



## Fabrication and Characterisation of Device Quality ZnO Nanostructures

By Augustine Che Mofor

Cuvillier Verlag Jul 2007, 2007. Taschenbuch. Book Condition: Neu. 211x147x12 mm. Neuware - Since ZnO resurfaced as a very promising semiconductor material for applications in microelectronics, optoelectronics, sensor technology, biomedicine and spin electronics, producing high purity ZnO nanostructures for such applications has rather proven to be challenging. This book first revises the main properties of ZnO as a semiconductor and nanomaterial and also some fabrication techniques for nanostructures. It later concentrates on the development of a vapour transport system for the growth of high quality ZnO nanostructures (mainly nanorods). The book attempts to explain the influence of reactor pressure, growth temperature and growth time on the morphology and quality of ZnO nanorods. While intrinsic (undoped) ZnO nanorods were grown for extensive analysis, transition metal-doped ZnO nanorods were also fabricated and investigated for possible applications in magnetoelectronics/spintronics. Conventional material characterisation methods are also revisited and employed to analyse the crystalline quality, optical, electrical and magnetic properties of ZnO nanorods. Since the book is written in an application-oriented fashion, it extends to the fabrication of ZnO nanorod-based device structures. Here, nano p-n junctions and nano ZnO/ZnMgO quantum well structures are also presented. At the end, the reader clearly sees how ZnO nanorods of...



[READ ONLINE](#)

### Reviews

*It is really an amazing pdf which i actually have possibly read. I really could comprehend almost everything using this published e pdf. Its been printed in an remarkably easy way and it is just soon after i finished reading through this book in which in fact changed me, modify the way in my opinion.*

-- **Jena Jacobi**

*This pdf is great. This really is for anyone who statte there had not been a well worth studying. You may like just how the writer compose this pdf.*

-- **Dr. Freida Leuschke II**

## See Also



**Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)**

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to expand and inspire young minds; this is...



**Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English] (Paperback)**

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to expand and inspire young minds; this is...



**World famous love of education(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Pub Date :2010-01 Publisher: Popular Literature Publishing0.27 Description Amicis. born in 1846 in Italy. Italy was affected by the impact...



**DK Readers L1: Jobs People Do: A Day in the Life of a Firefighter**

DK Publishing. Paperback / softback. Book Condition: new. BRAND NEW, DK Readers L1: Jobs People Do: A Day in the Life of a Firefighter, Linda Hayward, DK Publishing, This Level 1 book is appropriate for children who are just beginning to read....



**The Ethical Journalist (New edition)**

SAGE Publications Ltd. Paperback. Book Condition: new. BRAND NEW, The Ethical Journalist (New edition), Tony Harcup, 'Harcup's interviews with local journalists reveal the complexity of acting ethically through insightful discussions of professional rivalry, the demands of editors and the consequences for local...



**JA] early childhood parenting :1-4 Genuine Special(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2006-01-01 Pages: 179 Publisher: the China Pictorial Our book is all new book of genuine special spot any...