

Devices from Hybrid and Organic Materials

Introduction (V. Turkovic, M. Madsen, H.-G. Rubahn)

Section 1: Interfaces in organic and hybrid devices

1. Modelling organic-inorganic hybrid interfaces (O. T. Hofmann, E. Zojer)
2. Graphene properties by functionalization with organic molecules (G. Fratesi, A. Ravikumar, G. P. Brivio)
3. Metal-oxide interface materials for organic and perovskite solar cells (S. Olthof, T. Riedl)
4. Surface and interface characterization in organic electronics (N. Witkowski)

Section 2: Development of functional devices

5. Modelling organic devices - Foundation, implementation, and merit of the kinetic Monte Carlo method (M. Krammer, K. Zojer)
6. Innovative materials for the development of stable and efficient perovskite solar cells (L. Calió, M. Salado, S. Kazim, S. Ahmad)
7. Organic and hybrid photodetectors (B. Siegmund, K. Vandewal)
8. Organic light-emitting transistors (L. Tavares, J. Kjelstrup-Hansen)
9. State of the art in flexible electrochromic devices for shading applications (L. Beverina, M. Sassi, U. Posset)
10. Organo-silane self-assembly on porous silicon and silica particle based sensors (C. Rodrigez, P. Pellacani, M. Manso)

Section 3: Stability and up-scaling of organic and hybrid devices

11. Degradation mechanisms in organic photovoltaic devices (W. Greenbank, S. Chambon)
12. Inhibiting photo-oxidative degradation in organic solar cells using stabilizing additives (V. Turkovic, M. Madsen)
13. Scaling-up of dye sensitized solar modules (L. Vesce, A. Guidobaldi, P. Mariani, M. L. Parisi, S. Maranghi, R. Basosi, A. Di Carlo)
14. Perovskite photovoltaic modules (R. Gehlhaar, T. Aernouts)

Perspectives (V. Turkovic, M. Madsen, H.-G. Rubahn)