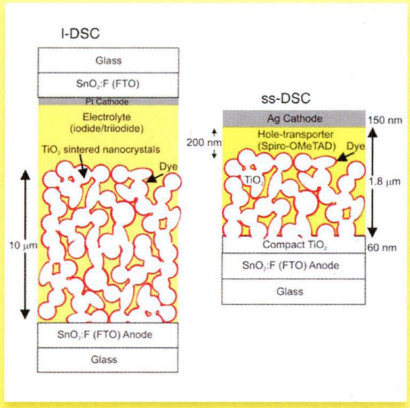
JPCCCK

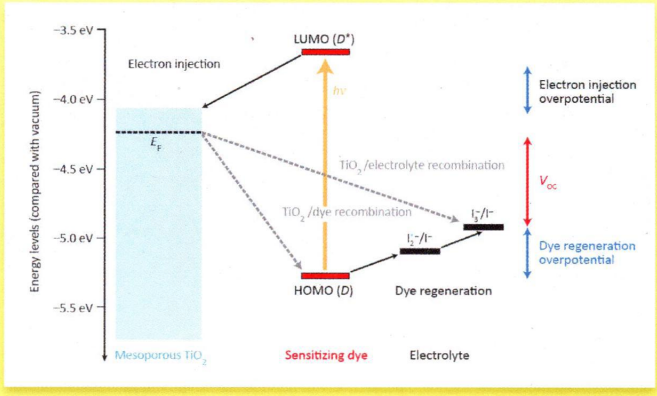
JULY 31, 2014
VOLUME 118
NUMBER 30

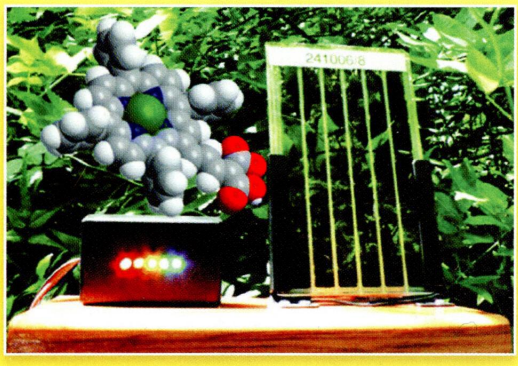
pubs.acs.org/JPCC

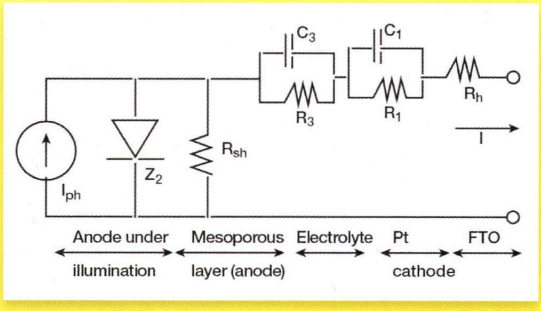
THE JOURNAL OF PHYSICAL CHEMISTRY C

Structural Features and Fundamental Processes of Dye-Sensitized Solar Cells Based on Mesoscopic Oxide Layers









MICHAEL GRÄTZEL FESTSCHRIFT

ACS Publications
Most Trusted. Most Cited. Most Read.

www.acs.org

THE JOURNAL OF PHYSICAL CHEMISTRY C

JULY 31, 2014

VOLUME 118 ISSUE 30

JPCCCK 118(30) 16303−17178 (2014)

ISSN 1932-7447

ON THE COVER: Structural features and fundamental processes of dye-sensitized solar cells based on mesoscopic oxide layers. Top left: Schematic representation of the dye-sensitized solar cells using liquid electrolytes (l-DSC) and solid-state hole transport materials (ss-DSC). (From: Snaith, H. J. Perovskites: The Emergence of a New Era for Low-Cost, High-Efficiency Solar Cells. *J. Phys Chem Lett.* **2013**, *4*, 3623−3630.) Top right: Interplay of various electron-transfer processes involved in dye-sensitized solar cells. (Reprinted with permission from Macmillan Publishers, Ltd. (Hardin, B. E.; Snaith, H. J.; McGhee, M. D. The Renaissance of Dye-Sensitized Solar Cells. *Nat. Photon.* **2012**, *6*, 162−169.)) Bottom left: A prototype green translucent dye-sensitized solar cell based on zincporphyrins. Bottom right: Electrical circuit model for the main charge-transport processes of dye-sensitized solar cells. This special issue was organized by Guest Editor Kuppuswamy Kalyanasundaram.

SPECIAL ISSUE: MICHAEL GRÄTZEL FESTSCHRIFT

Guest Editor: Kuppuswamy Kalyanasundaram

Special Issue Preface

Articles

Supporting Information available via online article