Record Nr. UNINA9911004827303321 Handbook of nanoscale optics and electronics / / editor, Gary P. **Titolo** Wiederrecht Pubbl/distr/stampa Amsterdam;; Boston,: Elsevier, 2010 **ISBN** 9786612381126 9781282381124 1282381121 9780123751799 0123751799 Edizione [1st ed.] Descrizione fisica 1 online resource (401 p.) Classificazione 33.38 53.56 33.77 WiederrechtGary P (Gary Phillip) Altri autori (Persone) Disciplina 621.36 621.381 Soggetti **Nanoelectronics Optics** 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. COVER: HANDBOOK OF NANOSCALE OPTICS AND ELECTRONICS: Nota di contenuto COPYRIGHT PAGE; CONTENTS; PREFACE; CONTRIBUTORS; EDITORIAL ADVISORY BOARD; Chapter 1 Optics of Metallic Nanostructures; 1.1 Introduction: 1.2 Surface Plasmon Polaritonic Crystals: 1.3 Metallic Nanorod Arrays; 1.4 Conclusion; Acknowledgments; Chapter 2 Surface Nanophotonics Theory; 2.1 Introduction; 2.2 Background; 2.3 Theoretical and Computational Methods; 2.4 Isolated Apertures in Metal Films; 2.5 Periodic Nanostructured Metal Films; 2.6 Summary and

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Sommario/riassunto

With the increasing demand for smaller, faster, and more highly integrated optical and electronic devices, as well as extremely sensitive detectors for biomedical and environmental applications, a field called nano-optics or nano-photonics/electronics is emerging - studying the many promising optical properties of nanostructures. Like nanotechnology itself, it is a rapidly evolving and changing field - but because of strong research activity in optical communication and related devices, combined with the intensive work on nanotechnology, nano-optics is shaping up fast to be a field with a p