1. Record Nr. UNINA9910557512803321

Autore	Gadomski Adam
Titolo	Condensed-Matter-Principia Based Information & Statistical Measures : From Classical to Quantum
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 electronic resource (166 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This book summarizes the efforts of ten papers collected by the Special Issue "Condensed-Matter-Principia Based Information & Statistical Measures: From Classical to Quantum". It calls for papers which deal with condensed-matter systems, or their interdisciplinary analogs, for which well-defined classical–statistical vs. quantum information measures can be inferred while based on the entropy concept. The contents have mainly been rested upon objectives addressed by an international colloquium held on October 2019, in UTP Bydgoszcz, Poland (see http://zmpf.imif.utp.edu.pl/rci-jcs/rci-jcs-4/), with an emphasis placed on the achievements of Professor Gerard Czajkowski, who commenced his research activity with open diffusion–reaction systems under the supervision of Roman S. Ingarden (Toru), a father of Polish synergetics, and original thermodynamic approaches to self-organization. The active cooperation of Professor Czajkowski, mainly with German physicists (Friedrich Schloegl, Aachen; Werner Ebeling, Berlin), ought to be highlighted. In light of this, a development of his research, as it has moved from statistical thermodynamics to solid state theory, pursued in terms of nonlinear solid-state optics (Franco Bassani, Pisa), and culminated very recently with large quasiparticles termed Rydberg excitons, and their coherent interactions with light, is worth delineating.