

第121回 OPERA研究交流セミナー

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第180回 未来化学創造センターセミナー





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## A Surface Science Approach to Perovskite Solar Cell Research

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Alternative "green" energy sources hold the promise to solve the pressing challenges of energy sustainability and global warming. For efficient and cost-effective energy harvesting devices, surfaces and interfaces are of paramount importance. The Energy Materials and Surface Sciences unit at the Okinawa Institute of Science and Technology Graduate University is making concentrated effort to investigate relevant surfaces and interfaces with advanced experimental techniques to address critical issues in energy materials and devices. In this lecture, I will introduce our recent research progress on perovskite solar cells, which have garnered much attention because of low-cost fabrication and high efficiency. Firstly, I will discuss about air exposure effects and perovskite solar cell lifetime .Secondly, I will talk about the chemical vapor deposition method, which can be used to fabricate semi-transparent high efficiency perovskite solar cells .Lastly, I will show some results with the aim to reduce solar cell fabrication cost .

主催:九州大学 最先端有機光エレクトロニクス研究センター

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