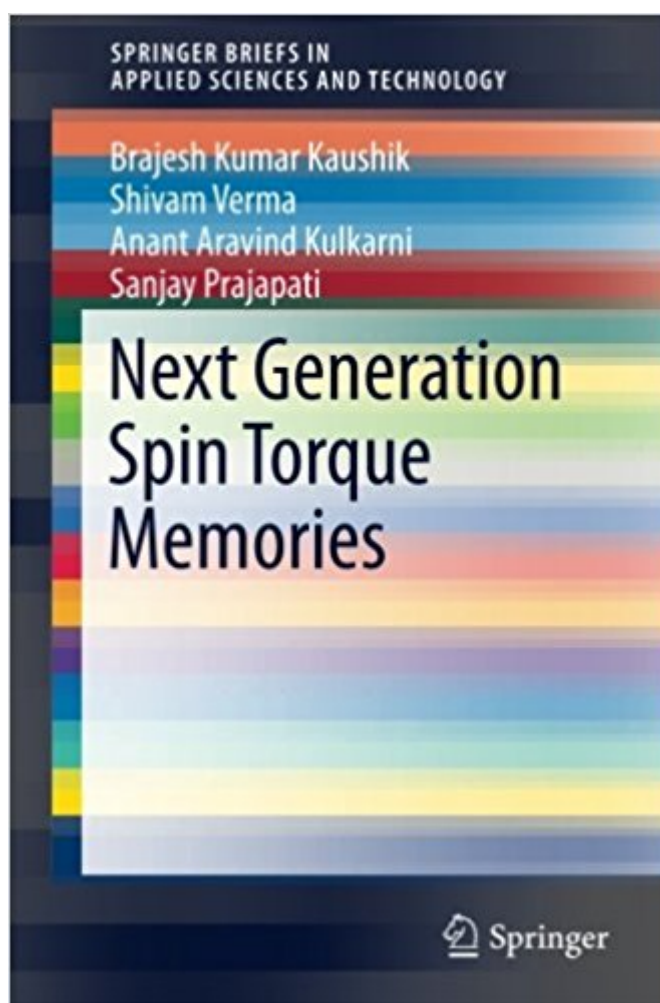


The book was found

# Next Generation Spin Torque Memories (SpringerBriefs In Applied Sciences And Technology)



## Synopsis

This book offers detailed insights into spin transfer torque (STT) based devices, circuits and memories. Starting with the basic concepts and device physics, it then addresses advanced STT applications and discusses the outlook for this cutting-edge technology. It also describes the architectures, performance parameters, fabrication, and the prospects of STT based devices. Further, moving from the device to the system perspective it presents a non-volatile computing architecture composed of STT based magneto-resistive and all-spin logic devices and demonstrates that efficient STT based magneto-resistive and all-spin logic devices can turn the dream of instant on/off non-volatile computing into reality.

## Book Information

Series: SpringerBriefs in Applied Sciences and Technology

Paperback: 92 pages

Publisher: Springer; 1st ed. 2017 edition (April 8, 2017)

Language: English

ISBN-10: 9811027196

ISBN-13: 978-9811027192

Product Dimensions: 6.1 x 0.3 x 9.2 inches

Shipping Weight: 6.6 ounces (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #810,138 in Books (See Top 100 in Books) #135 in [Books > Science & Math > Technology > Nanotechnology](#) #711 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits](#) #1706 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics](#)

## Customer Reviews

Brajesh Kumar Kaushik received his Bachelor of Engineering Degree in Electronics and Communication Engineering from D.C.R. University of Science and Technology, (formerly C. R. State College of Engineering) Murthal, Haryana in 1994. He received Master of Technology Degree in Engineering Systems, from Dayalbagh Educational Institute, Agra, in 1997, and Doctorate of Philosophy (PhD) Degree in 2007 under AICTE-QIP scheme from Indian Institute of Technology Roorkee, India. He served Vinytics Peripherals Pvt. Ltd., Delhi as Research & Development Engineer in Microprocessor, Microcontroller and DSP processor based system design. He joined Department of Electronics and Communication Engineering, G.B. Pant Engineering College, Pauri

Garhwal, Uttarakhand, India as Lecturer in July, 1998, where later he served as Assistant Professor from May, 2005 to May, 2006 and Associate Professor from May 2006 to Dec, 2009. He joined Department of Electronics and Communication Engineering, Indian Institute of Technology, Roorkee as Assistant Professor in Dec, 2009; where since April 2014, he is working as Associate Professor. He has extensively published in several national and international journals and conferences of repute. He has also authored/co-authored several books and book chapters. He is reviewer of many international journals belonging to various publications such as IEEE, IET, Elsevier, Springer, Taylor and Francis, Emerald, ETRI, PIER etc. He has also served as General Chair, Technical Chair and Keynote Speaker in many reputed international and national conferences. Dr. Kaushik is Senior Member of IEEE and member of many expert committees constituted by Government and Non-Government organizations. He holds the position of Editor and Editor-in-Chief of various journals in the field of VLSI and Microelectronics. Dr. Kaushik is Editor-in-Chief of International Journal of VLSI Design and Communication System (VLSICS), AIRCC Publishing Corporation. He also holds the position of Editor of Microelectronics Journal (MEJ), Elsevier Inc.; Journal of Engineering, Design and Technology (JEDT), Emerald Group Publishing Limited; and Journal of Electrical and Electronics Engineering Research (JEEER), Academic Journals. He has received many awards and recognitions from International Biographical Center (IBC), Cambridge etc. His name has been listed in Marquis Who's Who in Science and Engineering<sup>®</sup> and Marquis Who's Who in the World<sup>®</sup>. His research interests are in the areas of High Speed Interconnects, Low power VLSI Design, Carbon Nanotube based Designs, Organic Electronics; FinFET Device Circuit Co-Design, Electronic Design Automation (EDA), Spintronics based devices and circuits. Shivam Verma received the B.E. Degree in Electronics and Communication Engineering from Shri Vaishnav Institute of Technology and Science, Indore, India, and the M.Tech. Degree in Microelectronics from Indian Institute of Technology Varanasi, India, in 2010 and 2012, respectively. He is currently pursuing Ph.D. from Indian Institute of Technology Roorkee, India. He has published many papers in IEEE journals. His current research interests include spin transfer torque-based devices and all spin logic. Kulkarni Anant Aravind received the B.E. Degree in Electronics Engineering from Shri Guru Gobind Singhji College of Engineering and Technology, Nanded, Maharashtra, India, in 2002, M.Tech. Degree in Electrical Engineering from Uttar Pradesh Technical University (presently Dr. A.P.J. Abdul Kalam Technical University), Lucknow, Uttar Pradesh, India in 2009, and M.Tech. Degree in Microelectronics and VLSI Design from Technocrat Institute of Technology, Bhopal, Madhya Pradesh, India in 2013. He is presently pursuing Ph.D. from Indian Institute of Technology Roorkee, India. He worked at Multitech

Microsystems (Calibration Unit), Aurangabad as a trainee engineer from August, 2002 to June, 2003. He joined Department of Electronics and Communication Engineering, Marathwada Institute of Technology, Bulandshahr, India as lecturer from July, 2003 to January, 2007. He joined Electronics and Communication Engineering Department, Meerut Institute of Engineering and Technology, Meerut, India as lecturer in February, 2007 and served there till January, 2008. He joined Electrical, Electronics, and Power Engineering Department, College of Engineering, Ambajogai, Maharashtra, India, and worked as senior lecturer from February, 2007 to May, 2009 and where since June 2009, he has been working as Assistant Professor. His current research interests include Spintronics based devices, and circuits. Sanjay Prajapati received the B.E. Degree in Electronics and Communication Engineering from Government Engineering College (GEC), Modasa, Gujarat, India in 1996 and M.Tech Degree in VLSI Design from Nirma University, Ahmedabad, Gujarat, India in 2010. He is pursuing Ph.D from the Indian Institute of Technology, Roorkee, India, since July, 2015. He served as a lecturer in the Department of Electronics and Communication Engineering, Government Polytechnic, Surat, Gujarat, India, from October, 1998 to October, 2004. He became an Assistant Professor at Vishwakarma Government Engineering College, Ahmedabad, Gujarat, India in October, 2004 and later promoted as an Associate Professor in September, 2012 at Government Engineering College, Dahod, affiliated to Gujarat Technological University, Ahmedabad, Gujarat, India. He has attended several workshops, seminars and faculty development programs of national level. He has more than seventeen years of research and academic experience. His current research interest includes Spintronic device modeling and logic design.

[Download to continue reading...](#)

Next Generation Spin Torque Memories (SpringerBriefs in Applied Sciences and Technology) BMX Racing (Torque Books: Action Sports) (Torque: Action Sports) BMX Freestyle (Torque Books: Action Sports) (Torque: Action Sports) Dirt Bikes (Torque Books: Cool Rides) (Torque: Cool Rides) AC-130H/U Gunships (Torque Books: Military Machines) (Torque: Military Machines (Library)) Strykers (Torque Books: Military Machines) (Torque: Military Machines (Library)) Spin to Win: A Roller Derby Lesson Plan, Emphasizing Spin Techniques for Blockers & Jammers (Encyclopedia Skate-annica Book 1) The Fifty-Year Mission: The Next 25 Years: From the Next Generation to J. J. Abrams: The Complete, Uncensored, and Unauthorized Oral History of Star Trek Molecular Biology and Pathogenesis of Peste des Petits Ruminants Virus (SpringerBriefs in Animal Sciences) Supply Chain Finance and Blockchain Technology: The Case of Reverse Securitisation (SpringerBriefs in Finance) Applied Functional Analysis: Main Principles and Their Applications (Applied Mathematical

Sciences) Applied Functional Analysis: Applications to Mathematical Physics (Applied Mathematical Sciences) (v. 108) Maori Warriors (Torque Books: History's Greatest Warriors) Paintball (Torque: Action Sports) Kickboxing (Torque: Action Sports) Karts (Torque: Cool Rides) Mackinac Island Memories (Travel Memories Series) Last Photos: vol 8: My Treasured Memories (My Treasured Memories of Elvis) Tiger Man: vol.6 My Treasured Memories (My Treasured Memories of Elvis) Las Vegas 1975: vol 7 My Treasured Memories (My Treasured Memories of Elvis)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)