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	Descrizione fisica	1 online resource (215 pages)
	Collana	Nano-Optics and Nanophotonics, , 2192-1970
	Disciplina	621.365
	Soggetti	Lasers Photonics Nanoscale science Nanoscience Nanostructures Quantum optics Nanotechnology Nanochemistry Atomic structure Molecular structure Optics, Lasers, Photonics, Optical Devices Nanoscale Science and Technology Quantum Optics Nanotechnology and Microengineering Atomic/Molecular Structure and Spectra
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Historical Review of Dressed Photons: Experimental Progress and Required Theories -- Virtual Photon Model by Spatio-temporal Vortex Dynamics -- Quantum Probability for Dressed Photons the Arcsine Law in Nanophotonics -- Control over o-shell QFT via Induction & Imprimitivity -- An Approach from Measurement Theory to Dressed Photon -- Response Theory Supporting Dressed Photons.
	Sommario/riassunto	This book presents important topics in nanophotonics in review-style

chapters written by world leading scientists. The book sketches the history of dressed photon science and technology and explains why advanced theories of dressed photons are required. To meet this requirement, the recent results of theoretical studies and the theory of dressed photons are displayed by modifying the conventional electromagnetic theory. The classical theoretical model of spatiotemporal vortex dynamics is explained by treating the dressed photon as a space-like virtual photon. Also discussed in the book is the energy transfer of dressed photons, based on a quantum walk model and a quantum mechanical measurement process of dressed photons for connecting the nano- and macro-systems. Dressed photons are explained as quantum fields by characterizing them in momentum space. .