

1. Record Nr.	UNINA9910139820303321
Titolo	Spin electronics // Michael Ziese, Martin J. Thornton, editors
Pubbl/distr/stampa	Berlin ; ; Heidelberg ; ; New York : , : Springer, , [2001] ©2001
ISBN	3-540-45258-3
Edizione	[1st ed. 2001.]
Descrizione fisica	1 online resource (447 p.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 569
Disciplina	621.3
Soggetti	Spintronics Electron paramagnetic resonance
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	to Spin Electronics -- Basic Concepts -- An Introduction to the Theory of Normal and Ferromagnetic Metals -- Basic Electron Transport -- Phenomenological Theory of Giant Magnetoresistance -- Electronic Structure, Exchange and Magnetism in Oxides -- Transport Properties of Mixed-Valence Manganites -- Spin Dependent Tunneling -- Basic Semiconductor Physics -- Metal-Semiconductor Contacts -- Micromagnetic Spin Structure -- Electronic Noise in Magnetic Materials and Devices -- Materials, Techniques and Devices -- Materials for Spin Electronics -- Thin Film Deposition Techniques (PVD) -- Magnetic Imaging -- Observation of Micromagnetic Configurations in Mesoscopic Magnetic Elements -- Micro— and Nanofabrication Techniques -- Spin Transport in Semiconductors -- Circuit Theory for the Electrically Declined -- Spin—Valve and Spin—Tunneling Devices: Read Heads, MRAMs, Field Sensors.
Sommario/riassunto	For 50 years conventional electronics has ignored the electron spin. The manipulation and utilisation of the electron spin heralds an exciting and rapidly changing era in electronics, combining the disciplines of magnetism and traditional electronics. The first generation of "spintronic" devices (such as read heads based on giant magnetoresistance or non-volatile magnetic random access memories) have already gained dominant positions in the market place. This volume, the first of its kind on spin electronics, describes all the

essential topics for new researchers entering the field. It covers magnetism and semiconductor basics, micromagnetism, experimental techniques, material science, device fabrication and new developments in spin-dependent processes. At the end of most chapters are a number of exercises and worked problems to aid the reader in understanding this fascinating new field.

2. Record Nr.	UNICAMPANIAVAN00254662
Titolo	Proceedings of the Summer School in Logic, Leeds, 1967 : N.A.T.O. Advanced Study Institute Meeting of the Association for Symbolic Logic / edited by M. H. Löb
Pubbl/distr/stampa	Berlin, : Springer, 1968
Descrizione fisica	iv, 331 p. : ill. ; 24 cm
Soggetti	00B25 - Proceedings of conferences of miscellaneous specific interest [MSC 2020] 03-XX - Mathematical logic and foundations [MSC 2020]
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
