CONTENTS

I. I	EHUD HEYMAN AND TIMOR MELAMED		
I. I			
200	ntroduction and Outline		
II. T	ime-Harmonic Radiation from an Aperture		
II. I	Time-Domain Representation of Radiation from an Aperture .		
V. I	llustrative Example		•
V. V	Vavepackets and Pulsed Beams in a Uniform Medium		
I. F	Phase-Space Pulsed Beam Analysis for Time-Dependent Radiation	n	
	from Extended Apertures		
A	Appendix: Asymptotic Evaluation of the Beam Field in (125)		•
F	References		
	JAN J. KOENDERINK AND A. J. VAN DOORN		
	ntroduction		•
	The Differential Structure of Images		
	Global Description of the Relief		
	Contours: Envelopes of the Level Curves		
	Discrete Representation		•
	Conclusion		•
- 1	References		

vi CONTENTS

111.	Implicit 3D Dyadic Green's Function with Simple External Material	
	Using Mode-Matching	19
IV.	2D Dyadic Green's Function for Penetrable Walls	20
	3D Dyadic Green's Function for Penetrable Walls	21
VI.	Limiting Dyadic Green's Function Forms for Homogeneous Ferrite	22
VII.	Symmetry Considerations for Hard Magnetic Wall Circulators .	24
VIII.	Overall Conclusion	2
	References	2
	•	
Ch	parged Particle Optics of Systems with Narrow Gaps: A Perturbati	on
	Theory Approach	
	M. I. YAVOR	
I.	Introduction	2
II.	Applicability of Perturbation Methods in Charged Particle Optics	28
	Calculation of Weakly Distorted Sector Fields and Their Properties	
	with the Aid of a Direct Substitution Method	29
IV.	Transformation of Charged Particle Trajectories in the Narrow	
	Transition Regions Between Electron- and Ion-Optical Elements	3
V.	Synthesis of Required Field Characteristics in Sector Energy	
	Analyzers and Wien Filters with the Aid of	
	Terminating Electrodes	33
VI.	Calculation of the Elements of Spectrometers for	
	Simultaneous Angular and Energy or Mass Analysis of	
	Charged Particles	34
VII.	Conclusion	38
	Acknowledgments	38
	References	38
NDEX	X	38