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Soggetti	Optics Electrodynamics Surfaces (Technology) Thin films Surfaces (Physics) Interfaces (Physical sciences) Lasers Photonics Atoms Physics Classical Electrodynamics Surfaces and Interfaces, Thin Films Surface and Interface Science, Thin Films Optics, Lasers, Photonics, Optical Devices Atomic, Molecular, Optical and Plasma Physics
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	From the Contents: Preface -- Introducing Reflection -- Exact Results -- Reflection of Long Waves -- Variational Theory -- Equations for the Reflection Amplitudes -- Reflection of Short Waves -- Anisotropy -- Absorption -- Inverse Problems -- Pulses, Finite Beams.
Sommario/riassunto	This book deals with the reflection of electromagnetic and particle

waves by interfaces. The interfaces can be sharp or diffuse. The topics of the book contain absorption, inverse problems, anisotropy, pulses and finite beams, rough surfaces, matrix methods, numerical methods, reflection of particle waves and neutron reflection. Exact general results are presented, followed by long wave reflection, variational theory, reflection amplitude equations of the Riccati type, and reflection of short waves. The Second Edition of the Theory of Reflection is an updated and much enlarged revision of the 1987 monograph. There are new chapters on periodically stratified media, ellipsometry, chiral media, neutron reflection and reflection of acoustic waves. The chapter on anisotropy is much extended, with a complete treatment of the reflection and transmission properties of arbitrarily oriented uniaxial crystals. The book gives a systematic and unified treatment reflection and transmission of electromagnetic and particle waves at interfaces. It is intended for physicists, chemists, applied mathematicians and engineers, and is written in a simple direct style, with all necessary mathematics explained in the text.
