

Who is Xueliang Zhu?

Xueliang Zhu is currently a Ph.D. candidate at Wuhan University supervised by Prof. Zhiping Wang. His research interests include high power conversion efficiency and stable perovskite solar cells. Cho Fai Jonathan Lau is a research fellow at Solar Energy Research Institute of Singapore (SERIS).

Should a p-n heterojunction be based on n-type ZnO and ZnTe?

It is beneficial to construct a p-n heterojunction based on the favorable energy band configuration of the n-type ZnO with wide bandgap of 3.21 eV and the p-type ZnTe with bandgap of 2.25 eV [,,,].

How is ZnO/ZnTe photodetector constructed?

The ZnO/ZnTe core/shell nanorod arrays photodetector was constructed by depositing a strip of aluminum (Al) on ZnO seed layer as the bottom electrode by RF sputtering, and a piece of indium tin oxide (ITO) glass was covered on the top of ZnO/ZnTe nanorods as the transparent top-electrode, respectively, as shown in Fig. 1 a.

Who are the authors of organic photovoltaic devices?

These authors contributed equally: Lei Zhu, Ming Zhang, Jinqiu Xu. F.L. and Y.S. conceived and directed this project. L.Z. fabricated and characterized the organic photovoltaic devices. L.Z. and M.Z. conducted the certification.

Who is Jie Zhao?

Jie Zhao received his Bachelor's degree in biomedical engineering from Changchun university of science and technology in 2016. She is now a master student in Biological Science & Medical Engineering, Southeast University. Her research focuses on the construction and lasing mode modulation of ZnO/Graphene field effect transistors-like.

Why is UV stability important in perovskite-semiconductor heterojunctions?

Our work also highlights that the investigation on UV stability, performing long-term operational stability and understanding instabilities at perovskite-semiconductor heterojunctions are essential in order to enable an extremely efficient and stable thin-film perovskite PV technology.

To further improve the photovoltaic performance of the polymer solar cells (PSCs), it is an essential and significantly challenging issue to synergistically minimize non-radiative energy loss and ...

Jun-Sheng Yu's 74 research works with 3,239 citations and 4,416 reads, including: Highly Efficient Organic Solar Cells with Improved Vertical Donor-Acceptor Compositional Gradient ...

The Improved Photovoltaic Performance of Phenothiazine-Dithienopyrrole Based Dyes with Auxiliary

Acceptors. Ming-Liang Han, Yi-Zhou Zhu, Shuang Liu, Qing-Long Liu, Dan Ye, Bing ...

Instead of perovskite or the transport layer itself, nonradiative recombination mostly takes place at the contact [17], [18].The multilayer structure makes the performance of ...

It is found that the performance of devices increases significantly with suitable annealing temperature and drops after high annealing temperatures. Thus, we can obtain an ...

Web: <https://nowoczesna-promocja.edu.pl>

