

1. Record Nr.	UNINA9910299623903321
Titolo	Supercritical-Pressure Light Water Cooled Reactors // edited by Yoshiaki Oka, Hideo Mori
Pubbl/distr/stampa	Tokyo : , : Springer Japan : , : Imprint : Springer, , 2014
ISBN	4-431-55025-9
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (391 p.)
Disciplina	333.7924 539.7092 541.38 620.11223
Soggetti	Nuclear energy Tribology Corrosion and anti-corrosives Coatings Nuclear physics Heavy ions Energy systems Nuclear chemistry Nuclear Energy Tribology, Corrosion and Coatings Nuclear Physics, Heavy Ions, Hadrons Energy Systems Nuclear Chemistry
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 at the end of each chapters and index.
Nota di contenuto	Introduction and Overview -- Reactor design and safety -- Thermal hydraulics -- Materials -- Material-Coolant Interactions.
Sommario/riassunto	This book focuses on the latest reactor concepts, single pass core and experimental findings in thermal hydraulics, materials, corrosion, and water chemistry. It highlights research on supercritical-pressure light

water cooled reactors (SCWRs), one of the Generation IV reactors that are studied around the world. This book includes cladding material development and experimental findings on heat transfer, corrosion, and water chemistry. The work presented here will help readers to understand the fundamental elements of reactor design and analysis methods, thermal hydraulics, materials, and water chemistry of supercritical water used as a coolant in nuclear power reactors. It will also help readers to broaden their understanding of fundamental elements of light water cooled reactor technologies and the evolution of reactor concepts.

2. Record Nr.	UNINA9910299670903321
Autore	Hu Jun
Titolo	Nonlinear Stochastic Systems with Network-Induced Phenomena : Recursive Filtering and Sliding-Mode Design // by Jun Hu, Zidong Wang, Huijun Gao
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-08711-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (230 p.)
Disciplina	519 519.2 620 621.382
Soggetti	Automatic control Probabilities Telecommunication System theory Control theory Control and Systems Theory Probability Theory Communications Engineering, Networks Systems Theory, Control
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 at the end of each chapters and index.
Nota di contenuto	Recursive Filtering with Missing Measurements and Quantized Effects -- Recursive Filtering with Fading Measurements, Sensor Delays, and Correlated -- Noises -- Probability-Guaranteed H Finite Horizon Filtering with Sensor Saturations -- H Sliding Mode Observer Design for Nonlinear Time-Delay Systems -- Sliding Mode Control with Time-Varying Delays and Randomly Occurring Nonlinearities -- Sliding Mode Control with Randomly Occurring Uncertainties and Mixed Time-Delays.
Sommario/riassunto	<p>This monograph introduces methods for handling filtering and control problems in nonlinear stochastic systems arising from network-induced phenomena consequent on limited communication capacity. Such phenomena include communication delay, packet dropout, signal quantization or saturation, randomly occurring nonlinearities and randomly occurring uncertainties. The text is self-contained, beginning with an introduction to nonlinear stochastic systems, network-induced phenomena and filtering and control, moving through a collection of the latest research results which focuses on the three aspects of:</p> <ul style="list-style-type: none"> · the state-of-the-art of nonlinear filtering and control; · recent advances in recursive filtering and sliding mode control; <p>and · their potential for application in networked control systems, and concluding with some ideas for future research work. New concepts such as the randomly occurring uncertainty and the probability-constrained performance index are proposed to make the network models as realistic as possible. The power of combinations of such recent tools as the completing-the-square and sums-of-squares techniques, HamiltonJacobiSaacs matrix inequalities, difference linear matrix inequalities, and parameter-dependent matrix inequalities is exploited in treating the mathematical and computational challenges arising from nonlinearity and stochasticity. Nonlinear Stochastic Systems with Network-Induced Phenomena establishes a unified framework of control and filtering which will be of value to academic researchers in bringing structure to problems associated with an important class of networked system and offering new means of solving them. The significance of the new concepts, models and methods presented for practical control engineering and signal processing will also make it a valuable reference for engineers dealing with nonlinear control and filtering problems.</p>