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Optics-Electronic Devices: Turn Light into Electricity Turn Electricity Into Light

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The first paper about hybrid organic-inorganic solid state solar cells with perovskite-structured $\text{CH}_3\text{NH}_3\text{PbI}_3$ as the active layer was published in 2009. Over 26% efficiency in few years, perovskite solar cells are the most promising next generation solar cell. It has been found application in light emitting, photoluminescence, sensors and so on. This presentation involves the synthesis and doping of halide perovskite materials for the application in solar cells, light emitting, electrochromism and other related topics.

Academic or Professional Status

Faculty

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