



Active Magnetic Bearings and Self-Bearing Motors

By Grochmal, Thomas R.

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Modeling and Nonlinear Control | This dissertation covers aspects of modeling and control of magnetic levitation devices, specifically, active magnetic bearings (AMBs) and self-bearing motors (SBMs). Chapters 2-4 focus on AMBs and how they are used to levitate high-speed rotating shafts in a variety of applications. First principle modeling, parameter identification, and feedback control designs are discussed and demonstrated in practice on a commercially available test stand. Various control approaches are presented to achieve basic stabilization, vibration suppression, and trajectory tracking. An SBM, which simultaneously levitates and rotates a shaft, is used to integrate an AMB with an electric motor for the sake of compactness and economy. This dissertation focuses on recent developments in SBM design which utilize the Lorentz force as the basis for levitation, in contrast to AMBs which establish levitation on more common basis of Maxwell force. SBMs are the topic of Chapters 5-7, with emphasis on levitation force and motoring torque characterization, dynamic modeling, and feedback control approaches necessary to drive robust performance. | Format: Paperback | Language/Sprache: english | 240 gr | 168 pp.



READ ONLINE
[6.92 MB]

Reviews

The publication is easy in read safer to comprehend. It is actually rally intriguing throgh studying time. I am easily will get a delight of looking at a created publication.

-- **Claud Feest**

This ebook will not be simple to start on looking at but really enjoyable to read. It is one of the most awesome book we have study. Your life span is going to be transform when you complete looking over this pdf.

-- **Kayla Gutkowski**

Related PDFs



[Summer Fit Preschool to Kindergarten Math, Reading, Writing, Language Arts Fitness, Nutrition and Values](#)

Summer Fit Learning. Paperback. Book Condition: New. Paperback. 160 pages. Dimensions: 10.6in. x 8.3in. x 0.5in. Summer Fit Activity Books move summer learning beyond academics to also prepare children physically and socially for the grade ahead. Academic exercises are based on Common Core...



[Traffic Massacre: Learn How to Drive Multiple Streams of Targeted Traffic to Your Website, Amazon Store, Auction, Blog, Newsletter or Squeeze Page](#)

Createspace Independent Publishing Platform, United States, 2016. Paperback. Book Condition: New. 279 x 216 mm. Language: English . Brand New Book ***** Print on Demand *****.3 Free Bonus Books Included! Attention: Online business owners. quote; Finally! How Would You Like To Tap Into...



[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 Games. iPods. Kids today are plugged into...



[The Trouble with Trucks: First Reading Book for 3 to 5 Year Olds](#)

Anness Publishing. Paperback. Book Condition: new. BRAND NEW, The Trouble with Trucks: First Reading Book for 3 to 5 Year Olds, Nicola Baxter, Geoff Ball, This is a super-size first reading book for 3-5 year olds, with an engaging story, colourful pictures...



[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...



[Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. \(1624-1625\)](#)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you can. Digitally preserved and previously accessible...