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Autore	Oram Richard D
Titolo	Domination and lordship : Scotland, 1070-1230 // Richard D. Oram
Pubbl/distr/stampa	Edinburgh, : Edinburgh University Press, 2006
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Descrizione fisica	1 online resource (449 p.)
Collana	The new Edinburgh history of Scotland ; ; 3
Disciplina	941.102
Soggetti	Royal houses - Scotland Scotland History 1057-1603
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Contents -- Tables, Maps and Figures -- Abbreviations -- General Editor's Preface -- Acknowledgements and Dedication -- Tables 1–7 -- Introduction: Scotland in 1070 -- Part One: Narratives -- Chapter 1 Out with the Old, In with the New? 1070–93 -- Chapter 2 Kings and Pretenders, 1093–1136 -- Chapter 3 Building the Scoto-Northumbrian Realm, 1136–57 -- Chapter 4 Under Angevin Supremacy, 1157–89 -- Chapter 5 Settling the Succession, 1189–1230 -- Part Two: Processes -- Chapter 6 Power -- Chapter 7 Reworking Old Patterns: Rural Change, c. 1070–1230 -- Chapter 8 Towns, Burghs and Burgesses -- Chapter 9 Nobles -- Chapter 10 The Making of the Ecclesia Scoticana -- Conclusion -- Table of Events -- Guide to Further Reading -- Bibliography -- Index
Sommario/riassunto	This volume centres upon the era conventionally labelled the 'Making of the kingdom', or the 'Anglo-Norman' era in Scottish history. It seeks a balance between traditional historiographical concentration on the 'feudalisation' of Scottish society as part of the wholesale importation of alien cultural traditions by a 'modernising' monarchy and more recent emphasis on the continuing vitality and centrality of Gaelic culture and traditions within the twelfth- and early thirteenth-century

kingdom. Part I explores the transition from the Gaelic kingship of Alba into the hybridised medieval state and traces Scotland's role as both dominated and dominator. It examines the redefinition of relationships with England, Gaelic magnates within Scotland's traditional territorial heartland and with autonomous/independent mainland and insular powers. These interrelationships form the central theme of an exploration of the struggle for political domination of the northern mainland of Britain and the adjacent islands, the mechanisms through which that domination was projected and expressed, and the manner of its expression. Part II is a thematic exploration of central aspects of the society and culture of late eleventh- to early thirteenth-century Scotland which gave character and substance to the emerging kingdom. It considers the evolutionary growth of Scottish economic structures, changes in the management of land-based resources, and the manner in which secular power and authority were acquired and exercised. These themes are developed in discussions of the emergence of urban communities and in the creation of a new noble class in the twelfth century. Religion is examined both in terms of the development of the Church as an institution and through the religious experience of the lay population.

2. Record Nr.	UNINA9910966192803321
Autore	Skomski Ralph <1961->
Titolo	Simple models of magnetism // Ralph Skomski
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ISBN	0-19-965539-1 9786611160401 1-4356-3892-1 0-19-152475-1 1-281-16040-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (366 p.)
Collana	Oxford Graduate Texts
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Soggetti	Magnetism Magnetism - Mathematical models
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Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; List of abbreviations; List of panels and tables; Preface; 1 Introduction: The simplest models of magnetism; 1.1 Field and magnetization; 1.2 The circular-current model; 1.3 Paramagnetic spins; 1.4 Ising model and exchange; 1.5 The viscoelastic model of magnetization dynamics; Exercises; 2 Models of exchange; 2.1 Atomic origin of exchange; 2.1.1 One-electron wave functions; 2.1.2 Two-electron wave functions; 2.1.3 Hamiltonian and spin structure; 2.1.4 Heisenberg model; 2.1.5 Independent-electron approximation; 2.1.6 Correlations; 2.1.7 *Hubbard model; 2.1.8 *Kondo model 2.2 Magnetic ions2.2.1 Atomic orbitals; 2.2.2 Angular-momentum algebra; 2.2.3 Vector model and Hund's rules; 2.2.4 Spin and orbital moment; 2.3 Exchange between local moments; 2.3.1 Exchange in oxides; 2.3.2 Ruderman-Kittel exchange; 2.3.3 Zero-temperature spin structure; 2.4 Itinerant magnetism; 2.4.1 Free electrons, Pauli susceptibility, and the Bloch model; 2.4.2 Band structure; 2.4.3 Stoner model and beyond; 2.4.4 *Itinerant antiferromagnets; Exercises; 3 Models of magnetic anisotropy; 3.1 Phenomenological models; 3.1.1 Uniaxial anisotropy 3.1.2 Second-order anisotropy of general symmetry3.1.3 Higher-order

anisotropies of nonuniaxial symmetry; 3.1.4 Cubic anisotropy; 3.1.5 Anisotropy coefficients; 3.1.6 Anisotropy fields; 3.2 Models of pair anisotropy; 3.2.1 Dipolar interactions and shape anisotropy; 3.2.2 Demagnetizing factors; 3.2.3 Applicability of the shape-anisotropy model; 3.2.4 The Neel model; 3.3 Spin-orbit coupling and crystal-field interaction; 3.3.1 Relativistic origin of magnetism; 3.3.2 Hydrogen-like atomic wave functions; 3.3.3 Crystal-field interaction; 3.3.4 Quenching; 3.3.5 Spin-orbit coupling
 3.4 The single-ion model of magnetic anisotropy 3.4.1 Rare-earth anisotropy; 3.4.2 Point-charge model; 3.4.3 The superposition model; 3.4.4 Transition-metal anisotropy; 3.5 Other anisotropies; 3.5.1 Magnetoelasticity; 3.5.2 Anisotropic exchange; 3.5.3 Models of surface anisotropy; Exercises; 4 Micromagnetic models; 4.1 Stoner-Wohlfarth model; 4.1.1 Aligned Stoner-Wohlfarth particles; 4.1.2 Angular dependence; 4.1.3 Spin reorientations and other first-order transitions; 4.1.4 Limitations of the Stoner-Wohlfarth model; 4.2 Hysteresis; 4.2.1 Micromagnetic free energy
 4.2.2 *Magnetostatic self-interaction 4.2.3 *Exchange stiffness; 4.2.4 Linearized micromagnetic equations; 4.2.5 Micromagnetic scaling; 4.2.6 Domains and domain walls; 4.3 Coercivity; 4.3.1 Nucleation; 4.3.2 Pinning; 4.3.3 Phenomenological coercivity modeling; 4.4 Grain-boundary models; 4.4.1 Boundary conditions; 4.4.2 Spin structure at grain boundaries; 4.4.3 Models with atomic resolution; 4.4.4 Nanojunctions; Exercises; 5 Finite-temperature magnetism; 5.1 Basic statistical mechanics; 5.1.1 Probability and partition function; 5.1.2 *Fluctuations and response; 5.1.3 Phase transitions
 5.1.4 Landau theory

Sommario/riassunto

Models of magnetism have been pivotal in the understanding and advancement of science and technology. The book is the first one to cover the field as a whole, complementing a rich literature on specific models of magnetism. It is written in an easily accessible style, with a limited amount of mathematics, and covers a wide range of phenomena. - ;For hundreds of years, models of magnetism have been pivotal in the understanding and advancement of science and technology, from the Earth's interpretation as a magnetic dipole to quantum mechanics, statistical physics, and modern nanotechnology. This
