



## Silicon Carbide Field-Effect Transistor (FET) Transducers for Harsh Environment Applications

By Walter Daves

Shaker Verlag Mrz 2013, 2013. Buch. Book Condition: Neu. Neuware - The emerging field of harsh environment semiconductor devices has a high potential to improve efficiency and safety of combustion processes significantly. Above all, robust sensor and electronic devices enable system and exhaust gas monitoring, as well as combustion control in real-time. For these applications the exposure of the devices to the harsh environment is often unavoidable. Especially for pressure and exhaust gas sensing applications, the direct contact with the harsh environment is required for sensor operation. This imposes completely different requirements on the material and the device reliability compared to silicon microsystem technology standards. In particular, resistance against temperatures as high as 600 °C and highly corrosive air/moisture environments is required. Furthermore, thermal cycling is also a major concern. Silicon carbide (SiC) is a promising semiconductor material for harsh environment sensors and electronics due to its outstanding properties and the high level of maturity of the related process technology. Despite the excellent properties of the SiC substrate material, the lifetime of SiC devices in harsh environments is above all limited by the stability of the ohmic contacts and the gate dielectrics. This work aimed at the development of novel...



**READ ONLINE**  
[ 7.9 MB ]

### Reviews

*Merely no words to spell out. Sure, it is actually perform, nonetheless an amazing and interesting literature. Once you begin to read the book, it is extremely difficult to leave it before concluding.*

-- **Vada Heidenreich**

*This book is really gripping and interesting. Sure, it can be enjoy, nonetheless an amazing and interesting literature. I found out this ebook from my i and dad suggested this pdf to find out.*

-- **Mr. Manuela Mann II**

## See Also



### [Programming in D](#)

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers who are new to computer programming. Although...



### [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...



### [Adobe Indesign CS/Cs2 Breakthroughs](#)

Peachpit Press, 2005. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Adobe InDesign is taking the publishing world by storm and users are hungry for breakthrough solutions to...



### [The Java Tutorial \(3rd Edition\)](#)

Pearson Education, 2001. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Praise for "The Java' Tutorial, Second Edition" includes: "This book stands above the rest because it has..."



### [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...



### [Edge\] the collection stacks of children's literature: Chunhyang Qiuyun 1.2 --- Children's Literature 2004\(Chinese Edition\)](#)

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: 2005 Pages: 815 Publisher: the Chinese teenager Shop Books all book. the genuine special part of the spot...