

1. Record Nr.	UNINA9910337883503321
Titolo	Fundamental and Applied Nano-Electromagnetics II : THz Circuits, Materials, Devices // edited by Antonio Maffucci, Sergey A. Maksimenko
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2019
ISBN	94-024-1687-0
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (VIII, 214 p. 127 illus., 92 illus. in color.)
Collana	NATO Science for Peace and Security Series B: Physics and Biophysics, , 1874-6500
Disciplina	620.5
Soggetti	Nanoscale science Nanoscience Nanostructures Nanotechnology Lasers Photonics Electronic circuits Nanoscale Science and Technology Nanotechnology and Microengineering Optics, Lasers, Photonics, Optical Devices Electronic Circuits and Devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Electromagnetic Response of Carbon Nanotube-Based Composites; M. V. Shuba -- Electrophysical Properties of Sr ₂ FeMoO ₆ —ceramics with dielectric shells -- Peculiarities of formation and characterization of SiO ₂ /Si ion-track template -- Optical and electrical properties of ferric chloride doped graphene -- Self-organization of plasmonic nanostructures in pores of silica template for SERS -- Polymer nanocomposites with hybrid fillers as materials with controllable electrodynamic characteristics for microwave devices -- Evolution of structure and magnetic characteristic of template synthesized Ni nanotubes -- First- and second order light scattering processes in biological photonic nanostructures -- Prospects for terahertz imaging

the human skin cancer with the help of gold-nanoparticles-based terahertz-to-infrared converter -- Carbon-Based Terahertz Resonant Antennas -- Terahertz applications of non-simply-connected and helical nanostructures.

Sommario/riassunto

A unique reference to fundamental and applied Nano-Electromagnetics, with a special focus on the Terahertz technology. A comprehensive overview on: nanostructured materials synthesis and their electrical and optical properties; nano-sized elements and nanostructures as building blocks of devices; design and fabrication of nanotechnology devices operating in the THz, IR and optical range. .
