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## Challenges for commercializing perovskite solar cells

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152	Cryogenic Temperatures Characterization of an MAPbBr <sub>3</sub> Perovskite and a Silicon Photomultiplier for Radiation Detector Applications. 2200313	0
151	A triethyleneglycol C60 mono-adduct derivative for efficient electron transport in inverted perovskite solar cells.	0
150	Understanding the Effect of Intrinsic Defects in Lead-Free Vacancy-Ordered Double Perovskites Cs <sub>2</sub> PdBr <sub>6</sub> . <b>2022</b> , 126, 17875-17884	0
149	Perovskite-based Photovoltaics for Artificial Indoor Light Harvesting: A Critical Review.	0
148	Perfluoroarenes: A Versatile Platform for Hybrid Perovskite Photovoltaics. <b>2022</b> , 13, 9869-9874	0
147	Passivating Defects of Perovskite Solar Cells with Functional Donor-Acceptor Donor Type Hole Transporting Materials. 2208317	1
146	Intrinsic Phase Stability and Inherent Bandgap of Formamidinium Lead Triiodide Perovskite Single Crystals.	0
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144	Evaluation of the Passivation Effects of PEDOT:PSS on Inverted Perovskite Solar Cells. 2202713	0
143	Recent Advances in g-C <sub>3</sub> N <sub>4</sub> for the Application of Perovskite Solar Cells. <b>2022</b> , 12, 3625	0

142	Engineering the Comfort-of-Wear for Next Generation Wearables. 2200512	2
141	Exploring the Charge Dynamics and Energy Loss in Printable Mesoscopic Perovskite Solar Cells. 2202813	2
140	Phase-Transition-Cycle-Induced Recrystallization of FAPbI <sub>3</sub> Film in An Open Environment Toward Excellent Photodetectors with High Reproducibility. 2204386	0
139	High-Performance Inverted Perovskite Solar Devices Enabled by a Polyfullerene Electron Transporting Material.	0
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137	Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> -Modified PEDOT:PSS Hole-Transport Layer for Inverted Perovskite Solar Cells. <b>2022</b> , 27, 7452	0
136	Ion migration and accumulation in halide perovskite solar cells.	0
135	Enhancing performance and stability of carbon-based perovskite solar cells by surface modification using 2-(trifluoromethylthio)aniline. <b>2022</b> , 33, 104653	0
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133	FAPbI <sub>3</sub> phase stabilization using aprotic trimethylsulfonium cation for efficient perovskite solar cells. <b>2022</b> , 551, 232207	0
132	Flexible and stretchable transparent conductive graphene-based electrodes for emerging wearable electronics. <b>2023</b> , 202, 495-527	1
131	Recent progress in perovskite solar cells: from device to commercialization.	4
130	Molecular engineering of contact interfaces for high-performance perovskite solar cells.	5
129	Modification of energy levels by cetyltrimethylammonium bromide at the perovskite/carbon interface for highly efficient and stable perovskite solar cells. <b>2022</b> , 106689	0
128	Full Life-Cycle Lead Management and Recycling Transparent Conductors for Low-Cost Perovskite Solar Cell.	0
127	Preannealing Process Improves the Efficiency of CsPbI <sub>2</sub> Br <sub>2</sub> Perovskite Solar Cells. 2200544	0
126	The Dissociation of Exciton During the Lasing of a Single CsPbBr <sub>3</sub> Microplate. 10851-10857	0
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123	Carbonous-Based Optoelectronic Devices. <b>2023</b> , 101-125	0
122	Dissolved-Cl <sub>2</sub> Triggered Redox Reaction Enables High-performance Perovskite Solar Cells.	0
121	Interfacial engineering of sputtered NiO <sub>x</sub> for enhancing efficiency and stability of inverted perovskite solar cells. <b>2022</b> , 248, 128-136	0
120	Toward efficient hybrid solar cells comprising quantum dots and organic materials: progress, strategies, and perspectives.	0
119	Connecting the dots for fundamental understanding of structure-property relationships of COFs, MOFs, and perovskites using a Multiparticle Holstein Formalism.	0
118	Investigation of the optoelectronics properties and stability of Formamidinium lead mixed halides perovskite. <b>2023</b> , 135, 113334	0
117	Hybrid copper halide material with perovskite like structure with tetrahedral units; synthesis, characterization and optical properties. <b>2023</b> , 231, 116247	0
116	Interfacial engineering by p-methylphenylmethylammonium iodide for efficient carbon counter electrode (CE)-based 2D/3D hybrid perovskite solar cells. <b>2023</b> , 113, 106699	1
115	Decoupling excitons behavior of two-dimensional Ruddlesden-Popper PEA <sub>2</sub> PbI <sub>4</sub> nanosheets. <b>2023</b> , 936, 168312	0
114	Emerging Chalcogenide Materials for Energy Applications.	1
113	Manipulating Halide Perovskite Passivation by Controlling Amino Acid Derivative Isoelectric Point for Stable and Efficient Inverted Perovskite Solar Cells. 2200858	0
112	Antisolvent Additive Engineering for Boosting Performance and Stability of Graded Heterojunction Perovskite Solar Cells Using Amide-Functionalized Graphene Quantum Dots. <b>2022</b> , 14, 54623-54634	1
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110	Zwitterions in 3D Perovskites: Organosulfide-Halide Perovskites. <b>2022</b> , 144, 22403-22408	0
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107	An Overview of Current Printing Technologies for Large-Scale Perovskite Solar Cell Development. <b>2023</b> , 16, 190	1

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105	Perylene Diimide Derivative Engineering for Covering Interfacial Defects in Indoor Perovskite Optoelectronics. 2200937	0
104	Conversion of ALD CuO Thin Films into Transparent Conductive p-Type CuI Thin Films. 2201860	1
103	Addressing the Role of 2D Domains in High-Dimensionality Ruddlesden-Popper Perovskite for Solar Cells. 2200860	0
102	Unraveling the Defect-Dominated Broadband Emission Mechanisms in (001)-Preferred Two-Dimensional Layered Antimony-Halide Perovskite Film. <b>2022</b> , 13, 11736-11744	0
101	Pr <sup>3+</sup> -doped perovskite niobate ceramics towards improving performance of optical temperature sensor by second harmonic generation (SHG) combined with lanthanide luminescence. <b>2023</b> ,	0
100	Unveiling facet-dependent degradation and facet engineering for stable perovskite solar cells. <b>2023</b> , 379, 173-178	1
99	Optical modeling and active layer design of MASnI <sub>3</sub> perovskite photovoltaics using FDTD simulation: from the sun to indoor light.	0
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94	Recent advancements and manipulation strategies of colloidal Cs <sub>2</sub> BiBr <sub>6</sub> lead-free halide double perovskite nanocrystals.	0
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92	The Nonhalides in Perovskite Solar Cells.	1
91	Bulk Incorporation with 4-Methylphenethylammonium Chloride for Efficient and Stable Methylammonium-Free Perovskite and Perovskite-Silicon Tandem Solar Cells. 2203607	0
90	Designing and Theoretical Study of Dibenzocarbazole Derivatives Based Hole Transport Materials: Application for Perovskite Solar Cells.	0
89	Recent Progress of Halide Perovskites Applied to Five Senses Sensors.	0

88	Interfacial engineering between SnO <sub>2</sub> /MAPbI <sub>3</sub> by maleate pheniramine halides toward carbon counter electrode-based perovskite solar cell with 16.21% efficiency.	0
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85	Controlled synthesis of highly stable lead-free bismuth halide perovskite nanocrystals: Structures and photophysics.	0
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