Open Access Article. Published on 22 April 2025. Downloaded on 12/24/2025 5:55:39 PM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

EES Solar

rsc.li/EESSolar

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 3033-4063 CODEN ESEOAU 1(2) 101–210 (2025)

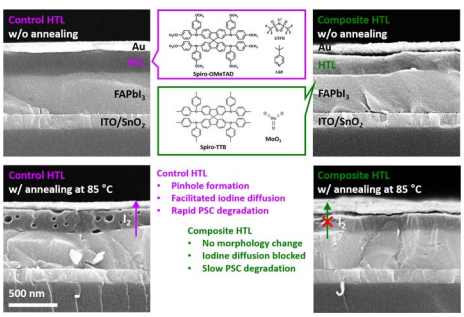
Cover
See K. D. G. Imalka Jayawardena, S. Ravi P. Silva *et al.*, pp. 115–128. Image reproduced by permission of Uthpala Saroshan Deshapriya from *EES Sol.*, 2025, **1**, 115.

COMMUNICATION

107

Evaporated organic–MoO_3 composite hole transport layers toward stable perovskite solar cells

Jisu Hong, Zhaojian Xu, Tuo Hu, Sujin Lee, Manting Gui, Antoine Kahn and Barry P. Rand*

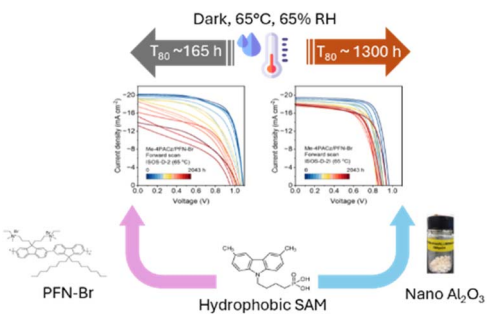


PAPERS

115

Improved stability and electronic homogeneity in perovskite solar cells *via* a nanoengineered buried oxide interlayer

W. Hashini K. Perera, Tony J. Woodgate, Dong Kuk Kim, Rachel C. Kilbride, Mateus G. Masteghin, Christopher T. G. Smith, Steven J. Hinder, Sebastian Wood, K. D. G. Imalka Jayawardena* and S. Ravi P. Silva*



View Article Online

ROYAL SOCIETY OF CHEMISTRY

Advance your career in science

with professional recognition that showcases your **experience, expertise and dedication**

Stand out from the crowd
Prove your commitment to attaining excellence in your field

Gain the recognition you deserve
Achieve a professional qualification that inspires confidence and trust

Unlock your career potential
Apply for our professional registers (RSci, RSciTech) or chartered status (CChem, CSci, CEnv)

Apply now

rsc.li/professional-development

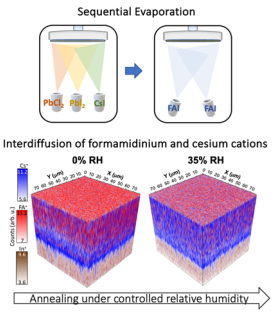
Registered charity number: 207890

Open Access Article. Published on 22 April 2025. Downloaded on 12/24/2025 5:55:39 PM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

129

Interdiffusion control in sequentially evaporated organic–inorganic perovskite solar cells

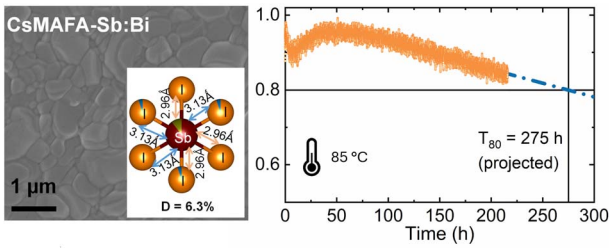
Rahul A. Nambiar, David P. McMeekin, Manuel Kober Czenry, Joel A. Smith, Margherita Taddei, Pietro Caprioglio, Amit Kumar, Benjamin W. Putland, Junke Wang, Karim A. Elmestekawy, Akash Dasgupta, Seongrok Seo, M. Greyson Christoforo, Jin Yao, Daniel J. Graham, Laura M. Herz, David Ginger and Henry J. Snaith*



139

The promise of operational stability in pnictogen-based perovskite-inspired solar cells

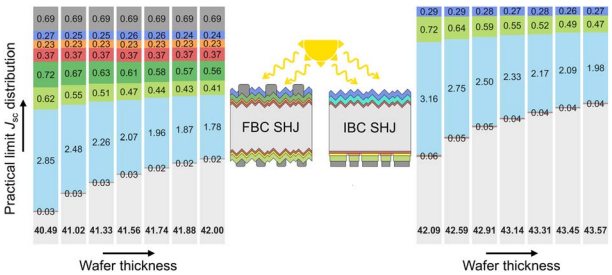
Noora Lamminen, Joshua Karlsson, Ramesh Kumar, Noolu Srinivasa Manikanta Viswanath, Snigdha Lal, Francesca Fasulo, Marcello Righetto, Mokurala Krishnaiah, Kimmo Lahtonen, Amit Tewari, Atanas Katerski, Jussi Lahtinen, Ilona Oja Acik, Erik M. J. Johansson, Ana Belén Muñoz-García, Michele Pavone, Laura M. Herz, G. Krishnamurthy Grandhi* and Paola Vivo*



157

Optical losses in silicon heterojunction solar cells: analysis of record-efficiency devices and practical limits based on ray-tracing simulations

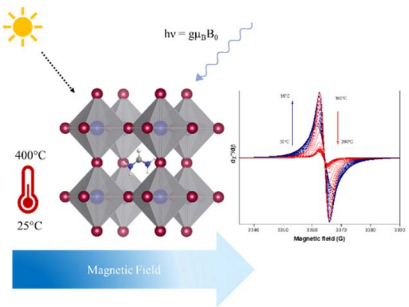
Erik M. Spaans,* Selvaraj Venkataraj, Krishna Singh, Ashwath Ravichandran, Maria L. Manalo, Rosalie Guerra, Armin G. Aberle and Nitin Nampalli



172

Thermal and photodegradation mechanism of (FA-MA)PbI$_3$ perovskite and spiro-OMeTAD captured by *in situ* EPR spectroscopy

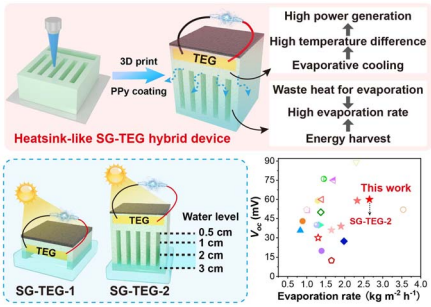
Julie Ruellou, Hania Ahouari, Matthieu Courty, Hervé Vezin and Frédéric Sauvage*



Open Access Article. Published on 22 April 2025. Downloaded on 12/24/2025 5:55:39 PM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

PAPERS

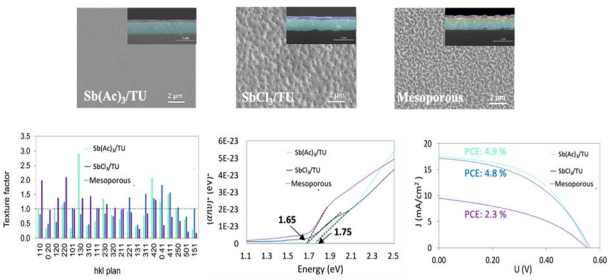
182



Synergistic solar-powered water–electricity cogeneration using a 3D-printed heatsink-like device

Na Li, Jintao He, Jingjing Li, Zhaojun Li, Petri Murto, Zhihang Wang* and Xiaofeng Xu*

193



Spin-coating processing of an oriented Sb_2S_3 layer for PV applications: effect of the precursors and device architecture

Nathan Daem, Marie-Julie Charlier, Gilles Spronck, Pierre Colson, Rudi Cloots* and Jennifer Dewalque

 This journal is © The Royal Society of Chemistry 2025