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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.

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