodide Perovskites. 2020 , 11, 1068-1074		17
510	High crystallinity and photovoltaic performance of CsPbI_3 film enabled by secondary dimension. 2020 , 48, 181-186		9
509	Graphene-mediated enhanced Raman scattering and coherent light lasing from CsPbI_3 perovskite nanorods. 2020 , 70, 104497		2
508	Tailoring C for Efficient Inorganic CsPbI_2Br Perovskite Solar Cells and Modules. 2020 , 32, e1907361		54
507	Low-temperature interfacial engineering for flexible CsPbI_2Br perovskite solar cells with high performance beyond 15%. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 5308-5314	13	26
506	Metal composition influences optoelectronic quality in mixed-metal lead-free triiodide perovskite solar absorbers. 2020 , 13, 1776-1787		50
505	Critical role of interface contact modulation in realizing low-temperature fabrication of efficient and stable CsPbI_2Br perovskite solar cells. 2020 , 394, 124903		77
504	Insights on the opto-electronic structure of the inorganic mixed halide perovskites $\text{CsPb}(\text{I}_{1-x}\text{Br}_x)_3$ with low symmetry black phase. 2020 , 832, 154847		9
503	Effect of lead thiocyanate ions on performance of tin-based perovskite solar cells. 2020 , 458, 228067		9
502	Enhanced Thermoelectric Performance in Lead-Free Inorganic $\text{CsSn}_{1-x}\text{Ge}_x\text{I}_3$ Perovskite Semiconductors. 2020 , 124, 11749-11753		24
501	Organic functional materials: recent advances in all-inorganic perovskite solar cells. 2020 , 4, 2134-2148		6
500	Strain-induced structural phase transition, electric polarization and unusual electric properties in photovoltaic materials CsMI (M = Pb, Sn).. 2020 , 10, 12432-12438		2
499	Black phosphorus quantum dots in inorganic perovskite thin films for efficient photovoltaic application. 2020 , 6, eayy5661		49
498	Inorganic Halide Perovskite Solar Cells: Progress and Challenges. 2020 , 10, 2000183		111
497	Experimental Determination of Complex Optical Constants of Air-Stable Inorganic CsPbI_3 Perovskite Thin Films. 2020 , 14, 2000070		7
496	Low-Dimensional Lead-Free Inorganic Perovskites for Resistive Switching with Ultralow Bias. 2020 , 30, 2002110		40

495	An Environmentally Stable Organic-Inorganic Hybrid Perovskite Containing Py Cation with Low Trap-State Density. 2020 , 10, 272		4
494	A-Site Rubidium Cation-Incorporated CsPbI ₂ Br All-Inorganic Perovskite Solar Cells Exceeding 17% Efficiency. 2020 , 4, 2000164		61
493	High performance CsPbBr ₃ quantum dots photodetectors by using zinc oxide nanorods arrays as an electron-transport layer. 2020 , 116, 162103		60
492	A facile surface passivation method for efficient inorganic CsPbI ₂ Br perovskite solar cells with efficiencies over 15%. 2020 , 63, 719-727		17
491	In situ observation of Γ -phase suppression by lattice strain in all-inorganic perovskite solar cells. 2020 , 73, 104803		13
490	Combustion-processed NiO/ALD TiO ₂ bilayer as a novel low-temperature electron transporting material for efficient all-inorganic CsPbI ₂ Br solar cell. 2020 , 203, 10-18		7
489	Vacuum-Controlled Growth of CsPbI ₂ Br for Highly Efficient and Stable All-Inorganic Perovskite Solar Cells. 2020 , 12, 21539-21547		7
488	Mediator-Antisolvent Strategy to Stabilize All-Inorganic CsPbI ₃ for Perovskite Solar Cells with Efficiency Exceeding 16%. 2020 , 5, 1619-1627		31
487	Quasi-quantum dot-induced stabilization of Γ -CsPbI ₃ perovskite for high-efficiency solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 10226-10232	13	9
486	Moisture-tolerant and high-quality Γ -CsPbI ₃ films for efficient and stable perovskite solar modules. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 9597-9606	13	33
485	Optimizing Band Gap of Inorganic Halide Perovskites by Donor-Acceptor Pair Codoping. 2020 , 59, 6053-6059		4
484	Low-Temperature Processed Carbon Electrode-Based Inorganic Perovskite Solar Cells with Enhanced Photovoltaic Performance and Stability. 2021 , 4, 95-102		10
483	Dimethylammonium: An A-Site Cation for Modifying CsPbI ₃ . 2021 , 5, 2000599		10
482	Interface engineering, the trump-card for CsPbX ₃ (X=I, Br) perovskite solar cells development. 2021 , 79, 105490		8
481	Electron reflection effect in the perovskite solar cells. 2021 , 323, 114111		
480	Emerging perovskite quantum dot solar cells: feasible approaches to boost performance. 2021 , 14, 224-261		39
479	A Low-Temperature Additive-Involved Leaching Method for Highly Efficient Inorganic Perovskite Solar Cells. 2021 , 11, 2002754		16
478	Ionic liquid reducing energy loss and stabilizing CsPbI ₂ Br solar cells. 2021 , 81, 105631		28

477	Is the strain responsible to instability of inorganic perovskites and their photovoltaic devices?. 2021 , 19, 100601	9
476	Research and progress of black metastable phase CsPbI ₃ solar cells. 2021 , 5, 1221-1235	13
475	Enhancing Built-In Electric Field and Defect Passivation through Gradient Doping in Inverted CsPbI ₂ Br Perovskite Solar Cells. 2021 , 5, 2000629	14
474	Recent advances in resistive random access memory based on lead halide perovskite. 2021 , 3, 293-315	29
473	Exotic Structural and Optoelectronic Properties of Layered Halide Double Perovskite Polymorphs. 2021 , 31, 2008620	2
472	Effects of A site doping on the crystallization of perovskite films. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1372-1394	13 14
471	Roles of Organic Molecules in Inorganic CsPbX ₃ Perovskite Solar Cells. 2021 , 11, 2002940	25
470	Epitaxial halide perovskite-based materials for photoelectric energy conversion. 2021 , 14, 127-157	17
469	Structural Properties and Stability of Inorganic CsPbI ₃ Perovskites. 2021 , 2, 2000089	13
468	Surface Engineering of Ambient-Air-Processed Cesium Lead Triiodide Layers for Efficient Solar Cells. 2021 , 5, 183-196	152
467	Screening of perovskite materials for solar cell applications by first-principles calculations. 2021 , 198, 109387	5
466	Photovoltaic Performance Enhancement of All-Inorganic CsPbBr ₃ Perovskite Solar Cells Using In ₂ S ₃ as Electron Transport Layer via Facile Reflux-Condensation Process. 2021 , 218, 2000665	2
465	Strain Engineering of Metal Halide Perovskites toward Efficient Photovoltaics: Advances and Perspectives. 2021 , 5, 2000672	9
464	Low-cost air-stable perovskite solar cells by incorporating inorganic materials. 2021 , 45, 788-795	0
463	B-site doping of CsPbI ₃ quantum dot to stabilize the cubic structure for high-efficiency solar cells. 2021 , 421, 127822	7
462	Band gaps of the solar perovskites photovoltaic CsXCl ₃ (X=Sn, Pb or Ge). 2021 , 122, 105484	30
461	CsPbBrI ₂ perovskites with low energy loss for high-performance indoor and outdoor photovoltaics. 2021 , 66, 347-353	19
460	Effect of doping on the phase stability and photophysical properties of CsPbIBr perovskite thin films.. 2021 , 11, 1440-1449	3

459	Potential development of all-inorganic perovskites. 2021 , 16, 1		1
458	Stability of the CsPbI ₃ perovskite: from fundamentals to improvements. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 11124-11144	13	26
457	ZnO nanowire embedded TiO film as an electrode for perovskite CsPbI ₃ solar cells.. 2021 , 11, 19705-19711		1
456	Performance of 2-bromoterephthalic acid passivated all-inorganic perovskite cells. 2021 , 70, 128803-128803		1
455	Structural, electronic, optical, thermoelectric, and transport properties of indium-based double perovskite halides Cs ₂ InAgX ₆ (X = Cl, Br, I) for energy applications. 2021 , 127, 1		11
454	Electronic effects of nano-confinement in functional organic and inorganic materials for optoelectronics. 2021 , 50, 3585-3628		12
453	Advent of alkali metal doping: a roadmap for the evolution of perovskite solar cells. 2021 , 50, 2696-2736		34
452	High-efficiency and thermal/moisture stable CsPbI _{2.84} Br _{0.16} inorganic perovskite solar cells enabled by a multifunctional cesium trimethylacetate organic additive. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 4922-4932	13	4
451	Theoretical study of the influence of doped niobium on the electronic properties of CsPbBr ₃ . 2021 , 3, 1910-1916		1
450	The effect of temperature and time on the properties of 2D Cs ₂ ZnBr ₄ perovskite nanocrystals and their application in a Schottky barrier device. 2021 , 9, 6022-6033		2
449	Recent progress in tailoring the properties of inorganic CsPbX ₃ perovskites with functional organic compounds: a route to enhanced efficiency and operational stability in CsPbX ₃ -based photovoltaics. 2021 , 9, 9377-9399		4
448	Electronic and optical properties of halide double-perovskites under strain: a density functional study. 1-13		1
447	Dye-Sensitized and Perovskite Solar Cells: Theory and Applications. 2021 , 558-594		
446	Suppressed Degradation and Enhanced Performance of CsPbI Perovskite Quantum Dot Solar Cells via Engineering of Electron Transport Layers. 2021 , 13, 6119-6129		14
445	Phase stability investigation of CsPbI ₃ perovskite for solar cell application. 2021 ,		0
444	Influence of an SCN- moiety on the electronic properties of ECsPb(SCN) _x Br _{3-x} and the performance of carbon-based HTL-free ECsPb(SCN) _x Br _{3-x} perovskite solar cells. 2021 , 32, 1557-1569		1
443	Beneficial effects of cesium acetate in the sequential deposition method for perovskite solar cells. 2021 , 13, 11478-11487		8
442	Preserving a robust CsPbI perovskite phase via pressure-directed octahedral tilt. 2021 , 12, 461		31

441	Inorganic hole transport layers in inverted perovskite solar cells: A review. 2021 , 2, 1081-1116		16
440	Alkali metal iodides and hydroiodic acid additives for phase-stability CsPbI ₃ films prepared at low temperature. 2021 , 70, 118401-118401		
439	Raman spectroscopy insights into the band phases of formamidinium lead iodide (FAPbI ₃). 2021 , 50, 3315-3323		1
438	The Optimization and Photovoltaic Properties of CsPbI ₃ /xBr _x Perovskite Thin Films. 2021 , 10, 20-30		0
437	Gradient-Band Alignment Homojunction Perovskite Quantum Dot Solar Cells. 2021 , 12, 1018-1024		16
436	All-inorganic perovskite quantum dots as light-harvesting, interfacial, and light-converting layers toward solar cells. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 18947-18973	13	2
435	Anion Substitution Effects on the Structural, Electronic, and Optical Properties of Inorganic CsPb(I _{1-x} Br _x) ₃ and CsPb(Br _{1-x} Cl _x) ₃ Perovskites: Theoretical and Experimental Approaches. 2021 , 125, 886-897		12
434	Implementing Dopant-Free Hole-Transporting Layers and Metal-Incorporated CsPbI ₃ Br for Stable All-Inorganic Perovskite Solar Cells. 2021 , 6, 778-788		21
433	Antisolvent engineering on low-temperature processed CsPbI ₃ inorganic perovskites for improved performances of solar cells. 2021 , 32, 185402		2
432	Water mediated synthesis of phase-stable red-emitting CsPbI ₃ nanocrystals. 2021 , 36, 1824-1834		
431	Fully Air-Processed Dynamic Hot-Air-Assisted M:CsPbI ₂ Br (M: Eu ²⁺ , In ³⁺) for Stable Inorganic Perovskite Solar Cells. 2021 , 4, 635-653		53
430	Tunable Rashba Spin Splitting in Two-Dimensional Polar Perovskites. 2021 , 12, 1932-1939		4
429	Formation and Stabilization of Inorganic Halide Perovskites for Photovoltaics. 2021 , 4, 528-551		8
428	Stable Terahertz In Situ Photo-Writable Electrically Erasable Memory with a CsPbI ₃ :Ag/SnO ₂ /PEDOT:PSS Hybrid Structure. 2021 , 3, 1006-1014		1
427	Reversible Pb ²⁺ /Pb ⁰ and I ⁻ /I ₃ ⁻ Redox Chemistry Drives the Light-Induced Phase Segregation in All-Inorganic Mixed Halide Perovskites. 2021 , 11, 2002934		22
426	1D Perovskitoid as Absorbing Material for Stable Solar Cells. 2021 , 11, 241		7
425	Lead-Free Metal Halide Perovskites for Hydrogen Evolution from Aqueous Solutions. 2021 , 11,		6
424	Atomic and electronic structure of cesium lead triiodide surfaces. 2021 , 154, 074712		1

423	Stable CsPbI ₃ -Mesoporous Alumina Composite Thin Film at Ambient Condition: Preparation, Characterization, and Study of Ultrafast Charge-Transfer Dynamics. 2021 , 125, 3285-3294	3
422	Europium Addition Reduces Local Structural Disorder and Enhances Photoluminescent Yield in Perovskite CsPbBr ₃ . 2021 , 9, 2002221	1
421	Grain Transformation and Degradation Mechanism of Formamidinium and Cesium Lead Iodide Perovskite under Humidity and Light. 2021 , 6, 934-940	28
420	DFT and TDDFT studies of the new inorganic perovskite CsPbI ₃ for solar cell applications. 2021 , 766, 138347	22
419	Inorganic Ammonium Halide Additive Strategy for Highly Efficient and Stable CsPbI ₃ Perovskite Solar Cells. 2021 , 31, 2010813	31
418	An aerosol-liquid-solid process for the general synthesis of halide perovskite thick films for direct-conversion X-ray detectors. 2021 , 4, 942-954	32
417	Commercial Carbon-Based all-Inorganic Perovskite Solar Cells with a High Efficiency of 13.81%: Interface Engineering and Photovoltaic Performance. 2021 , 4, 3255-3264	3
416	Effects of Fe doping on the visible light absorption and bandgap tuning of lead-free (CsSnCl ₃) and lead halide (CsPbCl ₃) perovskites for optoelectronic applications. 2021 , 11, 035229	3
415	Metastable δ -CsPbI ₃ Perovskite Nanocrystals Created Using Aged Orthorhombic CsPbBr ₃ . 2021 , 125, 7109-7118	4
414	Crystal Symmetry and Static Electron Correlation Greatly Accelerate Nonradiative Dynamics in Lead Halide Perovskites. 2021 , 12, 2444-2453	4
413	First-principles study on the geometric, electronic and thermodynamic properties of the CsPbI ₃ (001) surfaces. 2021 , 692, 022020	0
412	Photostrictive Effect: Characterization Techniques, Materials, and Applications. 2021 , 31, 2010706	6
411	Long-term stability in δ -CsPbI ₃ perovskite via an ultraviolet-curable polymer network. 2021 , 2,	2
410	Lanthanide Stabilized All-Inorganic CsPbI ₂ Br Perovskite Solar Cells with Superior Thermal Resistance. 2021 , 4, 3937-3944	10
409	Interfacial Enhancement of Photovoltaic Performance in MAPbI/CsPbI Superlattice. 2021 , 13, 14679-14687	5
408	Organic Tetrabutylammonium Cation Intercalation to Heal Inorganic CsPbI ₃ Perovskite. 2021 , 133, 12459-12463	1
407	Efficient Stabilization and Passivation for Low-Temperature-Processed δ -CsPbI Solar Cells. 2021 , 13, 18784-18794	1
406	Organic Tetrabutylammonium Cation Intercalation to Heal Inorganic CsPbI Perovskite. 2021 , 60, 12351-12355	32

405	Structural Stability of Formamidinium- and Cesium-Based Halide Perovskites. 2021 , 6, 1942-1969	31
404	Control over Light Soaking Effect in All-Inorganic Perovskite Solar Cells. 2021 , 31, 2101287	10
403	Ab-initio calculation of cubic and tetragonal phase of CsPbI ₃ perovskite. 2021 , 1869, 012206	
402	Encapsulated Passivation of Perovskite Quantum Dot (CsPbBr ₃) Using a Hot-Melt Adhesive (EVA-TPR) for Enhanced Optical Stability and Efficiency. 2021 , 11, 419	3
401	Vapor-deposited CsPbI ₃ solar cells demonstrate an efficiency of 16%. 2021 , 66, 757-760	7
400	Theoretical Study on the Carrier Mobility and Optical Properties of CsPbI ₃ by DFT. 2021 , 6, 11545-11555	9
399	Effect of Capping Ligand Engineering on Transport Properties and Carrier Dynamics in Cubic CsPbI ₃ Nanocrystal Film. 2021 , 125, 10539-10548	1
398	Defect engineering on all-inorganic perovskite solar cells for high efficiency. 2021 , 42, 050203	10
397	Chalcogenide perovskites for photovoltaics: current status and prospects. 2021 , 3, 034010	9
396	Exploring inorganic and nontoxic double perovskites Cs ₂ AgInBr ₆ (1-x)Cl _{6x} from material selection to device design in material genome approach. 2021 , 862, 158575	4
395	All-Inorganic Halide Perovskite Nanocrystals: Future Prospects and Challenges to Go Lead Free. 2021 , 218, 2100185	1
394	Probing the Electron Beam-Induced Structural Evolution of Halide Perovskite Thin Films by Scanning Transmission Electron Microscopy. 2021 , 125, 10786-10794	4
393	Pressure induced semiconductor to metal phase transition in cubic CsSnBr ₃ perovskite. 2021 , 11, 055024	5
392	Low-temperature preparation achieving 10.95%-efficiency of hole-free and carbon-based all-inorganic CsPbI ₃ perovskite solar cells. 2021 , 862, 158454	11
391	Theoretical Investigation of CsBX ₃ (B = Pb, Sn; X = I, Br, Cl) Using TranBlaha Modified BeckeJohnson Approximation for Flexible Photoresponsive Memristors. 2021 , 4, 2100011	5
390	Fabrication of Porous Lead Bromide Films by Introducing Indium Tribromide for Efficient Inorganic CsPbBr Perovskite Solar Cells. 2021 , 11,	0
389	Improving Photovoltaic Performance of Pb-Less Halide Perovskite Solar Cells by Incorporating Bulky Phenylethylammonium Cations. 2021 , 9, 2100176	
388	All-Inorganic Cesium-Based Hybrid Perovskites for Efficient and Stable Solar Cells and Modules. 2021 , 11, 2100672	18

387	First-principles calculations of electronic, optical and transport properties of the inorganic metal halide perovskite CsBi ₂ Br (B = Sn, Ge, Pb) compounds. 2021 , 126, 105657	2
386	Structural, Electronic and Optical Properties of Inorganic Perovskite CsPb(1-x)GexI ₃ : A First Principle Approach. 1-5	2
385	Exploring the Structural Competition between the Black and the Yellow Phase of CsPbI ₃ . 2021 , 11,	3
384	CsPbI ₃ Perovskite Quantum Dot Solar Cells with Both High Efficiency and Phase Stability Enabled by Br Doping. 2021 , 4, 6688-6696	4
383	Maximizing the performance of single and multijunction MA and lead-free perovskite solar cell. 2021 , 20, 100647	7
382	Atomistic Insights Into the Degradation of Inorganic Halide Perovskite CsPbI ₃ : A Reactive Force Field Molecular Dynamics Study. 2021 , 12, 5519-5525	7
381	Intermediate phase-enhanced Ostwald ripening for the elimination of phase segregation in efficient inorganic CsPbI ₂ Br perovskite solar cells. 2021 , 64, 2655-2666	4
380	Insights into the impact of Mn doped inorganic CsPbBr ₃ perovskite on electronic structures and magnetism for photovoltaic application. 2021 , 100796	6
379	Influence of Metal-Ion Replacement on the Phase Stabilization of Cubic All-Inorganic Cesium Lead Halide Perovskites: an Ab Initio Thermodynamic Formalism for Solution-Processed Cation Doping. 2021 , 125, 13195-13211	2
378	Composition manipulation boosts the efficiency of carbon-based CsPbI ₃ perovskite solar cells to beyond 14%. 2021 , 84, 105881	19
377	Carbon-based all-inorganic perovskite solar cells: Progress, challenges and strategies toward 20% efficiency. 2021 ,	6
376	Preparation of nanoscale inorganic CsPbI _x Br _{3-x} perovskite photosensitizers on the surface of mesoporous TiO ₂ film for solid-state sensitized solar cells. 2021 , 551, 149387	2
375	Pressure induced mechanical, opto-electronics, and transport properties of ZnHfO ₃ oxide for solar cell and energy harvesting devices. 2021 , 8, 065504	1
374	Research progress of absorber film of inorganic perovskite solar cells: Fabrication techniques and additive engineering in defect passivation. 2021 , 127, 105666	10
373	All-inorganic perovskite solar cells with efficiency >20%. 2021 , 64, 2624-2626	3
372	Enhanced Efficiency and Stability of All-Inorganic CsPbI ₃ Br Perovskite Solar Cells by Organic and Ionic Mixed Passivation. 2021 , 8, e2101367	27
371	Ionic conduction and relaxation mechanisms in three-dimensional CsPbCl ₃ perovskite. 2021 , 129, 234102	4
370	Pseudo-Halide Perovskite Solar Cells. 2021 , 11, 2100818	16

- 369 All-Evaporated, All-Inorganic CsPbI Perovskite-Based Devices for Broad-Band Photodetector and Solar Cell Applications. **2021**, 3, 3023-3033 4
- 368 Theoretical study of mixed-halide influence on the stability and electronic properties of CsCd(Cl/Br)₃. **2021**, 1200, 113251 0
- 367 Surface Reconstruction-Induced Efficient CsPbI₂Br Perovskite Solar Cell using Phenylethylammonium Iodide. **2021**, 4, 5583-5589 1
- 366 Simulation and optimization studies on CsPbI₃ based inorganic perovskite solar cells. **2021**, 221, 99-108 11
- 365 Current Development toward Commercialization of Metal-Halide Perovskite Photovoltaics. **2021**, 9, 2100390 9
- 364 Advances in cesium lead iodide perovskite solar cells: Processing science matters. **2021**, 47, 156-169 9
- 363 Synthesis and photoluminescence kinetics of Ce³⁺-doped CsPbI₃ QDs with near-unity PLQY. **2021**, 14, 3352-3357 7
- 362 Unraveling All-Inorganic CsPbI₃ and CsPbI₂Br Perovskite Thin Films Formation [Black Phase Stabilization by Cs₂PbCl₂I₂ Addition and Flash-Annealing. **2021**, 2021, 3059-3073 4
- 361 Kinetics of moisture-induced phase transformation in inorganic halide perovskite. **2021**, 4, 2392-2402 9
- 360 Fluorescence enhancement of perovskite nanocrystals by flexible photonic crystals and its application in optical strain gauge. **2021**, 119, 033302 3
- 359 Electronic coupling between the unoccupied states of the organic and inorganic sublattices of methylammonium lead iodide: A hybrid organic-inorganic perovskite single crystal. **2021**, 104, 2
- 358 The Vibrational and Thermodynamic Properties of CsPbI Polymorphs: An Improved Description Based on the SCAN meta-GGA Functional. **2021**, 12, 6613-6621 5
- 357 Effects of pressure on narrowing the band gap, visible light absorption, and semi-metallic transition of lead-free perovskite CsSnBr₃ for optoelectronic applications. **2021**, 154, 110083 9
- 356 Ion Migration in Metal Halide Perovskites. 0
- 355 Ligand-Assisted Sulfide Surface Treatment of CsPbI₃ Perovskite Quantum Dots to Increase Photoluminescence and Recovery. **2021**, 8, 1979-1987 10
- 354 Can Vacuum Deposition Apply to Bismuth-Doped δ -CsPbI Perovskite? Revealing the Role of Bi in the Formation of Black Phase. **2021**, 12, 6927-6933 0
- 353 Effect of heterovalent doping on photostimulated defect formation in CsPbBr₃. **2021**, 31, 465-468 1
- 352 A roadmap towards stable perovskite solar cells: prospective on substitution of organic (A) & inorganic (B) cations. **2021**, 32, 18466-18511 0

351	Using 4-Chlorobenzoic Acid Layer Toward Stable and Low-Cost CsPbI ₂ Br Perovskite Solar Cells. 2021 , 5, 2100347	1
350	Demystifying phase transformations in metal halide perovskites. 2021 , 4, 2627-2629	1
349	Cesium manganese chloride: Stable lead-free perovskite from bulk to single layer. 2021 , 531, 167845	1
348	Electronic and optical properties of the SnO ₂ /CsPbI ₃ interface: Using first principles calculations. 2021 , 374, 208-213	4
347	Secondary crystallization strategy for highly efficient inorganic CsPbI ₂ Br perovskite solar cells with efficiency approaching 17%. 2021 , 63, 558-558	7
346	Simulation studies of lead-free Mn-based 2D perovskite solar cells. 2021 , 36, 095043	2
345	Constructing All-Inorganic Perovskite/Fluoride Nanocomposites for Efficient and Ultra-Stable Perovskite Solar Cells. 2106386	8
344	Pressure-induced band gap tuning in Cs ₂ TiBr ₆ : A theoretical study. 2021 , 300, 122244	1
343	Highly Stable Inorganic Lead Halide Perovskite toward Efficient Photovoltaics. 2021 , 54, 3452-3461	9
342	Minimizing Open-Circuit voltage deficit via interface engineering for highly efficient CsPbI ₂ Br perovskite solar cells. 2021 , 417, 129247	8
341	Study of optical and thermoelectric properties of ZYbI ₃ (Z = Rb, Cs) for solar cells and renewable energy; Modelling by density functional theory. 2021 , 155, 110117	6
340	Study of the solar perovskite CsMBr ₃ (M=Pb or Ge) photovoltaic materials: Band-gap engineering. 2021 , 118, 106679	3
339	First-principles investigation of CO ₂ , CO, and O ₂ adsorptions on the (001)-reconstructed surfaces of CsPbX ₃ (X = Cl, Br, and I) perovskites. 2021 , 25, 101264	1
338	Chlorides, other Halides, and Pseudo-Halides as Additives for the Fabrication of Efficient and Stable Perovskite Solar Cells. 2021 , 14, 3665-3692	5
337	X-Ray imager of 26- μ m resolution achieved by perovskite assembly. 1	10
336	Tuning of the Interconnecting Layer for Monolithic Perovskite/Organic Tandem Solar Cells with Record Efficiency Exceeding 21. 2021 , 21, 7845-7854	8
335	A Perspective on the Commercial Viability of Perovskite Solar Cells. 2021 , 5, 2100401	10
334	The Effect of Structural Phase Transitions on Electronic and Optical Properties of CsPbI ₃ Pure Inorganic Perovskites. 2021 , 11, 1173	0

- 333 Two-Dimensional Materials for Advanced Solar Cells.
- 332 Defects in CsPbX Perovskite: From Understanding to Effective Manipulation for High-Performance Solar Cells.. **2021**, 5, e2100725 11
- 331 Organic Matrix Assisted Low-temperature Crystallization of Black Phase Inorganic Perovskites. 1
- 330 Interfaces and Interfacial Layers in Inorganic Perovskite Solar Cells. 1
- 329 Optical and structure properties of CH₃NH₃PbI₃ perovskite films doped with Cesium.
- 328 Efficient and Stable CsPbI Inorganic Perovskite Photovoltaics Enabled by Crystal Secondary Growth. **2021**, 33, e2103688 24
- 327 Rational Surface-Defect Control via Designed Passivation for High-Efficiency Inorganic Perovskite Solar Cells. **2021**, 60, 23164-23170 50
- 326 Interfaces and Interfacial Layers in Inorganic Perovskite Solar Cells. **2021**, 60, 26440-26453 16
- 325 Recent Progress on All-Inorganic Metal Halide Perovskite Solar Cells. **2021**, 100143 5
- 324 Dual-Interface Modification with BMIMPF₆ for High-Efficiency and Stable Carbon-Based CsPbI₂Br Perovskite Solar Cells. **2021**, 4, 9294-9303 9
- 323 Rational Surface-Defect Control via Designed Passivation for High-Efficiency Inorganic Perovskite Solar Cells. **2021**, 133, 23348 16
- 322 Inorganic perovskites improved film and crystal quality of CsPbI₂Br₂ when doped with rubidium. **2021**, 32, 24825 1
- 321 Current status on synthesis, properties and applications of CsPbX(X=Cl, Br, I) perovskite quantum dots/nanocrystals. **2021**, 32, 3
- 320 Organic Matrix Assisted Low-temperature Crystallization of Black Phase Inorganic Perovskites. **2021**, 9
- 319 Interface Engineering for All-Inorganic CsPbI₂Br₂ Perovskite Solar Cells with Enhanced Power Conversion Efficiency over 11%. 2100562 5
- 318 Size mismatch induces cation segregation in CsPbI₃: Forming energy level gradient and 3D/2D heterojunction promotes the efficiency of carbon-based perovskite solar cells to over 15%. **2021**, 89, 106411 11
- 317 Unraveling the hysteretic behavior at double cations-double halides perovskite - electrode interfaces. **2021**, 89, 106428 3
- 316 Design of (C₃N₂H₅)(1-x)Cs_xPbI₃ as a novel hybrid perovskite with strong stability and excellent photoelectric performance: A theoretical prediction. **2021**, 233, 111401 3

315	CsPbI ₃ quantum dots/polypyrrole microrod 0D/1D heterostructure: Synthesis, formation mechanism and enhanced charge transport property. 2021 , 274, 125193	1
314	Influence of surface passivation on perovskite CsPbBr _{1.2} I _{1.8} quantum dots and application of high purity red light-emitting diodes. 2022 , 892, 162140	7
313	Large-Area Synthesis and Patterning of All-Inorganic Lead Halide Perovskite Thin Films and Heterostructures. 2021 , 21, 1454-1460	12
312	First-principles study on the electronic and optical properties of the orthorhombic CsPbBr ₃ and CsPbI ₃ with Cmcm space group. 2021 , 45, 15857-15862	1
311	Wide-bandgap organic/inorganic hybrid and all-inorganic perovskite solar cells and their application in all-perovskite tandem solar cells.	25
310	Polymorphism in metal halide perovskites. 2021 , 2, 47-63	9
309	Narrowing bandgap and enhanced mechanical and optoelectronic properties of perovskite halides: Effects of metal doping. 2021 , 11, 015052	9
308	Influence of molybdenum and technetium doping on visible light absorption, optical and electronic properties of lead-free perovskite CsSnBr for optoelectronic applications.. 2021 , 11, 2405-2414	8
307	Composition and dimension dependent static and dynamic stabilities of inorganic mixed halide antimony perovskites.	1
306	The metal doping strategy in all inorganic lead halide perovskites: synthesis, physicochemical properties, and optoelectronic applications. 2021 , 13, 18010-18031	6
305	A synergistic Cs ₂ CO ₃ ETL treatment to incorporate Cs cation into perovskite solar cells via two-step scalable fabrication. 2021 , 9, 4367-4377	5
304	Engineering inorganic lead halide perovskite deposition toward solar cells with efficiency approaching 20%. 2021 , 2, 66-83	12
303	Highly Mobile Large Polarons in Black Phase CsPbI ₃ . 2021 , 6, 568-573	14
302	A review on the stability of inorganic metal halide perovskites: challenges and opportunities for stable solar cells. 2021 , 14, 2090-2113	63
301	Photon-Induced Reversible Phase Transition in CsPbBr ₃ Perovskite. 2019 , 29, 1807922	37
300	Guanidinium-Assisted Surface Matrix Engineering for Highly Efficient Perovskite Quantum Dot Photovoltaics. 2020 , 32, e2001906	67
299	High Stability and Temperature-Dependent Photoluminescence of Orthorhombic CsPbI ₃ Perovskite Nanoparticles. 2020 , 8, 2000498	15
298	Morphology Controlling of All-Inorganic Perovskite at Low Temperature for Efficient Rigid and Flexible Solar Cells. 2018 , 8, 1800758	104

297	Electron-Beam-Related Studies of Halide Perovskites: Challenges and Opportunities. 2020 , 10, 1903191	27
296	Soft Template-Controlled Growth of High-Quality CsPbI ₃ Films for Efficient and Stable Solar Cells. 2020 , 10, 1903751	60
295	Perovskite Photovoltaics: From Laboratory to Industry. 2020 , 219-255	7
294	Effect of B-site doping on the phase and thermal stability of CsPbI ₃ perovskite. 2020 , 752, 137572	5
293	Study of pressure induced physical properties of ZnZrO ₃ perovskite using density functional theory. 2020 , 753, 137601	7
292	Effects of Cr- and Mn-alloying on the band gap tuning, and optical and electronic properties of lead-free CsSnBr perovskites for optoelectronic applications.. 2020 , 10, 43660-43669	9
291	HI hydrolysis-derived intermediate as booster for CsPbI ₃ perovskite: from crystal structure, film fabrication to device performance. 2020 , 41, 051202	12
290	Emergence of hidden phases of methylammonium lead iodide (CH ₃ NH ₃ PbI ₃) upon compression. 2018 , 2,	7
289	Material design of indium-based compounds: Possible candidates for charge, valence, and bond disproportionation and superconductivity. 2019 , 3,	6
288	Common acoustic phonon lifetimes in inorganic and hybrid lead halide perovskites. 2019 , 3,	8
287	First-principles study on material properties and stability of inorganic halide perovskite solid solutions CsPb(I _{1-x} Br _x) ₃ . 2020 , 4,	6
286	Density functional theory study of mixed halide influence on structures and optoelectronic attributes of CsPb(I/Br). 2020 , 59, 3751-3759	5
285	Investigation of CsPbBr ₃ films with controllable morphology and its influence on the photovoltaic properties for carbon-based planar perovskite solar cells. 2020 , 59, 5481	1
284	Superior single-mode lasing in a self-assembly CsPbX ₃ microcavity over an ultrawide pumping wavelength range. 2021 , 9, 54	7
283	Lead-free metal-halide double perovskites: from optoelectronic properties to applications. 2021 , 10, 2181-2219	9
282	Review of Perovskite Solar Cells Using Metal-Organic Framework Materials. 2020 , 23, 358-388	1
281	Interfacial Modification of Mesoporous TiO Films with Pbi-Ethanolamine-Dimethyl Sulfoxide Solution for CsPbI ₃ Perovskite Solar Cells. 2020 , 10,	3
280	The effect of divalent europium doping on stability and electronic properties of CH ₃ NH ₃ PbI ₃ : a theoretical investigation. 2020 , 13, 101001	1

279	Gold nanoparticles modified indium tin oxide anode for high performance red perovskite light emitting diodes. 2021 , 70, 207803-207803	0
278	Interface modification of an electron transport layer using europium acetate for enhancing the performance of P3HT-based inorganic perovskite solar cells. 2021 , 23, 23818-23826	2
277	Research Progress of Hole Transport Materials Based on Spiro Aromatic-Skeleton in Perovskite Solar Cells. 2021 , 79, 1181	0
276	Highly Luminescent and Phase-Stable Red/NIR-Emitting All-Inorganic and Hybrid Perovskite Nanocrystals. 3780-3787	6
275	Organic additives in all-inorganic perovskite solar cells and modules: from moisture endurance to enhanced efficiency and operational stability. 2021 , 67, 361-361	4
274	Deep-Red Perovskite Light-Emitting Diodes Based on One-Step-Formed CsPbI_3 Cuboid Crystallites. 2021 , 33, e2105699	8
273	Insight into the Role of Guanidinium and Cesium in Triple Cation Lead Halide Perovskites. 2100586	0
272	Emerging Perovskite Solar Cell Technology: Remedial Actions for the Foremost Challenges. 2101085	11
271	Bimetallic superalkali substitution in the CsPbBr_3 perovskite: Pseudocubic phases and tunable bandgap. 2021 , 155, 174307	0
270	Increasing Efficiency of Nonadiabatic Molecular Dynamics by Hamiltonian Interpolation with Kernel Ridge Regression. 2021 , 125, 9191-9200	5
269	A Systematic Review of Metal Halide Perovskite Crystallization and Film Formation Mechanism Unveiled by In Situ GIWAXS. 2021 , e2105290	21
268	Enhancing the stability and crystallinity of CsPbI_2Br through antisolvent engineering. 2021 , 56, 20071	2
267	Structural, optical, and electrical properties of tin iodide-based vacancy-ordered-double perovskites synthesized via mechanochemical reaction. 2021 ,	
266	Anchoring CsPbI_3 crystalline for stable and efficient perovskite solar cells with perfluorocarbon-assisted shield. 2021 , 228, 636-642	
265	High-performance CsPbI_3 perovskite solar cells without additives in air condition. 2021 , 228, 405-412	3
264	Elastic, electronic, optical and thermoelectric properties of perovskite: BaTbO_3 . 2021 , 29, 102896	0
263	Review on perovskite silicon tandem solar cells: Status and prospects 2T, 3T and 4T for real world conditions. 2021 , 211, 110138	6
262	Polymer-Passivated Inorganic Cesium Lead Halide Perovskites for High-Voltage and High-Efficiency Solar Cells.	

- 261 Research progress of solution processed all-inorganic perovskite solar cell. **2019**, 68, 158806 1
- 260 Electron energy band spectrum of CsPbBr₃ and CsPbI₃ crystals modified by spin-orbit interaction. **2019**, 23, 1187-1198 0
- 259 Synthesis and Luminescent Properties of Perovskite Quantum Dots. **2019**, 1410, 012025 0
- 258 Computer-aided synthesis of cost-effective perovskite crystals: an emerging alternative to silicon solar cells. **2020**, 22, 1187-1198 0
- 257 A Universal Dopant-Free Polymeric Hole-Transporting Material for Efficient and Stable All-Inorganic and Organic-Inorganic Perovskite Solar Cells. **2021**, 11, 2003585 5
- 256 Enhancing the performance and stability of carbon-based CsPbI₂Br perovskite solar cells via tetrabutylammonium iodide surface passivation. **2021**, 230, 666-674 4
- 255 Review: Perovskite Photovoltaics. **2020**, 53-63 0
- 254 Organic Dye Passivation for High-Performance All-Inorganic CsPbI_{1.5}Br_{1.5} Perovskite Solar Cells with Efficiency over 14%. **2021**, 11, 2003585 14
- 253 Stable Dy-doped CsPbBr₃ quantum dot glass with enhanced optical performance. **2022**, 575, 121224 4
- 252 Moisture-stimulated reversible thermochromic CsPbI₃-xBr_x films: In-situ spectroscopic-resolved structure and optical properties. **2022**, 573, 151484 0
- 251 Effect of the decrease of Pb concentration on the properties of pentary mixed-halide perovskites CsPb_{8-x}Sn_xIBr₂ and CsPb_{8-x}Sn_xI₂Br (100) for solar-cell applications: A DFT study. **2022**, 161, 110429 0
- 250 Perovskite Quantum Dots for Photovoltaic Applications. **2020**, 243-254 0
- 249 Fiber Perovskite Solar Cells. **2020**, 137-159 0
- 248 Overview of Hybrid Perovskite Solar Cells. **2021**, 29-64 0
- 247 Passivation of Hybrid/Inorganic Perovskite Solar Cells. **2021**, 91-111 0
- 246 Resistance Switching Effect of Memory Device Based on All-Inorganic CsPbBr₃ Perovskite. **2021**, 14, 1187-1198 2
- 245 Density Functional Theory Analysis of Structural, Electronic, and Optical Properties of Mixed-Halide Orthorhombic Inorganic Perovskites. **2021**, 6, 30752-30761 3
- 244 Multi-Junction Perovskite Solar Cells. **2021**, 521-548 0

- 243 The Applications and Functions of Rare-Earth Ions in Perovskite Solar Cells. 0
- 242 All-inorganic Perovskite Solar Cells. **2021**, 175-221 0
- 241 Phase transition dynamics in one-dimensional halide perovskite crystals. 1-7 0
- 240 Observing the stability evolution of $\text{EDMAxCs}_{1-x}\text{PbI}_2\text{Br}$ through precursor incubation. **2020**, 84, 105800 0
- 239 Unraveling the effects of metal incorporation in cubic perovskite SrCoO_3 by partially replacing Co atoms. **2022**, 786, 139208 0
- 238 Spin-coating thermal-pressed strategy for the preparation of inorganic perovskite quasi-single-crystal thin films with giant single-/two-photon responses. **2022**, 92, 106719 3
- 237 Significant phonon anharmonicity drives phase transitions in CsPbI_3 . **2021**, 119, 191101 2
- 236 Research Background and Recent Progress of Perovskite Photovoltaics. **2022**, 1-60 0
- 235 Challenges and strategies of all-inorganic lead-free halide perovskite solar cells. **2021**, 2
- 234 Hybrid Perovskite Degradation from an Optical Perspective: A Spectroscopic Ellipsometry Study from the Deep Ultraviolet to the Middle Infrared. 2101553 2
- 233 All-Inorganic Perovskite Photovoltaics. **2022**, 247-292
- 232 Benign Deep-Level Defects in Cesium Lead Iodine Perovskite. 1
- 231 The Chemical Design in High-Performance Lead Halide Perovskite: Additive vs Dopant?. **2021**, 12, 11636-11644 3
- 230 High-Efficiency Solar Cells with Polyelemental, Multicomponent Perovskite Materials. **2022**, 233-246 0
- 229 Recent Advances in Halide Perovskite-Based Nonvolatile Resistive Random-Access Memory. **2022**, 51, 434 2
- 228 Stabilization Techniques of Lead Halide Perovskite for Photovoltaic Applications. 2100710 3
- 227 Experimental and theoretical investigation of crystal structure of formamidiniumdopperbdiide single crystals grown from aqueous solution. **2021**, 306, 122778 0
- 226 Interfacial engineering of $\text{mp-TiO}_2/\text{CH}_3\text{NH}_3\text{PbI}_3$ with Al_2O_3 : Effect of different phases of alumina on performance and stability of perovskite solar cells. **2021**, 36, 4938 0

225	Phase evolution of all-inorganic perovskite nanowires during its growth from quantum dots. 2021 , 33,	1
224	Physical properties of rare earth perovskites $CeMO_3$ ($M = Co, Cu$) in the context of density functional theory. 2021 , 29, 102973	2
223	Identifying high-performance and durable methylammonium-free lead halide perovskites via high-throughput synthesis and characterization. 2021 , 14, 6638-6654	4
222	Crystallization kinetics modulation and defect suppression of all-inorganic $CsPbX_3$ perovskite films.	9
221	Solution based low temperature $CsPbI_3$ nanoparticles perovskite solar cells.	1
220	Recent progress in perovskite solar cells: challenges from efficiency to stability. 2022 , 23, 100686	6
219	Extracting ammonium halides by solvent from the hybrid perovskites with various dimensions to promote the crystallization of $CsPbI_3$ perovskite. 2022 , 94, 106925	6
218	Synergistic stabilization of $CsPbI_3$ inorganic perovskite via 1D capping and secondary growth. 2022 , 68, 387-392	1
217	First principles study of electronic, optical, and thermoelectric properties of $K_2Pd(Cl/Br)_6$ for solar cells and renewable energy. 2022 , 97, 035803	1
216	Ab initio study of structural and optical properties of the halide perovskite KBX_3 compound. 1	0
215	Highly Efficient and Stable $CsPbTh$ ($Th = I, Br, Cl$) Perovskite Solar Cells by Combinational Passivation Strategy.. 2022 , e2105103	4
214	Stabilization of Metastable Halide Perovskite Lattices in the 2D Limit.. 2022 , e2108556	7
213	Design and Comparative Performance Analysis of High-Efficiency Lead-Based and Lead-Free Perovskite Solar Cells. 2100606	1
212	Optoelectronic Devices Based on Scaffold Stabilized Black-Phase $CsPbI_3$ Nanocrystals. 2102112	0
211	Stabilizing all-inorganic $CsPbI_3$ perovskite films with polyacrylonitrile for photovoltaic solar cells.	1
210	A facile interface engineering method to improve the performance of $FTO/ZnO/CsPbI_3 \times Br_x$. 2022 , 33, 3711	0
209	Defect calculations using a combined SCAN and hybrid functional in $ECsPbI_3$.. 2022 ,	2
208	Revealing the stability and optoelectronic properties of novel nitride and phosphide semiconductors: A DFT prediction. 2022 , 29, 101740	1

207	Surface passivation for enhancing photovoltaic performance of carbon-based CsPbI ₃ perovskite solar cells. 2022 , 308, 122891	3
206	Theoretical investigation of structural, electronic, and optical properties of halide cubic perovskite CsPbBr _{3-x} I _x . 2022 , 141, 106442	3
205	Flexible hybrid perovskite nanofiber for all-inorganic perovskite solar cells. 2022 , 149, 111747	2
204	Urbach Energy and Open-Circuit Voltage Deficit for Mixed Anion-Cation Perovskite Solar Cells.. 2022 ,	7
203	Bandgap engineering and optoelectronic properties of all-inorganic lead-free Pd-based double perovskites. 2022 , 15, 103785	0
202	Strain-induced cesium bismuth bromide perovskite/bismuth oxide bromide composite with enhanced optical properties. 2022 ,	
201	First-principles Calculations to Investigate Structural, Electronics, Optical and Elastic Properties of Sn-based Inorganic Halide-perovskites CsSnX ₃ (X = I, Br, Cl) for Solar Cell Applications. 2022 , 113624	2
200	Stokes Shift in Inorganic Lead Halide Perovskites: Current Status and Perspective.. 2022 , e202100285	3
199	Revealing the influence of B-site doping on the physical properties of CsPbI ₃ : A DFT investigation. 2022 , 309, 122956	2
198	Boosting Performance of CsPbI ₃ Perovskite Solar Cells via the Synergy of Hydroiodic Acid and Deionized Water. 2022 , 3, 2100149	1
197	Structural, Elastic and Optoelectronic Properties of Inorganic Cubic Frbx ₃ (B = Ge, Sn; X = Cl, Br, I) Perovskite: The Density Functional Theory Approach.	
196	Structural, elastic and optoelectronic properties of inorganic cubic FrBX (B = Ge, Sn; X = Cl, Br, I) perovskite: the density functional theory approach.. 2022 , 12, 7961-7972	0
195	Cation substitution effects on the structural, electronic and sun-light absorption features of all-inorganic halide perovskites. 2022 , 9, 1337-1353	0
194	A small-molecule-templated nanostructure back electrode for enhanced light absorption and photocurrent in perovskite quantum dot photovoltaics. <i>Journal of Materials Chemistry A</i> ,	13
193	Strategies for highly efficient and stable cesium lead iodide perovskite photovoltaics: mechanisms and processes. 2022 , 10, 4999-5023	3
192	Unveiling the roles of halogen ions in the surface passivation of CsPbI ₃ perovskite solar cells.. 2022 ,	2
191	Preparation of F/Mn-Doped Cspb(Br/Cl) ₃ Quantum-Dot Glass and Their Luminescence Properties.	
190	Unified picture for the pressure-controlled band gap in inorganic halide perovskites: Role of strain-phonon and phonon-phonon couplings. 2022 , 105,	

189	Intermediate phase engineering of halide perovskites for photovoltaics. 2022 , 6, 315-339	12
188	Design of all-inorganic hole-transport-material-free CsPbI ₃ /CsSnI ₃ heterojunction solar cells by device simulation. 2022 , 9, 025509	0
187	Controlling the Formation Process of Methylammonium-Free Halide Perovskite Films for a Homogeneous Incorporation of Alkali Metal Cations Beneficial to Solar Cell Performance. 2022 , 12, 2103618	7
186	Mini-review on all-inorganic lead-based perovskite solar cells: challenges and opportunities for production and upscaling. 2022 , 5, 207-225	1
185	Defects in Statically Unstable Solids: The Case for Cubic Perovskite β -CsPbI ₃ . 2022 , 39, 046101	1
184	Effect of Dispersion Solutions on Optical Properties and Stability of CsPbBr ₃ Perovskite Nanocrystals. 2022 , 11, 036002	1
183	Anion-exchange Driven Phase Transition in CsPbI Nanowires for Fabricating Epitaxial Perovskite Heterojunctions.. 2022 , e2109867	1
182	Poly(vinylidene fluoride)-Stabilized Black β -Phase CsPbI Perovskite for High-Performance Piezoelectric Nanogenerators.. 2022 , 7, 10559-10567	0
181	Stable CsPbX ₃ mixed halide alloyed epitaxial films prepared by pulsed laser deposition. 2022 , 120, 112109	1
180	A General Low-Temperature Strategy to Prepare High-Quality Metal Sulfides Charge-Transporting Layers for All-Inorganic CsPbI ₂ Br Perovskite Solar Cells. 2200098	1
179	Reveal the large open-circuit voltage deficit of all-inorganic CsPbI ₂ Br ₂ perovskite solar cells. 2022 , 31, 038804	1
178	Stabilizing black-phase CsPbI ₃ under over 70% humidity. 2022 , 43, 030501	1
177	Recent Advances in Colloidal Quantum Dots or Perovskite Quantum Dots as a Luminescent Downshifting Layer Embedded on Solar Cells.. 2022 , 12,	1
176	Progress in Nanostructured Perovskite Photovoltaics. 2022 , 317-344	
175	Surface modification of CsPbI ₂ Br for improved performance of inorganic perovskite solar cells. 2022 , 115265	1
174	NiBr ₂ -Treated CsPbI ₃ Nanocrystals with Stability and Tunable Bright Luminescence for Light-Emitting Devices.	2
173	Temperature-Reliable Low-Dimensional Perovskites Passivated Black-Phase CsPbI ₃ toward Stable and Efficient Photovoltaics.	3
172	Temperature-Reliable Low-Dimensional Perovskites Passivated Black-phase CsPbI ₃ toward Stable and Efficient Photovoltaics.. 2022 ,	17

171	Exploring the structural, mechanical, electronic, and optical properties of double perovskites of Cs ₂ AgInX ₆ (X = Cl, Br, I) by first-principles calculations. 2022 , 310, 123025	0
170	The difference on the physical properties between CsPbX ₃ and Cs ₂ PbX ₆ : A comparative study. 2022 , 310, 123055	0
169	Strain-induced electronic and optical properties of inorganic lead halide perovskites APbBr ₃ (A= Rb and Cs). 2022 , 31, 103305	0
168	Durability engineering in all-inorganic CsPbX ₃ perovskite solar cells: strategies and challenges. 2022 , 24, 100792	0
167	A quick peek at solar cells and a closer insight at perovskite solar cells. 2021 , 30, 53-63	
166	CHAPTER 10. Deposition Techniques for Perovskite Solar Cells. 341-366	1
165	Interstitial doping of K and Mn induced structural distortion and electronic properties changes in all-inorganic CsPbI ₂ Br perovskite.	0
164	Suppressed recombination for monolithic inorganic perovskite/silicon tandem solar cells with an approximate efficiency of 23%. 2022 ,	12
163	CHAPTER 9. Hybrid Solar Cells. 298-340	
162	Efficient and Stable Perovskite Solar Cells by B-Site Compositional Engineered All-Inorganic Perovskites and Interface Passivation.. 2022 ,	3
161	Guanidium-Assisted Crystallization Engineering for Highly Efficient CsPbI ₃ Solar Cells.	0
160	Review of Transparent and Semi-Transparent Building-Integrated Photovoltaics for Fenestration Application Modeling in Building Simulations. 2022 , 15, 3286	0
159	Insight into Luminescence Enhancement of Alkaline-Earth Metal Ion-Doped CsPbBr ₃ Perovskite Nanocrystals. 2022 , 126, 7588-7595	3
158	Optical simulation of CsPbI ₃ /TOPCon tandem solar cells with advanced light management.	
157	Multifunctional Polymer Capping Frameworks Enable High-Efficiency and Stable All-Inorganic Perovskite Solar Cells.	0
156	Perovskite Single-Crystal Solar Cells: Advances and Challenges.	3
155	Stress and Defect Effects on Electron Transport Properties at SnO/Perovskite Interfaces: A First-Principles Insight.. 2022 , 7, 16187-16196	0
154	Laser-accelerated phase transformation in cesium lead iodide perovskite. 2022 , 5, 1455-1465	2

153	Vacuum-Assisted Thermal Annealing of CsPbI ₃ for Highly Stable and Efficient Inorganic Perovskite Solar Cells.. 2022 ,	8
152	All-Inorganic Perovskite Solar Cells: Recent Advancements and Challenges. 2022 , 12, 1651	0
151	Vacuum-Assisted Thermal Annealing of CsPbI ₃ for Highly Stable and Efficient Inorganic Perovskite Solar Cells.	
150	Thin films deposition of fully inorganic metal halide perovskites: A review. 2022 , 147, 106721	1
149	Strain-induced tunability of the optoelectronic properties of inorganic lead iodide perovskites APbI ₃ (A= Rb and Cs). 2022 , 638, 413960	0
148	Hydrogen-induced nonradiative recombination in all-inorganic CsPbI ₃ perovskite solar cells.	0
147	Terbium-doped and dual passivated ECsPb(I Br) inorganic perovskite solar cells with improved air-thermal stability and high efficiency.. 2022 , e2203204	2
146	Ab-initio Study of structural, elastic, electronic and optical properties of hexahalometallate single crystals KXBr(X = Se, Pt).. 2022 , 12, 8345	0
145	The Halide Ion Replacement Effects on the Physical Properties of Cs ₂ Bx ₆ Variant Perovskites.	
144	Refined GFN1-xTB Parameters for Engineering Phase-Stable CsPbX ₃ Perovskites.	1
143	Tuning band gap and enhancing optical functions of AGeF ₃ (A = K, Rb) under pressure for improved optoelectronic applications. 2022 , 12,	0
142	Hydrazide Derivatives for Defect Passivation in Pure CsPbI ₃ Perovskite Solar Cells.	0
141	Fluorine Functionalized MXene QDs for Near-Record-Efficiency CsPbI ₃ Solar Cell with High Open-Circuit Voltage. 2203704	9
140	Hydrazide Derivatives for Defect Passivation in Pure CsPbI ₃ Perovskite Solar Cells.	13
139	Phase transformation barrier modulation of CsPbI ₃ films via PbI ₂ complex for efficient all-inorganic perovskite photovoltaics. 2022 , 99, 107388	0
138	Perovskite Photovoltaics. 2022 , 1267-1303	
137	Temperature-dependence of the band gap in the all-inorganic perovskite CsPbI ₃ from room to high temperatures.	1
136	High Open-circuit Voltage of Perovskite Solar Cells: A Review.	14

135	Synthesis, Properties, and Applications of Metal Halide Perovskite-Based Nanomaterials. 2022 , 225-273	
134	Cesium acetate-assisted crystallization for high-performance inverted CsPbI ₃ perovskite solar cells. 2022 , 33, 375205	0
133	A Hybrid Functional Study on Perovskite-Based Compounds CsPbI ₃ and CsPbBr ₃ (X = Cl or Br). 5900-5909	0
132	Key Factors Affecting the Stability of CsPbI ₃ Perovskite Quantum Dot Solar Cells: A Comprehensive Review. 2203430	2
131	All-inorganic CsPbX ₃ Perovskite Solar Cells. 2022 , 1-42	
130	Quasi-2D Hybrid Perovskite Formation Using Benzothieno[3,2-b]Benzothiophene (BTBT) Ammonium Cations: Substantial Cesium Lead(II) Iodide Black Phase Stabilization. 2200788	2
129	Numerical simulation of bilayer perovskite quantum dot solar cell with 18.55% efficiency. 2022 , 54,	1
128	Thermally-induced drift of A-site cations at solid-solid interface in physically paired lead halide perovskites. 2022 , 12,	0
127	Recent advancements and future insight of lead-free non-toxic perovskite solar cells for sustainable and clean energy production: A review. 2022 , 53, 102433	1
126	Atomic Layer Deposition of CsI and CsPbI ₃ . 2022 , 34, 6087-6097	3
125	Physics of defects in metal halide perovskites.	2
124	Double-Side Interface Engineering Synergistically Boosts the Efficiency of Inorganic CsPbI ₃ Perovskite Solar Cells Over 12%. 2200802	0
123	Recent Progress of Carbon-Based Inorganic Perovskite Solar Cells: From Efficiency to Stability. 2201320	6
122	Amplified Spontaneous Emission from Thermally Evaporated High-Quality Thin Films of CsPb(Br _{1-x} Y _x) ₃ (Y = I, Cl) Perovskites. 2022 , 38, 8607-8613	1
121	Stability of perovskite materials and devices. 2022 ,	2
120	Recent advances in Pb _n mixed perovskite solar cells. 2022 ,	0
119	Design of a CH ₃ NH ₃ PbI ₃ /CsPbI ₃ -based bilayer solar cell using device simulation. 2022 , 8, e09941	0
118	Understanding the optoelectronic properties of interface between Cs ₂ TiBr ₆ and TiO ₂ for solar cell applications. 2022 , 32, 103963	

- 117 Unveiling passivation roles of PEA+ in CsPbI₂Br surface. **2022**, 562, 111651
- 116 Improving inorganic perovskite photovoltaic performance via organic cation addition for efficient solar energy utilization. **2022**, 257, 124640 0
- 115 High-efficient hole-transport-material-free carbon-based all-inorganic perovskite solar cells using Cs-doped TiO₂ nanorods array as the electron transport layer. **2022**, 922, 166186
- 114 High performance solid-state thermoelectric energy conversion via inorganic metal halide perovskites under tailored mechanical deformation.
- 113 Influence of spin-orbit coupling and biaxial strain on the inorganic lead iodide perovskites, APbI₃ (A = K, Rb, and Cs). **2022**, 110919 0
- 112 Moisture is not always bad: H₂O accelerates the conversion of DMAPbI₃ intermediate to CsPbI₃ for boosting the efficiency of carbon-based perovskite solar cells to over 16%. **2022**, 0
- 111 Effects of transition metal doping on CsGeBr₃ perovskite: First-principles study. **2022**, 12, 075122
- 110 Interplay of Kinetic and Thermodynamic Reaction Control Explains Incorporation of Dimethylammonium Iodide into CsPbI₃. 2745-2752 2
- 109 Stabilisation and Performance Enhancement Strategies for Halide Perovskite Photocatalysts. 2203836 1
- 108 Unveiling the fundamental physical properties of Cu₂-Na ZnSnX₄ (X = S, Se) alloys for solar cell applications: A theoretical investigation. **2022**,
- 107 Cesium Lead Iodide Perovskites: Optically Active Crystal Phase Stability to Surface Engineering. **2022**, 13, 1318 0
- 106 Recent Advances in CsPbX₃ Perovskite Solar Cells: Focus on Crystallization Characteristics and Controlling Strategies. 2201733 6
- 105 Recent Progress in Cesium-Based Lead-Free Halide Double Perovskite Materials for Photovoltaic Applications. 0
- 104 Solvent Engineering for High-Performance Two-Dimensional Ruddlesden-Popper CsPbI₃ Solar Cells. 0
- 103 Investigation of photocurrent efficiency of Cs₂TiBr₆ double perovskite solar cell. **2022**, 1
- 102 Fluorosubstitution Boosting 2D Ruddlesden-Popper CsPbI₃ with High Stability and Efficiency. 2200694
- 101 Phase Stability and Electronic Properties of Hybrid Organic-Inorganic Perovskite Solid Solution (CH₃NH₂)₂x(CH₃NH₃)_{1-x}Pb(BryI_{1-y})₃ as a Function of Composition. **2022**, 126, 13640-13648
- 100 Effect of out-gassing from polymeric encapsulant materials on the lifetime of perovskite solar cells. **2022**, 246, 111887 1

99	Low-Temperature Removal of Residual Dimethylammonium via Surface Molecular Oligomerization for CsPbI ₃ Perovskite Solar Cells. 3227-3234	1
98	Pressure induced band gap shifting from ultra-violet to visible region of RbSrCl ₃ perovskite. 2022 , 9, 095902	0
97	Impacts of 0D Cs ₄ PbI ₆ phase in all-inorganic CsPbI ₃ perovskites on their physical, optical properties and photovoltaic performances. 2022 , 759, 139485	0
96	The investigation of structural, electronic, optical, and mechanical properties of RGaO ₃ (R = Ca, Mg) perovskites for optoelectronic applications: A DFT study. 2022 , 33, e00742	0
95	Hole transport free carbon-based high thermal stability CsPbI _{1.2} Br _{1.8} solar cells with an amorphous InGaZnO ₄ electron transport layer. 2022 , 24, 18896-18904	0
94	A comparative study of the mechanical stability, electronic, optical and photocatalytic properties of CsPbX ₃ (X = Cl, Br, I) by DFT calculations for optoelectronic applications. 2022 , 12, 23704-23717	0
93	Mechanical-load and temperature-engendered degradation of α -CsPbI ₃ : reactive molecular dynamics simulation. 2022 , 10, 12091-12105	0
92	Spray-driven halide exchange in solid-state CsPbX ₃ nanocrystal films. 2022 , 14, 13214-13226	0
91	Revisiting the origin of green emission in Cs ₄ PbBr ₆ . 2022 , 3, 6791-6798	0
90	Efficient inverted CsPbI ₃ perovskite solar cells fabricated in common air. 2023 , 452, 139495	2
89	What Happens at Surfaces and Grain Boundaries of Halide Perovskites: Insights from Reactive Molecular Dynamics Simulations of CsPbI ₃ . 2022 , 14, 40841-40850	3
88	Progress and Perspective on Inorganic CsPbI ₂ Br Perovskite Solar Cells. 2201854	6
87	Self-powered, ultraviolet-to-near infrared broadband photodetector based on Ag-doped CsPbI ₃ /PEDOT:PSS heterojunction. 2022 , 30, 37261	0
86	CsPbI ₃ lead and CsSnI ₃ lead-free perovskite materials for solar cell device.	0
85	Stable pure-iodide wide-band-gap perovskites for efficient Si tandem cells via kinetically controlled phase evolution. 2022 ,	7
84	A One-Step Ionic Liquid Interface-to-Bulk Modification for Stable Carbon-Based CsPbI ₃ Perovskite Solar Cells with Efficiency Over 15%. 2201488	1
83	Advances in Processing Kinetics for All-Inorganic Halide Perovskite: Towards Efficient and Thermodynamic Stable Solar Cells. 2200847	1
82	Probing Optoelectronic and Thermoelectric Properties of Lead-Free Perovskite SnTiO ₃ : HSE06 and Boltzmann Transport Calculations. 2022 , 12, 1317	0

81	Perovskite CsPbI ₂ Br thin films prepared under nitrogen flow and black phase stabilization in the presence of a two-dimensional inorganic halide material and indium.	0
80	Interface-assisted cation exchange enables high-performance perovskite LEDs with tunable near-infrared emissions. 2022 ,	2
79	Recent Progress on Defect Passivation of All-Inorganic Halide Perovskite Solar Cells. 2022 , 9, 2200636	1
78	Theoretical optimization of defect density and band offsets for CsPbI ₂ Br based Perovskite Solar Cells.. 2022 , 104546	0
77	Cooperative Adsorption of Metal-Organic Complexes on CsPbI ₂ Br Perovskite Surface for Photovoltaic Efficiency Exceeding 17%.	0
76	Organic Additive Engineering to Grow High-Quality Inorganic CsPbX ₃ Perovskite Films for Efficient and Stable Solar Cells. 2200656	0
75	A Versatile Molten-Salt Induction Strategy to Achieve Efficient CsPbI ₃ Perovskite Solar Cells with a High Open-Circuit Voltage >1.2 V. 2205028	6
74	Metal halide perovskite nanocrystals with enhanced photoluminescence and stability toward anti-counterfeiting high-performance flexible fibers.	1
73	Strain-driven tunability of the optical, electronic, and mechanical properties of lead-free inorganic CsGeCl ₃ perovskites.	0
72	Compositional Engineering in δ -CsPbI ₃ toward the Efficiency and Stability Enhancement of All Inorganic Perovskite Solar Cells. 2022 , 5, 12099-12108	0
71	Strategies for enhancing the stability of metal halide perovskite towards robust solar cells.	0
70	Surface modification of CsPbI ₂ Br perovskite film with an organic ammonium salt for efficient photovoltaics. 2022 ,	0
69	Ethylenediamine Addition Improves Performance and Suppresses Phase Instabilities in Mixed-Halide Perovskites. 4265-4273	3
68	Stabilization of Photoactive δ -CsPbI ₃ Perovskite Phase by Incorporation of Mg.	0
67	Synergistic effect of lead-free quantum dots and SnO ₂ in glass-ceramics for broadband white-emitting.	1
66	Strategies for the preparation of high-performance inorganic mixed-halide perovskite solar cells. 2022 , 12, 32925-32948	2
65	Electronic and optical properties of double perovskites A ₂ BX ₆ (A = Cs; B = Sn, and (X = Cl, Br, I.) using modified Becke Johnson potential study. 2022 ,	0
64	Surface Versus Bulk State Transitions in Inkjet-Printed All-Inorganic Perovskite Quantum Dot Films. 2022 , 12, 3956	0

63	Perovskite phase heterojunction solar cells.	1
62	Effect of Various Electron and Hole Transport Layers on the Performance of CsPbI ₃ -Based Perovskite Solar Cells: A Numerical Investigation in DFT, SCAPS-1D, and wxAMPS Frameworks.	10
61	Photoelectric properties of cubic mixed-cation lead halide perovskites (Cs MA1-PbI ₃) from First-Principles. 2022 , 104898	0
60	Preannealing Process Improves the Efficiency of CsPbI ₂ Br Perovskite Solar Cells. 2200544	0
59	Lithium Fluoride Assisted Preparation of High-Performance All-Inorganic CsPbI ₃ Perovskite Solar Cells. 2201242	0
58	High Efficiency Cs based Perovskite- Silicon Tandem Solar Cells- A Modelling Study.	0
57	Bandgap tuning and thermoelectric characteristics of Sc-based double halide perovskites K ₂ ScAgZ ₆ (Z = Cl, Br, I) for solar cells applications. 2022 , 111115	0
56	Machine learning-driven design of promising perovskites for photovoltaic applications: A review. 2022 , 35, 102470	0
55	Recent progress of scalable perovskite solar cells and modules. 2022 , 1, 100010	1
54	20.67%-Efficiency Inorganic CsPbI ₃ Solar Cells Enabled by Zwitterion Ion Interface Treatment. 2206205	2
53	Self-Assembled CsPbI ₃ Nanowires for Stable White Light Emission.	0
52	Cyano-4'-Pentylbiphenyl dopant strategy for P3HT-Based CsPbI ₃ perovskite solar cells with a record efficiency and preminent stability. 2023 , 455, 140831	0
51	The progress and efficiency of CsPbI ₂ Br perovskite solar cells.	0
50	Vitamin needed: Lanthanides in optoelectronic applications of metal halide perovskites. 2023 , 152, 100710	1
49	Achieve high-efficiency long afterglow luminescence control using CsPbI ₃ quantum dots. 2022 ,	0
48	Ground-State Surface of All-Inorganic Halide Perovskites. 2022 , 126, 21155-21161	1
47	Dopant-Free Polymer Hole Transport Materials for Highly Stable and Efficient CsPbI ₃ Perovskite Solar Cells. 2206952	1
46	Anion Doping Delays Nonradiative Electron-Hole Recombination in Cs-Based All-Inorganic Perovskites: Time Domain ab Initio Analysis. 2022 , 13, 11375-11382	1

- 45 Scaffold-Enforced Nanoscale Crystalline Order Supersedes Interfacial Interactions in Driving CsPbI₃ Perovskite Phase Stability. 0
- 44 Fluorine-Containing Passivation Layer via Surface Chelation for Inorganic Perovskite Solar Cells. 0
- 43 Recent progress in perovskite solar cells: material science. 1
- 42 Fabrication of high-quality CsPbI₃ perovskite films via phosphorus pentachloride additive. 0
- 41 Inorganic lead-based halide perovskites: From fundamental properties to photovoltaic applications. **2022**, 61, 191-217 0
- 40 Fluorine-Containing Passivation Layer via Surface Chelation for Inorganic Perovskite Solar Cells. 0
- 39 Optimization of Inverted All-Inorganic CsPbI₃ and CsPbI₂Br Perovskite Solar Cells by SCAPS-1D Simulation. **2022**, 2, 559-571 0
- 38 Manipulating the Crystallization and Phase Transition for High-Performance CsPbI₂Br Solar Cells. 2203682 0
- 37 The Stability of Hybrid Perovskites with UiO-66 Metal-Organic Framework Additives with Heat, Light, and Humidity. **2022**, 12, 4349 0
- 36 Stabilizing CsPbI₃ perovskite for photovoltaic applications. **2023**, 0
- 35 Air-stable High-PLQY Cesium Lead Halide Perovskites for Laser-Patterned Displays. 0
- 34 Strain-induced tunable optoelectronic properties of inorganic halide perovskites APbCl₃ (A= K, Rb, and Cs). 4
- 33 21.15%-Efficiency and Stable η -CsPbI₃ Perovskite Solar Cells Enabled by an Acyloin Ligand. 2210223 1
- 32 Inorganic CsPbI₂Br Halide Perovskite: From Fundamentals to Solar Cells Optimizations. 0
- 31 Dimethyl sulfoxide: a promising solvent for inorganic CsPbI₃ perovskite. **2023**, 1
- 30 Band gap tuning of non-toxic Sr-based perovskites CsSrX₃ (X=I, Cl, Br) under pressure for improved optoelectronic applications. **2023**, 34, 105188 0
- 29 Ternary diagrams of phase, stability, and optical properties of cesium lead mixed-halide perovskites. **2023**, 246, 118661 0
- 28 A Complete Picture of Cation Dynamics in Hybrid Perovskite Materials from Solid-State NMR Spectroscopy. **2023**, 145, 978-990 1

27	Performance analysis and optimization of all-inorganic CsPbI ₃ -based perovskite solar cell.	0
26	Challenges in the development of metal-halide perovskite single crystal solar cells.	0
25	Constructing Interfacial Gradient Heterostructure Enables Efficient CsPbI ₃ Perovskite Solar Cells and Printed Minimodules.	0
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21	Effect of Cu doping on structural, electronic and thermoelectric properties of double perovskite Cs ₂ NaVCl ₆ . 2023 , 35, e00803	0
20	Numerical simulation and optimization of a CsPbI ₃ -based perovskite solar cell to enhance the power conversion efficiency. 2023 , 47, 4801-4817	3
19	Finite-temperature properties of CsPbI ₃ thin films. 2023 , 7,	0
18	Light: A new handle to control the structure of cesium lead iodide. 2023 , 107,	0
17	Organic bromide solutions-processed all-inorganic perovskite for efficient and stable photovoltaics. 2023 , 38, 045007	0
16	How cation nature controls the bandgap and bulk Rashba splitting of halide perovskites.	0
15	A Comprehensive First-Principles Investigation of SnTiO ₃ Perovskite for Optoelectronic and Thermoelectric Applications. 2023 , 13, 408	1
14	Surface Engineering toward High-Performance CsPbI ₃ Perovskite Solar Cells.	0
13	Dimethylammonium cation stabilizes all-inorganic perovskite solar cells. 2023 , 44, 030202	0
12	Surface Passivation of CsPbI ₃ Films for Efficient and Stable Hole-Transporting Layer-Free Carbon-Based Perovskite Solar Cells. 2023 , 6, 3495-3503	0
11	Functional organic cation induced 3D-to-0D phase transformation and surface reconstruction of CsPbI ₃ inorganic perovskite. 2023 , 68, 706-712	0
10	Colloidal CsPbX ₃ Nanocrystals with Thin Metal Oxide Gel Coatings. 2023 , 35, 2827-2834	0

- 9 Iodine Vacancies do not Cause Nonradiative Recombination in Halide Perovskites. **2023**, 2,
- 8 An Overview of Lead, Tin, and Mixed Tin-lead-Based AB₃ Perovskite Solar Cells. 2200160
- 7 Highly Efficient 2D/3D Mixed-Dimensional Cs₂PbI₂Cl₂/CsPbI_{2.5}Br_{0.5} Perovskite Solar Cells Prepared by Methanol/Isopropanol Treatment. **2023**, 13, 1239
- 6 The optoelectronic application of CsSnI₃ upon substitution with Pb: A DFT approach.
- 5 Improving the Solar Energy Utilization of Perovskite Solar Cells via Synergistic Effects of Alkylamine and Alkyl Acid on Defect Passivation.
- 4 Chiral Perovskite Nanocrystal Growth inside Helical Hollow Silica Nanoribbons.
- 3 An atomistic modeling study of high-throughput RVO₃(R=La, Nd) perovskites for efficient solar energy conversion materials. **2023**, 660, 414879
- 2 Recent Progress of Film Fabrication Process for Carbon-Based All-Inorganic Perovskite Solar Cells. **2023**, 13, 679
- 1 Rotatable Skeleton for the Alleviation of Thermally Accumulated Defects in Inorganic Perovskite Solar Cells. 2284-2291