

1. Record Nr.	UNINA9910702330203321
Titolo	The estimation of very-low probability hurricane storm surges for design and licensing of nuclear power plants in coastal areas [[electronic resource] /] / prepared by Donald T. Resio ... [and others]
Pubbl/distr/stampa	Washington, DC : , : U.S. Nuclear Regulatory Commission, Office of Nuclear Regulatory Research, , [2012]
Descrizione fisica	1 online resource (xvi, 86 pages) : color illustrations
Altri autori (Persone)	ResioDonald T
Soggetti	Storm surges - United States Hurricane protection - United States Nuclear power plants - United States - Safety measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed on Dec. 27, 2012). "NUREG/CR-7134." "Date published: October 2012."
Nota di bibliografia	Includes bibliographical references (pages 83-86).

2. Record Nr.	UNINA9910139248903321
Autore	Querlioz Damien
Titolo	The Wigner Monte-Carlo method for nanoelectronic devices : a particle description of quantum transport and decoherence // Damien Querlioz, Philippe Dollfus
Pubbl/distr/stampa	London, : ISTE Hoboken, N.J., : Wiley, 2010
ISBN	9781118618479 1118618475 9781118618448 1118618440 9781299315303 1299315305 9781118618486 1118618483
Edizione	[1st ed.]
Descrizione fisica	1 online resource (268 p.)
Collana	ISTE
Altri autori (Persone)	DollfusPhilippe
Disciplina	530.4/10151
Soggetti	Solid state physics - Mathematics Semiconductors Transport theory Coherent states Quantum statistics Particles (Nuclear physics) Nanoelectronics Wigner distribution Monte Carlo method
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Theoretical framework of quantum transport in semiconductors and devices -- Particle-based Wigner Monte Carlo approach to device simulation -- Application of the Wigner Monte Carlo technique to RTD, MOSFET, and CNTFET -- Transition from quantum to semi-classical

transport through decoherence theory.

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**Sommario/riassunto**

This book gives an overview of the quantum transport approaches for nanodevices and focuses on the Wigner formalism. It details the implementation of a particle-based Monte Carlo solution of the Wigner transport equation and how the technique is applied to typical devices exhibiting quantum phenomena, such as the resonant tunnelling diode, the ultra-short silicon MOSFET and the carbon nanotube transistor. In the final part, decoherence theory is used to explain the emergence of the semi-classical transport in nanodevices.

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