1. Record Nr. UNINA9910484589203321

Titolo	Advanced Display Technology : Next Generation Self-Emitting Displays / / edited by In Byeong Kang, Chang Wook Han, Jae Kyeong Jeong
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-336-582-X
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (VIII, 328 p. 239 illus., 214 illus. in color.)
Collana	Series in Display Science and Technology, , 2509-5919
Disciplina	621.3815422
Soggetti	Signal processing Optoelectronic devices Optical materials Electronic circuits Signal, Speech and Image Processing Digital and Analog Signal Processing Optoelectronic Devices Optical Materials Electronic Circuits and Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1 - Metal Oxide Thin-Film Transistor. - Chapter 2 - Pixel circuit of OLED display -- Chapter 3 - Phosphorescent OLEDs for power efficient displays -- Chapter 4 - TADF and hyperfluorescence.-Chapter 5 - Solution-processible OLED material based on conjugated polymer technology -- Chapter 6 - Soluble small molecules for ink jet printed OLEDs – history, status and prospects -- Chapter 7 - Chemical mechanisms of intrinsic degradation of emitting layers in OLED devices -- Chapter 8 - White OLED device technology and large-sized applications -- Chapter 9 - Encapsulation technology for flexible OLEDs -- Chapter 10 - Quantum dot-enabled displays -- Chapter 11 - Quantum dot based displays -- Chapter 12 - Micro LED technology for display applications -- Chapter 13 - Display techniques for augmented reality and virtual reality.
Sommario/riassunto	This book provides a comprehensive and up-to-date guide to the

AMOLED technologies and applications which have become industry standard in a range of devices, from small mobile displays to large televisions. Unlike other books on the topic, which cover the fundamentals, materials, processing, and manufacturing of OLEDs, this one-stop book discusses the core components, such as TFT backplanes, OLED materials and devices, and driving schematics together in one volume with chapters written by experts from leading international companies in the field of OLED materials and OLED TVs. It also examines emerging areas, such as micro-LEDs, displays using quantum dots, and AR & VR displays. Presenting the latest research trends as well as the basic principles of each topic, this book is intended for undergraduate and postgraduate students taking display-related courses, new researchers, and engineers in related fields.