# Device and Process Technology for Full-Color Active-Matrix OLED Displays



Filesize: 3.42 MB

## **Reviews**

If you need to adding benefit, a must buy book. It really is writter in straightforward words and phrases rather than difficult to understand. Your life period is going to be change the instant you total reading this ebook.

(Letha Okuneva)

## DEVICE AND PROCESS TECHNOLOGY FOR FULL-COLOR ACTIVE-MATRIX OLED DISPLAYS



Cuvillier Verlag Nov 2007, 2007. Taschenbuch. Book Condition: Neu. 212x147x12 mm. Neuware - Organic light emitting diodes fascinate due to unique properties like an extremely thin design, wide viewing angle and low energy consumption. For these reasons, OLED technology appears to be a promising technology for high-end display units. Today, organic light emitting diodes are already applied for low resolution applications as - for instance - mobile phone and automotive sub-displays. For being a serious competitor the high-resolution largearea display market, active-matrix driving circuits have to be integrated onto the display substrate. Since the circuitry is most likely to be opaque, the light has to be emitted rather from the top than through the substrate. This is, where inverted organic light emitting diodes step into the spotlight. The term 'inverted¿ refers to a reversed deposition sequence compared to conventional bottom-emitting OLEDs. Up-scaling of laboratory deposition processes to high-volume production means further challenges on the way to commercial full-color AM-OLED displays. The present study focuses on the realization of highly efficient IOLEDs and the development of scalable deposition and patterning processes. Utilizing highly phosphorescent emitter materials boosts the efficiency of inverted IOLEDs. As a precondition, luminescence quenching via thermal recrystallization of the host material, energy transfer to image dipoles on the cathode's surface or radiationless decay of interfacial exciplexes has to be minimized by an optimized device structure. Combining the optimized device structure with doped charge injection layers, yields superb efficiencies of 59 cd/A and 21 lm/W as well as a maximum brightness of 100000 cd/m. Coupling of several emission units by so called charge generation layers (CGL) enables a further increase of the current efficiency. An inverted OLED with two EMUs reaches a current efficiency of up to 92 cd/A. Effective CGL-structures are made of a pn-heterojunction of at least...

- Read Device and Process Technology for Full-Color Active-Matrix OLED Displays
- Download PDF Device and Process Technology for Full-Color Active-Matrix OLED Displays

#### Relevant Kindle Books



## Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

Read PDF »



#### Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

Read PDF »



# Unplug Your Kids: A Parent's Guide to Raising Happy, Active and Well-Adjusted Children in the Digital Age

Adams Media Corporation. Paperback. Book Condition: new. BRAND NEW, Unplug Your Kids: A Parent's Guide to Raising Happy, Active and Well-Adjusted Children in the Digital Age, David Dutwin, TV. Web Surfing. IMing. Text Messaging. Video...

Read PDF »



# A Dog of Flanders: Unabridged; In Easy-to-Read Type (Dover Children's Thrift Classics)

Dover Publications, 2011. Paperback. Book Condition: New. No Jacket. New paperback book copy of A Dog of Flanders by Ouida (Marie Louise de la Ramee). Unabridged in easy to read type. Dover Children's Thrift Classic....

Read PDF »



#### It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em, Greg Behrendt, Amiira Ruotola-Behrendt, A fabulous new guide to dating...

Read PDF »