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Altri autori (Persone)	MaiY. W. <1946->
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Nota di contenuto	Foreword; Preface; Contents; List of Tables; List of Figures; Chapter 1: Fundamentals of Fracture Mechanics; 1.1 Historical Perspective; 1.2 Stress Intensity Factors (SIF); 1.3 Energy Release Rate (ERR); 1.4 J-Integral; 1.5 Dynamic Fracture; 1.6 Viscoelastic Fracture; 1.7 Essential Work of Fracture (EWF); 1.8 Configuration Force (Material Force) Method; 1.9 Cohesive Zone and Virtual Internal Bond Models; Chapter 2 : Elements of Electrodynamics of Continua; 2.1 Notations; 2.1.1 Eulerian and Lagrangian descriptions; 2.1.2 Electromagnetic field; 2.1.3 Electromagnetic body force and couple 2.1.4 Electromagnetic stress tensor and momentum vector 2.1.5 Electromagnetic power; 2.1.6 Poynting theorem; 2.2 Maxwell Equations; 2.3 Balance Equations of Mass, Momentum, Moment of Momentum, and Energy; 2.4 Constitutive Relations; 2.5 Linearized Theory; Chapter 3 : Introduction to Thermoviscoelasticity; 3.1 Thermoelasticity; 3.2 Viscoelasticity; 3.3 Coupled Theory of Thermoviscoelasticity; 3.3.1 Fundamental principles of thermodynamics; 3.3.2 Formulation based

on Helmholtz free energy functional; 3.3.3 Formulation based on Gibbs free energy functional

3.4 Thermoviscoelastic Boundary-Initial Value Problems
Chapter 4 : Overview on Fracture of Electromagnetic Materials; 4.1 Introduction; 4.2 Basic Field Equations; 4.3 General Solution Procedures; 4.4 Debates on Crack-Face Boundary Conditions; 4.5 Fracture Criteria; 4.5.1 Field intensity factors; 4.5.2 Path-independent integral; 4.5.3 Mechanical strain energy release rate; 4.5.4 Global and local energy release rates; 4.6 Experimental Observations; 4.6.1 Indentation test; 4.6.2 Compact tension test; 4.6.3 Bending test; 4.7 Nonlinear Studies; 4.7.1 Electrostriction/magnetostriction

4.7.2 Polarization/magnetization saturation
4.7.3 Domain switching; 4.7.4 Domain wall motion; 4.8 Status and Prospects; Chapter 5 : Crack Driving Force in Electro-Thermo-Elastodynamic Fracture; 5.1 Introduction; 5.2 Fundamental Principles of Thermodynamics; 5.3 Energy Flux and Dynamic Contour Integral; 5.4 Dynamic Energy Release Rate Serving as Crack Driving Force; 5.5 Configuration Force and Energy-Momentum Tensor; 5.6 Coupled Electromechanical Jump/Boundary Conditions; 5.7 Asymptotic Near-Tip Field Solution; 5.8 Remarks

Chapter 6 : Dynamic Fracture Mechanics of Magneto-Electro-Thermo-Elastic Solids
6.1 Introduction; 6.2 Thermodynamic Formulation of Fully Coupled Dynamic Framework; 6.2.1 Field equations and jump conditions; 6.2.2 Dynamic energy release rate; 6.2.3 Invariant integral; 6.3 Stroh-Type Formalism for Steady-State Crack Propagation under Coupled Magneto-Electro-Mechanical Jump/Boundary Conditions; 6.3.1 Generalized plane crack problem; 6.3.2 Steady-state solution; 6.3.3 Path-independent integral for steady crack growth; 6.4 Magneto-Electro-Elastostatic Crack Problem as a Special Case; 6.5 Summary
Chapter 7 : Dynamic Crack Propagation in Magneto-Electro-Elastic Solids

Sommario/riassunto

Fracture Mechanics of Electromagnetic Materials provides a comprehensive overview of fracture mechanics of conservative and dissipative materials, as well as a general formulation of nonlinear field theory of fracture mechanics and a rigorous treatment of dynamic crack problems involving coupled magnetic, electric, thermal and mechanical field quantities. Thorough emphasis is placed on the physical interpretation of fundamental concepts, development of theoretical models and exploration of their applications to fracture characterization in the presence of magneto-electro-thermo-mechanical coupl

2. Record Nr.	UNINA9910463819003321
Autore	Stuckrad Kocku von <1966->
Titolo	The scientification of religion : an historical study of discursive change, 1800-2000 // Kocku von Stuckrad
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ISBN	1-61451-350-3 1-61451-821-1 1-61451-349-X
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Classificazione	BE 2210
Disciplina	201/.6509
Soggetti	Religion and science Secularism - Europe Electronic books.
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Nota di bibliografia	Includes bibliographical references (pages 183-210) and index.
Nota di contenuto	Front matter -- Preface -- Contents -- 1. Religion and Science in Discursive Perspective -- Part One: Discarded Knowledge and Its New Legitimacy in Secular Discourse -- 2. From Polemical Disjunction to New Integration: The Science of the Stars -- 3. Alchemical Quests in Modern Garb -- 4. Darwinism Turned into Religion: Monism -- 5. Merging Occultism, Philosophy, Science, and the Academic Study of Religion: The Theosophical Society -- Part Two: Academics as Religious Pioneers -- 6. The Trouble with Europe: Academic Orientalism and New Mystical Religions -- 7. In Search of the Great Goddess: How Academic Theories Generated Paganism and Witchcraft -- 8. Normalizing Shamanism: Academic Teachers as Religious Experts -- Conclusion: The Scientification of Religion -- Bibliography -- Index
Sommario/riassunto	The enigmatic relation between religion and science still presents a challenge to European societies and to ideas about what it means to be 'modern.' This book argues that European secularism, rather than pushing back religious truth claims, in fact has been religiously productive itself. The institutional establishment of new disciplines in the nineteenth century, such as religious studies, anthropology,

psychology, classical studies, and the study of various religious traditions, led to a professionalization of knowledge about religion that in turn attributed new meanings to religion. This attribution of meaning resulted in the emergence of new religious identities and practices. In a dynamic that is closely linked to this discursive change, the natural sciences adopted religious and metaphysical claims and integrated them in their framework of meaning, resulting in a special form of scientific religiosity that has gained much influence in the twentieth century. Applying methods that come from historical discourse analysis, the book demonstrates that religious semantics have been reconfigured in the secular sciences. Ultimately, the scientification of religion perpetuated religious truth claims under conditions of secularism.
