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ENHANCED AIR STABILITY OF GREEN-SOLVENT POLYMER SOLAR CELLS WITH GREEN-FLUORESCENT POLYMER

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The performance of polymer solar cells (PSC) underwent a great development due to material design and device engineering, while the poor stability of PSCs and the use of toxic solvents during device fabrication are the most two big challenges nowadays hindering a large scale application. Here, we select a green-solvent based material system PBDB-TF-T1:BTP-4F-12 as our research model, and explore a green fluorescent polymer additive EH-P that improves the air-illumination stability of these solar cells without too serious effects on the device performance. Thereby, this work demonstrates great potential in the real application of polymer solar cells.

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