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Sommario/riassunto

This handbook provides a comprehensive exploration of thermal hydraulics in water-cooled nuclear reactors, offering detailed insights into various procedures and applications. Edited by Francesco D’Auria and Yassin A. Hassan, the book is part of the Woodhead Publishing series in energy and serves as a crucial resource for understanding the complexities of nuclear reactor safety and efficiency. It covers topics such as subchannel modeling, containment thermal hydraulics, numerical methods, scaling techniques, and thermal hydraulic design of reactors. Aimed at researchers, practitioners, and students in the field of nuclear engineering, the handbook draws from contributions of thousands of researchers to enhance the understanding of thermal hydraulics. The book emphasizes the importance of safety, validation, and the evolution of methodologies within the field.