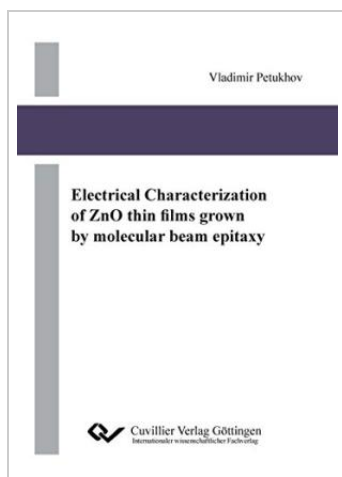




Electrical Characterization of ZnO thin films grown by molecular beam epitaxy

By Vladimir Petukhov

Cuvillier Verlag Apr 2012, 2012. Taschenbuch. Book Condition: Neu. 211x149x4 mm. Neuware - For the electronic and optoelectronic device realization a precise control of the electrical properties in the utilized material is a very important issue. Doping profiles in realized p-n-junctions influence the functionality of the devices. The morphological and crystal properties of a device material directly influence the electrical ones. Dislocations present in a region of p-n-junctions can short circuit them leading to malfunctions. Too rough surfaces during epitaxial growth could lead to inhomogeneities in a single or multiple quantum wells and superlattices. The main goal of the present work was to provide the basis for a reliable p-type doping of ZnO grown by molecular beam epitaxy. Firstly, the well established heteroepitaxial growth on c-sapphire substrates has been employed. Based on the theoretical and experimental works, suggesting nitrogen to be the impurity that builds the most shallow acceptor level in ZnO comparing to other group-V elements, it has been implied as a dopant. To generate reactive nitrogen atoms an rf-plasma source has been utilized in the MBE process. The resulting samples have been characterized by such methods as AFM, XRD, TEM, PL spectroscopy, temperature domain Hall measurements (TDHM) and ECV-profiling....



READ ONLINE
[7.74 MB]

Reviews

Very good eBook and valuable one. Better then never, though i am quite late in start reading this one. I am very easily could possibly get a satisfaction of reading through a created publication.

-- **Brianne Heidenreich**

A very awesome publication with perfect and lucid information. It is probably the most awesome book i have read. You may like how the author publish this pdf.

-- **Dr. Celia Howell DVM**

Other PDFs



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually download a free scanned copy of the...



Crochet: Learn How to Make Money with Crochet and Create 10 Most Popular Crochet Patterns for Sale: (Learn to Read Crochet Patterns, Charts, and Graphs, Beginner s Crochet Guide with Pictures)

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Getting Your FREE Bonus Download this book, read it to the end and see BONUS: Your FREE Gift chapter after...



DK Readers Animal Hospital Level 2 Beginning to Read Alone

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.9in. x 5.8in. x 0.1in.This Level 2 book is appropriate for children who are beginning to read alone. When Jack and Luke take an injured duck to the vet, it is just...



DK Readers Day at Greenhill Farm Level 1 Beginning to Read

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in.This Level 1 book is appropriate for children who are just beginning to read. When the rooster crows, Greenhill Farm springs to life. Join the ducklings, cows, and...



Read Write Inc. Phonics: Yellow Set 5 Storybook 7 Do We Have to Keep it?

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 211 x 101 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read Write Inc. Set 1 and 2 sounds....



Kingfisher Readers: What Animals Eat (Level 2: Beginning to Read Alone) (Unabridged)

Pan Macmillan. Paperback. Book Condition: new. BRAND NEW, Kingfisher Readers: What Animals Eat (Level 2: Beginning to Read Alone) (Unabridged), Brenda Stone, For the first time, Kingfisher brings its expertise in beautifully-designed, trusted non-fiction to the sphere of learning to read. This...