

Spintronics Handbook, Second Edition: Spin Transport and Magnetism: Volume Three: Nanoscale Spintronics and Applications (Hardback)

By -

Taylor & Francis Inc, United States, 2019. Hardback. Condition: New. 2nd New edition. Language: English. Brand new Book. Spintronics Handbook, Second Edition offers an update on the single most comprehensive survey of the two intertwined fields of spintronics and magnetism, covering the diverse array of materials and structures, including silicon, organic semiconductors, carbon nanotubes, graphene, and engineered nanostructures. It focuses on seminal pioneering work, together with the latest in cutting-edge advances, notably extended discussion of two-dimensional materials beyond graphene, topological insulators, skyrmions, and molecular spintronics. The main sections cover physical phenomena, spin-dependent tunneling, control of spin and magnetism in semiconductors, and spin-based applications.Features: Presents the most comprehensive reference text for the overlapping fields of spintronics (spin transport) and magnetism. Covers the full spectrum of materials and structures, from silicon and organic semiconductors to carbon nanotubes, graphene, and engineered nanostructures.Extends coverage of two-dimensional materials beyond graphene, including molybdenum disulfide and study of their spin relaxation mechanismsIncludes new dedicated chapters on cutting-edge topics such as spin-orbit torques, topological insulators, half metals, complex oxide materials and skyrmions.Discusses important emerging areas of spintronics with superconductors, spin-wave spintronics, benchmarking of spintronics devices, and theory and experimental approaches to molecular spintronics.Evgeny Tsymbal's research is focused on computational materials...



Reviews

A top quality publication along with the font used was intriguing to read. I really could comprehended everything using this written e ebook. Its been designed in an remarkably straightforward way and it is only after i finished reading through this publication by which basically altered me, modify the way i believe.

-- Cathrine Larkin Sr.

Very useful to all of group of people. I actually have read through and so i am certain that i will planning to study yet again once again down the road. I am just very easily can get a satisfaction of looking at a created book. -- Mark Bernier