1. Record Nr. UNINA9910257410403321

Titolo	Spin — Orbit-Influenced Spectroscopies of Magnetic Solids [[electronic resource]] : Proceedings of an International Workshop Held at Herrsching, Germany, April 20–23, 1995 / / edited by Hubert Ebert, Gisela Schütz
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1996
ISBN	3-540-49619-X
Edizione	[1st ed. 1996.]
Descrizione fisica	1 online resource (VII, 287 p. 23 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 466
Disciplina	530.4/12
Soggetti	Magnetism Magnetic materials Lasers Photonics Magnetism, Magnetic Materials Optics, Lasers, Photonics, Optical Devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Magneto-optical Kerr spectroscopy of transition metal alloy and compound films -- Energy-band theory of the magneto-optical Kerr effect of selected ferromagnetic materials -- Linear magnetic dichroism in angle-resolved photoemission spectroscopy from Co(0001) and Fe (110) valence bands -- Magnetic circular dichroism in photoemission from lanthanide materials -- Magnetic dichroism and spin polarization in valence band photoemission -- Photoelectron diffraction in spin-resolved photoemission and magnetic linear dichroism -- Magnetic ground state properties from Angular dependent magnetic dichroism in core level photoemission -- Experimental determination of orbital and spin moments from MCXD on 3d metal overlayers -- Circular magnetic X-ray dichroism in transition metal systems -- Imaging magnetic microstructures with elemental selectivity: Application of magnetic dichroisms -- Magnetic circular dichroism in X-ray fluorescence -- Spin-orbit interaction, orbital magnetism and spectroscopic properties

	-- Magnetic EXAFS -- Multiple-scattering approach to magnetic EXAFS -- X-ray anomalous scattering and related spectroscopies.
Sommario/riassunto	Presented here for the first time are up-to-date reviews of a new and rapidly developing field of investigation: magnetic solids with polarized photons. The current experimental and theoretical fundamentals of the interplay of spin-orbit interaction and magnetism are described and recent advances in the understanding of the related spectroscopic phenomena are outlined. New aspects on a variety of methods are reported, covering magneto-optical Kerr-effect studies, spin- and angle-resolved photoemission spectroscopy, dichroism in X-ray near- and extended-edge absorption, and X-anomalous scattering. The potential of these methods to reveal new insights in the magnetic aspects of the electronic structure and the microscopic origin of magnetic properties is discussed.