

1. Record Nr.	UNINA9910164982103321
Titolo	Progress in Nanophotonics 4 // edited by Motoichi Ohtsu, Takashi Yatsui
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-49013-3
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIII, 146 p. 91 illus., 26 illus. in color.)
Collana	Nano-Optics and Nanophotonics, , 2192-1989
Disciplina	620.5
Soggetti	Lasers Quantum optics Microtechnology Microelectromechanical systems Nanotechnology Electrodynamics Nanoscience Laser Quantum Optics Microsystems and MEMS Classical Electrodynamics Nanophysics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Progress in dressed photon technology and the future -- Nonequilibrium statistical mechanical models for photon breeding processes assisted by dressed-photon-phonons -- Nearfield-assisted chemical reactions and its applications -- Nanophotonics-based self-optimization for macro-optical applications -- Ultraflexible organic electronics and photonics.
Sommario/riassunto	This book presents the recent progress in the field of nanophotonics. It contains review-like chapters focusing on various but mutually related topics in nanophotonics written by the world's leading scientists.

Following the elaboration of the idea of nanophotonics, much theoretical and experimental work has been carried out, and several novel photonic devices, high-resolution fabrication, highly efficient energy conversion, and novel information processing have been developed in these years. Novel theoretical models describing the nanometric light-matter interaction, nonequilibrium statistical mechanical models for photon breeding processes and near-field assisted chemical reactions as well as lightmatter interaction are also explained in this book. It describes dressed photon technology and its applications, including implementation of nanophotonic devices and systems, fabrication methods and performance characteristics of ultrathin, ultraflexible organic lightemitting diodes, organic solar cells and organic transistors. .
