

1. Record Nr.	UNINA9910782275303321
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Titolo	Classical and quantum electrodynamics and the B(3) field [[electronic resource] /] / M.W. Evans & L.B. Crowell
Pubbl/distr/stampa	Singapore ; ; River Edge, N.J., : World Scientific, c2001
ISBN	1-281-96079-9 9786611960797 981-281-190-7
Descrizione fisica	1 online resource (473 p.)
Collana	Series in contemporary chemical physics ; ; vol. 18
Altri autori (Persone)	CrowellL. B
Disciplina	537.6
Soggetti	Electrodynamics Quantum electrodynamics Quantum theory
Lingua di pubblicazione	Inglese
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 ; Preface ; Introduction ; Chapter 1. Interaction of Electromagnetic Radiation with One Fermion ; 1.1. Lorentz Electron ; 1.2. Radiation Induced Electron and Proton Spin Resonance ; 1.3. The B(3) Field ; 1.4. Electrodynamics as a NonAbelian Gauge Field Theory 1.5. Limitations of the U(1) Theory 1.6. Classical Relativistic NonAbelian Electrodynamics ; 1.7. Relativistic Quantum Description ; 1.8. Nonrelativistic Quantum Description ; 1.9. Schrodinger Equation with Intrinsic Spin ; 1.10. Resonance Conditions in RFR 1.11. Chemical Shifts in NMR 1.12. Classical Derivation of the Inverse Faraday Effect ; References ; Chapter 2. The Field Equations of Classical O (3)b Electrodynamics ; 2.1. Introduction ; 2.2. The O(3)b Field Equations ; 2.3. Basic S. I. Units ; 2.4. The O(3)b Vacuum Equations

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 2.4.2. The  $O(3)^*$  Field Tensor in the Vacuum  
 ; 2.5. Reduction to Maxwell's Equations ;  
 2.6. The Fundamental Laws of  $O(3)_b$  Electrodynamics  
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 Primitive Concepts Axioms and Constitutive Relations of  $O(3)_b$   
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 effective  $A(3)$  Potential Photoelectric and Compton Effects and Radiation  
 Reaction  
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## Sommario/riassunto

It is well known that classical electrodynamics is riddled with internal inconsistencies springing from the fact that it is a linear, Abelian theory in which the potentials are unphysical. This volume offers a self-consistent hypothesis which removes some of these problems, as well as builds a framework on which linear and nonlinear optics are treated as a non-Abelian gauge field theory based on the emergence of the fundamental magnetizing field of radiation, the  $B(3)$  field.

*Contents:*

- Interaction of Electromagnetic Radiation with One Fermion
- The Field Equations of Cl

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