

Table of Contents

Preface

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Dye Sensitized Solar Cell: A Summary K. Rakesh, A. Pandikumar and K. Jothivenkatachalam | 1 |
| Recent Advances in SnO₂ Based Photo Anode Materials for Third Generation Photovoltaics B. Pari, S. Chidambaram, N. Kasi and S. Muthusamy | 25 |
| Dye Sensitized Solar Cell Using Natural Dyes as Chromophores - Review I. Jinchu, C.O. Sreekala and K.S. Sreelatha | 39 |
| A Critical Review on Mesoporous Photoanodes for Dye-Sensitized Solar Cells D. Jyoti, D. Mohan, A. Singh and D.S. Ahlawat | 53 |
| ZnO Nanoforest Based New Generation Dye Sensitized Solar Cells P.N. Dave and P.R. Malpani | 71 |
| Plasmon Resonance Enhanced Zinc Oxide Photoelectrodes for Improvement in Performance of Dye Sensitized Solar Cells T. Bora, H.H. Kyaw and J. Dutta | 91 |
| Effect of Nanograss and Annealing Temperature on TiO₂ Nanotubes Based Dye Sensitized Solar Cells J. Naduvath, S. Shaw, P. Bhargava and S. Mallick | 103 |
| Effect of Material Parameters on the Optical Properties of Dye-Sensitized Solar Cell Photoanode A. Singh, D. Mohan, D.S. Ahlawat and D. Jyoti | 115 |
| Fabrication and Testing of Dye-Sensitized Solar Cell D.T. Rajalakshmi and R. Velavan | 121 |
| Electrochemical Impedance Spectroscopic Study on DSSC Sensitized with <i>Begonia malabarica</i> Lam. L.K. Singh, T. Karlo and A. Pandey | 133 |
| Effect of Sintering Profiles on Titania Interparticle Connectivity, Electron Transport and Interfacial Resistance in Dye-Sensitized Solar Cells A.K. Jena, S.P. Mohanty and P. Bhargava | 143 |
| RETRACTED: Enhanced Photovoltaic Performance of the Dye Sensitized Solar Cell Using Natural Dyes with Surface Modification of the Photoanode I. Jinchu, A.B. Sharma, C.O. Sreekala, K.S. Sreelatha and K. Achuthan | 159 |
| Positron Annihilation Characterization of TiO₂ Doped Polystyrene A.D. Acharya | 169 |