1. Record Nr. UNINA9910380731503321

Titolo	Multiscale Modelling of Advanced Materials / / edited by Runa Kumari, Balamati Choudhury
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-2267-7
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XI, 199 p. 130 illus., 108 illus. in color.)
Collana	Materials Horizons: From Nature to Nanomaterials, , 2524-5384
Disciplina	620.11015118
Soggetti	Optical materials Electronic materials Materials science Computer simulation Optical and Electronic Materials Characterization and Evaluation of Materials Simulation and Modeling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1: Multiscale modelling of Green’s function -- Chapter 2: Multiscale Simulation of Metamaterials -- Chapter 3: Multilayer optimization of radar absorbing Materials -- Chapter 4: Green function approach on solving different problems.
Sommario/riassunto	This volume covers the recent advances and research on the modeling and simulation of materials. The primary aim is to take the reader through the mathematical analysis to the theories of electricity and magnetism using multiscale modelling, covering a variety of numerical methods such as finite difference time domain (FDTD), finite element method (FEM) and method of moments. The book also introduces the multiscale Green’s function (GF) method for static and dynamic modelling and simulation results of modern advanced nanomaterials, particularly the two-dimensional (2D) materials. This book will be of interest to researchers and industry professionals working on advanced materials.