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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Sample Preparation and Measurement Method -- Scattering-free Nature of Intrinsic Anomalous Hall Current -- Skew-scattering-induced Anomalous Hall Effect in Impurity-doped Fe -- Topological Hall Effect in Itinerant Helimagnets -- Conclusion.
Sommario/riassunto	This book presents an investigation of the anomalous and topological Hall effects in some itinerant ferromagnets and helimagnets by measurements of Hall effects driven by electrical or heat current. New clarifications are provided for spin-dependent Hall effects induced by the Berry phase, skew scattering, and scalar spin chirality. The author reveals the scattering-free nature of the Berry-phase-induced anomalous Hall current by conducting the first comparative study of electrical and thermal Hall effects. The impurity-element dependence of the anomalous Hall effect caused by skew scattering is systematically investigated in the low-resistivity region for Fe. Two new examples showing a topological Hall effect are found in helimagnets, in which nonzero scalar spin chirality arises from the modulation of spin structure through Dzyaloshinsky–Moriya (DM) interaction. Such a DM-interaction-mediated topological Hall effect is a new type of topological Hall effect. Also the temperature dependence of topological Hall terms in the thermal Hall effect and Nernst–Etingshausen effect is found to be totally different from that in the electrical Hall effect. These results will be useful for applications of spin current to devices with low power

consumption.
