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Nota di contenuto	Magnetic Properties of Antiferromagnetic Oxide Materials; Contents; 6.5.1.1 The Case of $af$ 1; Preface; List of Contributors; 1 Low-Dimensional Antiferromagnetic Oxides : An Overview; 1.1 Introduction; 1.2 Finite-Size Effects on the Magnetic Ordering Temperature; 1.3 AFM Anisotropy; 1.3.1 Magnetocrystal Anisotropy; 1.3.2 Dipolar Anisotropy; 1.4 Interlayer Coupling in AFM-FM Bilayers and Multilayers; 1.4.1 AFM-FM Interface Coupling; 1.4.2 Coupling between FM Layers Separated by an AFM Oxide Spacer; 1.5 Micromagnetic Structure at AFM-FM Interfaces; 1.6 Applications; 1.7 Conclusions; References 2 Growth of Antiferromagnetic Oxide Thin Films2.1 Introduction; 2.2 Nickel Oxide; 2.2.1 Ultrathin NiO Layers; 2.2.2 Thick NiO Films; 2.3 Cobalt Oxide; 2.3.1 Ultrathin CoO Layers; 2.3.2 Thick CoO Films; 2.4 Other Oxides; 2.4.1 MnO(001); 2.4.2 FeO; 2.4.3 -Fe <sub>2</sub> O <sub>3</sub> ; 2.5 Oxide-Substrate Interface; 2.6 Polar-Oxide Surfaces; 2.7 Conclusions and

Perspectives; Acknowledgments; References; 3 Dichroism in X-ray Absorption for the Study of Antiferromagnetic Materials; 3.1 X-ray Absorption and X-ray Dichroism; 3.1.1 X-ray Magnetic Circular Dichroism in the One-Electron Approximation  
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## Sommario/riassunto

This first focused treatment on a hot topic highlights fundamental aspects as well as technological applications arising from a fascinating area of condensed matter physics. The editors have excellent track records and, in light of the broadness of the topic, retain the focus on antiferromagnetic oxides. They thus cover such topics as dichroism in x-ray absorption, non-magnetic substrates, exchange bias, ferromagnetic-antiferromagnetic interface coupling and oxide multilayers, as well as imaging using soft x-ray microscopy. The result is a very timely monograph for solid state physicist