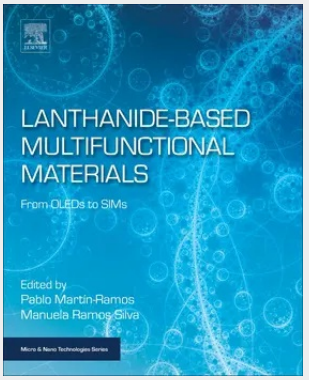
Elsevier Science & Technology

Lanthanide-Based Multifunctional Materials



Lanthanide-Based Multifunctional Materials: From OLEDs to SIMs serves as a comprehensive and state-of the art review on these promising compounds, delivering a panorama of their extensive and rapidly growing applications. After an introductory chapter on the theoretical description of the optical and magnetic behaviour of lanthanides and on the prediction of their properties by ab-initio methods, four chapters are devoted to lanthanide-based OLEDs, including the latest trends in visible emitters, the emerging field of near infrared emitters and the first achievements attained in the field of chiral OLEDs. The use of lanthanide complexes as molecular magnets spreads over another two chapters, which explain the evolution of 4f-elements-based SIMs and the most recent advances in heterometallic 3d–4f SMMs. Other very active research areas are covered in the remaining five chapters, dedicated to lanthanide-doped germanate and tellurite glasses, luminescent materials for up-conversion, luminescent thermosensors, multimodal imaging and therapeutic agents, and chemosensors. The book is aimed at academic and industrial researchers, undergraduates and postgraduates alike, and is of particular interest for the Materials Science, Applied Physics and Applied Chemistry communities.

179,50 €
167,76 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780128138403
Medium: Buch
ISBN: 978-0-12-813840-3
Verlag: Elsevier Science & Technology
Erscheinungstermin: 18.06.2018
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2018
Produktform: Kartoniert
Gewicht: 795 g
Seiten: 490
Format (B x H): 154 x 229 mm