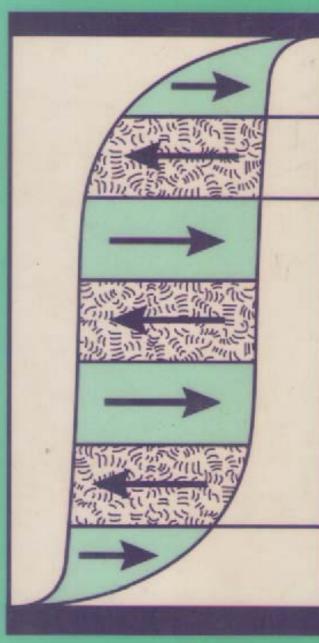
FERROMAGNETIC MATERIALS



Structure and

Properties

R. A. McCurrie

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Ferromagnetic Materials Structure and Properties

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Contents

Pi	Preface		ix
1	INT	RODUCTION	1
	1.1	Ferromagnetism	1
	1.2	Permanent Magnets	19
	1.3	Soft or High-permeability Magnetic Materials	22
2	SOFT MAGNETIC ALLOYS		26
	2.1	Introduction	26
	2.2	Factors Determining the Permeability of Metals and Alloys	28
	2.3	Effects of Fundamental Magnetic Properties on Permeability	29
	2.4	Magnetic Properties of High-permeability Ni-Fe Alloys: Permalloys	34
	2.5	High-permeability, High Saturation Fe-Co Alloys	43
	2.6	High-permeability Ni-Fe-Co Alloys	44
	2.7	High-permeability Iron and Ferritic Iron	45
	2.8	Non-oriented Silicon-Iron Alloys	48
	2.9	Microcrystalline Silicon-Iron Alloys	49
	2.10	Grain-oriented Silicon-Iron with the (110)[001] Texture	49
	2.11	Grain-oriented Si-Fe with the (001)[100] Texture	63
	2.12	Energy Losses in Transformer Cores	64
	2.13	Grain-orientated Si-Fe with an Improved (110)[001] Texture	68
	2.14	Domain Refinement of Grain-oriented Silicon-Iron	72
	2.15	Rotational Hysteresis Loss	73
	2.16	Iron-Aluminium Alloys	75
	2.17	Iron-Silicon-Aluminium Alloys	77
	2.18	Nanocrystalline High-permeability Alloys	77
	2.19	Applications of High-permeability Materials	78
	2.20	Non-ferromagnetic Cu-Ni Alloys	86
	2.21	Non-ferromagnetic and Very-low-permeability Steels and Alloys	87
	2.22	Ni-Fe Alloys with Very Low Thermal Expansion Coefficients and Other Invar Alloys	89
	2.23	Magnetostriction and Magnetoelasticity	90
	2.24	Magnetoresistance	93

	100000000000000000000000000000000000000	-	
VI	Cor	nten	TE

3	AM	ORPHOUS FERROMAGNETIC ALLOYS AND FERROFLUIDS	98
	3.1	Introduction	98
	3.2	Preparation of Amorphous Ferromagnetic Alloys	98
	3.3	Structure of Amorphous Ferromagnetics	99
	3.4	Application of Amorphous Alloys as Soft Magnetic Materials	107
	3.5	Elastomagnetic Properties and Applications	113
	3.6	Magnetic Properties of Hard Amorphous Alloys	114
	3.7	Amorphous Alloys for Erasable Magneto-optical Recording and	115
		Curie-point Writing	110
	3.8	Ferrofluids	117
4	FER	RIMAGNETIC MATERIALS	123
	4.1	Introduction	123
	4.2	Ferrimagnetic Materials with the Spinel Structure	123
	4.3	Néel Two-sublattice Theory of Ferrimagnetism	128
	4.4	Temperature Dependence of the Spontaneous Magnetization of	129
		Ferrimagnetic Materials	
	4.5	Magnetic Structures of Ferrites	132
	4.6	Magnetic Structure and Properties of Mixed Inverse Spinel Ferrites	136
	4.7	Magnetic Structure and Properties of Mixed Normal and Inverse	137
		Spinel Ferrites	
	4.8	Magnetic Structure of the Mixed Normal Spinel MnFe ₂ O ₄ with	139
		Normal Spinel ZnFe ₂ O ₄	100
	4.9	Preparation of Ferrites	139
	4.10	Permeability of Ferrites	142
	4.11	Magnetic Annealing of Ferrites and Induced Uniaxial	145
		Magnetocrystalline Anisotropy	1.10
	4.12	Stress-induced Anisotropy in Ferrites	146
	4.13	Grinding of Ferrites	147
	4.14	Composition and Temperature Dependence of Magnetic Properties	148
	4.15	Frequency Dependence of Permeability and Losses	149
	4.16	Applications of Soft Ferrites	151
	4.17	Electrical Properties of Ferrites	157
	4.18	Structure and Properties of the Ferrimagnetic Garnets	158
	4.19	Structure and Properties of the Ferrimagnetic Orthoferrites:	162
		Lanthanide Orthoferrites	
	4.20	Application of Garnet and Orthoferrite Domain Structures as	164
		Information Storage Devices	20.0
	4.21	Basic Properties of Magnetic Bubbles	166
	4.22	Oxides for Magnetic Recording	171
	4.23	Magnetic Thin Films for In-plane Magnetic Recording	184
	4.24	Co-Cr Films for Perpendicular Magnetic Recording	186
5	PER	MANENT MAGNET MATERIALS	189
	5.1	Introduction	189
	5.2	Distribution of the Fields B, H and M in a Toroidal Permanent	191
		Magnet with an Air Gap	

	Contents	vii
5.3	Energy Product of a Permanent Magnet Material	191
5.4	Behaviour of Permanent Magnets Under Dynamic or Recoil Conditions	197
5.5	Alnico Permanent Magnet Alloys	203
5.6	Fe-Cr-Co Alloys	211
5.7	Cu-Ni-Fe and Cu-Ni-Co Alloys	217
5.8	Fe-Co-V Alloys or Vicalloys	219
-	Fe-Co-V-Cr and Fe-Co-Cr Alloys	223
5.9	Fe-Co-Mo Alloys	223
5.10	Semihard Permanent Magnet Alloys	224
5.11		227
5.12	Mn-Al-C Magnets	230
5.13	Pt-Co Alloys	234
5.14	Hexagonal Ferrites, BaFe ₁₂ O ₁₉ and SrFe ₁₂ O ₁₉ Permanent Magnet Properties of Lanthanide-Cobalt Intermetallic Compounds and Related Alloys	247
210	Permanent Magnets Based on the Intermetallic Compound Sm ₂ Co ₁₇	255
5.16		259
5.17	Nd-Fe-B Alloys	266
5.18	Coercivity Mechanisms Production of Lanthamide-Transition Metal Permanent Magnets	273
5.19	Production of Landianing-Transition Production of Landianing-Transition Magnets	276
5.20	General Applications of Permanent Magnets Temperature Dependence of magnetic Properties of Permanent	281
5.21		
5.22	Magnets Summary of Research on New Permanent Magnet Alloys	282
INDEX		292

FERROMAGNETIC MATERIALS Structure and Properties

This book covers the properties and structure of a wide range of magnetic materials with engineering applications. It discusses ferromagnetic, ferrimagnetic and amorphous materials and their role in the two major property groupings of high permeability and permanent-magnet materials. Other groups, including materials suitable for magnetic recording, magnetoelastic transducers, magneto-optical discs and magnetic bubble memories, are also included. A considerable amount of space is devoted to the discussion of the basic mechanisms which determine magnetic properties. In particular the mechanisms of magnetisation reversal and coercivity are related to and interpreted in terms of the structure of the various materials at both the atomic and microstructural levels.

For ease of location of materials and topics, all chapters are structured with numbered headings. A large amount of information is presented in textual, tabular and graphical form, and extensive references will direct the reader to the most important or most representative original papers or reviews.

The book is aimed at research students in materials science and electrical engineering, and for industrial researchers, for whom the concentration on useful materials will be of particular interest.



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