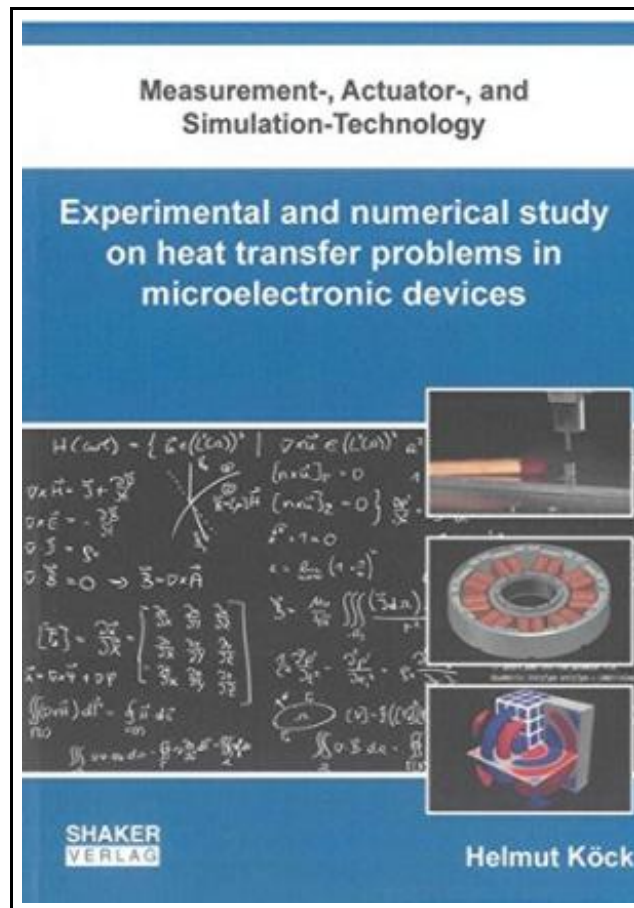


Experimental and numerical study on heat transfer problems in microelectronic devices



Filesize: 6.51 MB

Reviews


This is actually the greatest publication i have go through right up until now. I really could comprehended every little thing using this composed e book. I realized this book from my i and dad advised this ebook to learn.

(Jimmie Schmidt I)

EXPERIMENTAL AND NUMERICAL STUDY ON HEAT TRANSFER PROBLEMS IN MICROELECTRONIC DEVICES



Shaker Verlag Dez 2013, 2013. Buch. Book Condition: Neu. 214x151x22 mm. Neuware - Today, power semiconductor products are increasingly used to enhance energy efficiency, safety as well as comfort and convenience in automotive and industrial applications. These requirements ask for particularly high robustness and reliability in a market environment where the best technical solutions are challenged by high cost pressure. At the 'Kompetenzzentrum für Automobil- und Industrieelektronik GmbH (KAI)' several groups search for solutions to improve the robustness and reliability of power semiconductor devices. The goal of the engineering group is to study the long term behavior of power devices in the challenging automotive and industrial environment. Supported by proprietary test systems for accelerated testing developed and operated at KAI [77,79], power devices are tested in parallel under extreme electrical and thermal stress conditions. End-of-life data of several of hundreds of devices per month are the basis for statistical analysis. Using these experimental lifetime data, statistical methods (i.e. Bayesian approaches) are applied to evaluate existing data and further provide forecasts in order to reduce test time and costs [22,23]. At the same time, the physical device characterization group as well as the simulation group are acquiring advanced knowledge regarding destruction and degradation (fatigue) effects. A detailed understanding of the underlying degradation mechanism requires extended physical analysis, thermal and mechanical material characterization as well as a validation of physical models with the aid of finite element simulation. What all groups have in common is that temperature is the fundamental stress parameter related to robustness and reliability issues in power semiconductors. Indeed, parameters affecting the process from gradual fatigue towards ultimately destructive events are manifold. Rapid temperature variations during electrical stress events cause substantial fatigue phenomena driven by mechanical stress due to a mismatch in mechanical properties (i.e. thermal expansion coefficient, yield...

 [Read Experimental and numerical study on heat transfer problems in microelectronic devices Online](#)

 [Download PDF Experimental and numerical study on heat transfer problems in microelectronic devices](#)

Other eBooks



Reflections From the Powder Room on the Love Dare: A Topical Discussion by Women from Different Walks of Life

Destiny Image. Book Condition: New. 0768430593 BRAND NEW!! MULTIPLE COPIES AVAILABLE. NEW CONDITION!! 100% MONEY BACK GUARANTEE!! BUY WITH CONFIDENCE! WE SHIP DAILY!!EXPEDITED SHIPPING AVAILABLE. What's more fun than reading a book? Discussing it with...

[Download Book »](#)



Things I Remember: Memories of Life During the Great Depression

Createspace Independent Publishing Platform, United States, 2013. Paperback. Book Condition: New. 203 x 142 mm. Language: English . Brand New Book ***** Print on Demand *****.Some Americans who were born and raised during the Great...

[Download Book »](#)



The Facts of Life

Penguin Books. PAPERBACK. Book Condition: New. 0140055002 12+ Year Old paperback book-Never Read-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship FAST...

[Download Book »](#)



What s the Point of Life? (Hardback)

CF4kids, United States, 2014. Hardback. Book Condition: New. 208 x 145 mm. Language: English . Brand New Book. Abandoned by my mother, I was often clueless about my father s whereabouts, while his girlfriend-a cruel,...

[Download Book »](#)



Daddyteller: How to Be a Hero to Your Kids and Teach Them What s Really by Telling Them One Simple Story at a Time

Createspace, United States, 2013. Paperback. Book Condition: New. 214 x 149 mm. Language: English . Brand New Book ***** Print on Demand *****.You have the power, Dad, to influence and educate your child. You can...

[Download Book »](#)

**Who am I in the Lives of Children? An Introduction to Early Childhood Education**

Pearson Education (US), United States, 2015. Paperback. Book Condition: New. 10th Revised edition. 254 x 201 mm. Language: English . Brand New Book. Note: This is the bound book only and does not include access

[Save ePub »](#)

**DK Readers Disasters at Sea Level 3 Reading Alone**

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in. From fog, ice, and rocks to cannon fire and torpedo attacks--read the story of five doomed sea voyages and the fate

[Save ePub »](#)

**Anna's Fight for Hope: The Great Depression 1931 (Sisters in Time Series 20)**

Barbour Publishing, Inc., 2004. Paperback. Book Condition: New. No Jacket. New paperback book copy of Anna's Fight for Hope: The Great Depression 1931 (Sisters in Time Series 20). Publisher recommended for ages 8 to 12

[Save ePub »](#)

**My Big Book of Bible Heroes for Kids: Stories of 50 Weird, Wild, Wonderful People from God's Word**

Shiloh Kidz. PAPERBACK. Book Condition: New. 1634093151 BRAND NEW!! MULTIPLE COPIES AVAILABLE. NEW CONDITION!! 100% MONEY BACK GUARANTEE!! BUY WITH CONFIDENCE! WE SHIP DAILY!! EXPEDITED SHIPPING AVAILABLE.

[Save ePub »](#)

**Read Write Inc. Phonics: Yellow Set 5 Non-Fiction 3 Fun at the Fair**

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 207 x 170 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books

[Save ePub »](#)