

~JSAP-MRSジョイントシンポジウム~

New direction of perovskite solar cells

ペロブスカイト太陽電池の新展開

2024. September. 16th (Monday) 9:00~18:00

Metal halide perovskite solar cells have been investigated around the world toward practical application. However, it is necessary to expand into the market dominated by silicon solar cells. To take advantage of the features of perovskite solar cells, it is necessary to establish large-area technology by understanding crystal growth and the higher efficient and durable perovskite solar cells including Sn perovskite and introduction of 2D perovskite are desired. We will hold a joint symposium with the Materials Research Society (MRS). We would like to invite cutting-edge researchers of perovskite solar cells in the world, and to discuss new directions in perovskite solar cell research.

Invited speaker	Title
Makoto Konagai (Tokyo City Univ.)	Challenges and perspectives of perovskite solar cells -Lessons from 50 years of thin film solar cell development
Reinhold H. Dauskardt (Stanford Univ.)	Open-air spray-plasma manufacturing of large-area perovskite solar cells and modules
Hiroshi Segawa (Univ. of Tokyo)	Technological advances of perovskite solar cells and modules
Kenneth Graham (Univ. of Kentucky)	Stability of tin halide perovskites - From additives through two-dimensional materials
Shuzi Hayase (Univ. of Electro-Comm.)	Perovskite solar cells consisting of tin - Improvement of efficiency and stability
Shuxia Tao (Eindhoven Univ. of Tech.)	Materials theory of halide perovskites: defect and chirality
Tetsuhiko Miyadera (AIST)	Crystal growth in perovskite solar cells
Somin Park (National Univ. of Singapore)	Molecular engineering of interfaces for efficient and stable perovskite solar cells
Yuko Takeoka (Sophia Univ.)	Structural control of Pb or Sn-based 2D perovskite compounds
Enzheng Shi (Westlake Univ.)	Two-dimensional (2D) tin halide perovskite semiconductors for lasing

本シンポジウムの趣旨に合致した内容の一般講演(15分)も募集致します。

We are also accepting oral presentations (15 min) that fit this symposium.

世話人代表：沈 青(電気通信大学、JSAP側)、Letian Dou (Purdue University, MRS側)、

世話人：丸本 一弘(筑波大学)、辛川 誠(金沢大学)、古郷 敦史(AIST)、柳田 真利(NIMS)