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Recent Achievements and Progress in Perovskite Photovoltaics

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Message from the Guest Editors

The urgent demands to meet the world's net zero goals facilitate the development of photovoltaic (PV) technologies. Among many solar cells, perovskite solar cells (PSCs) have attracted significant attention, due to their low cost and decent power-conversion efficiency (PCE). Indeed, the PCE of single-junction and multi-junction PSCs has reached 25.7% and 31.3%, respectively, rivalling the conventional silicon cells. However, uncertainties and scientific challenges remain in PSC research and commercialization. For instance, the scalable fabrication of PSCs remains as one major problem in MW- and GW-scale production lines, i.e., the PCE of PSCs decreases rapidly with a larger cell/module area. Moreover, the unsatisfied moisture-, thermal- and light-induced instabilities in these PSCs significantly restrict their practical applications. Therefore, intensive efforts are still required to resolve these issues and enable perovskite PVs to enter the market.

This Special Issue focuses on recent achievements and progress in perovskite PV investigations. We would like to invite you to submit your original research articles, reviews, and perspectives to this Special Issue.

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Message from the Editor-in-Chief

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