1. Record Nr. UNICAMPANIAVAN0035060

Autore	Pozrikidis, Constantine
Titolo	Introduction to theoretical and computational fluid dynamics / C. Pozrikidis
Pubbl/distr/stampa	New York ; Oxford, : Oxford University, 1997
Titolo uniforme	Introduction to theoretical and computational fluid dynamics
ISBN	01-950932-0-8
Descrizione fisica	X, 675 p. : ill. ; 25 cm
Disciplina	532.05
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910303438303321

Autore	Chipouline Arkadi
Titolo	Optical Metamaterials: Qualitative Models : Introduction to Nano-Optics and Optical Metamaterials / / by Arkadi Chipouline, Franko Küppers
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-77520-0
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XII, 318 p. 105 illus., 98 illus. in color.)
Collana	Springer Series in Optical Sciences, , 0342-4111 ; ; 211
Disciplina	620.106
Soggetti	Optical materials Electronics - Materials Optics Electrodynamics Nanotechnology Lasers Photonics Microwaves Optical engineering Optical and Electronic Materials Classical Electrodynamics Optics, Lasers, Photonics, Optical Devices Microwaves, RF and Optical Engineering

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Phenomenological Electrodynamics of materials with negative dielectric and magnetic constants -- Homogenization of Maxwell equations – macroscopic and microscopic approaches -- Phenomenological vs multipole models -- Charge dynamics and dielectric/magnetic constants elaboration -- Plasmons/Polaritons -- Transmission of light through subwavelength structures -- Multipole approach for homogenization of metamaterials (MM) -- “Quantum” MM.
Sommario/riassunto	This textbook bridges the gap between university courses on electrodynamics and the knowledge needed to successfully address the problem of electrodynamics of metamaterials. It appeals to both experimentalists and theoreticians who are interested in the physical basics of metamaterials and plasmonics. Focusing on qualitative fundamental treatment as opposed to quantitative numerical treatment, it covers the phenomena of artificial magnetization at high frequencies, and discusses homogenization procedures and the basics of quantum dynamics in detail. By considering different phenomena it creates a self-consistent qualitative picture to explain most observable phenomena. This allows readers to develop a better understanding of the concepts, and helps to create a conceptual approach, which is especially important in educational contexts. This clearly written book includes problems and solutions for each chapter, which can be used for seminars and homework, as well as qualitative models that are helpful to students. .