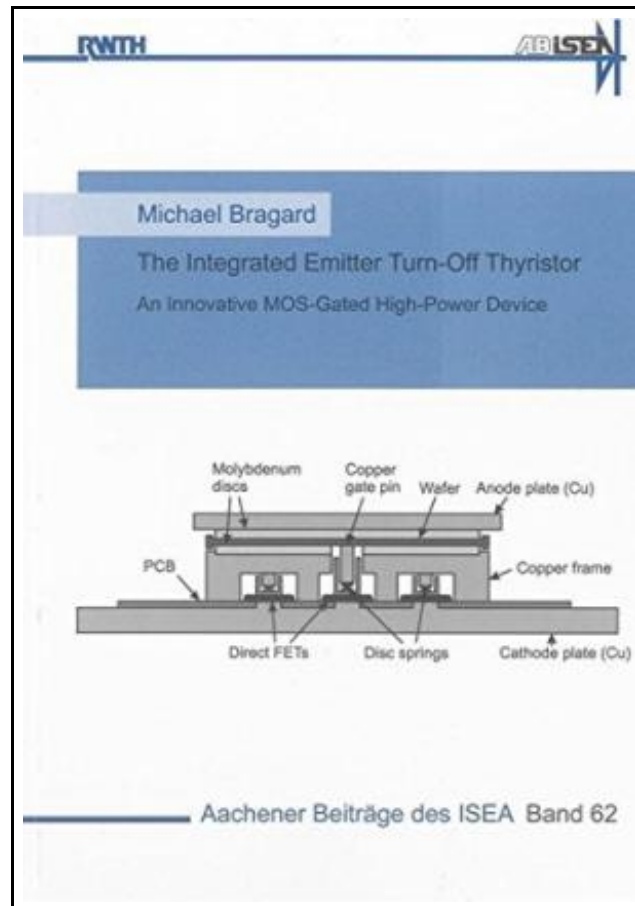


# The Integrated Emitter Turn-Off Thyristor



Filesize: 8.62 MB

## Reviews

*These types of book is the greatest ebook readily available. I was able to comprehend every little thing using this published e pdf. I realized this pdf from my dad and i encouraged this publication to discover.*

*(Dr. Porter Mitchell)*

## THE INTEGRATED EMITTER TURN-OFF THYRISTOR



To download **The Integrated Emitter Turn-Off Thyristor** eBook, remember to follow the web link below and download the file or gain access to other information which are have conjunction with THE INTEGRATED EMITTER TURN-OFF THYRISTOR ebook.

Shaker Verlag Jul 2012, 2012. Taschenbuch. Book Condition: Neu. Neuware - This thesis introduces the Integrated Emitter Turn-Off (IETO) Thyristor as a new high-power device. Known state-of-the-art research activities like the Dual GCT, the ETO thyristor and the ICT were presented and critically reviewed. A comparison with commercialized solutions identifies the pros and cons of each type of device family. Based on this analysis, the IETO structure is proposed, covering most benefits of each device class. In particular the combination of a MOS-assisted turn-off with a thyristor-based device allows a voltage-controlled MOS switching and the low on-state voltage of the thyristors. The following synthesis of an IETO device stands on a three-dimensional field of optimization spanned by electric, mechanical and thermal aspects. From an electric point of view, the lowest possible parasitic inductance and resistance within the commutation path are optimization criteria. The mechanical construction has to withstand the required contact pressure of multiple kilo Newtons. Finally, thermal borders limit the maximum average current of the device. FEM simulations covering these three aspects are performed for several design proposals. An IETO prototype is constructed and measurements on various test benches attest thermal, mechanical and electric performance. A local decoupling of the external driver stage and the presspack housing is presented by a cable connection. This separation enables a thermal and mechanical independence, which is advantageous in terms of vibrations and thermal cycles including increased reliability. The electric pulse performance of the prototype device is a factor of 3.1 above today's solutions. In single-pulse measurements, a current up to 1600 A was successfully turned off at 115°C with an active silicon area of 823 mm . One reason for this increased turn-off capability is the extremely low-inductive construction. Additional functionality of the IETO thyristor like over-current self-protection and defined short-circuit failure...



[Read The Integrated Emitter Turn-Off Thyristor Online](#)



[Download PDF The Integrated Emitter Turn-Off Thyristor](#)

## See Also



### [PDF] Psychologisches Testverfahren

Follow the web link beneath to download "Psychologisches Testverfahren" document.

[Download eBook »](#)



### [PDF] Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success

Follow the web link beneath to download "Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success" document.

[Download eBook »](#)



### [PDF] 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)

Follow the web link beneath to download "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)" document.

[Download eBook »](#)



### [PDF] 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)

Follow the web link beneath to download "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)" document.

[Download eBook »](#)



### [PDF] You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most

Follow the web link beneath to download "You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most" document.

[Download eBook »](#)



### [PDF] Programming in D

Follow the web link beneath to download "Programming in D" document.

[Download eBook »](#)