

1.	Record Nr.	UNINA990006222320403321
	Autore	Beck, Hans Peter
	Titolo	Das gesetzliche Gewinnanteilsrecht der Miterben : dissertation... / Hans Peter Beck
	Pubbl/distr/stampa	Zurich : Juris Druck, 1967
	Descrizione fisica	147 p. ; 24 cm
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	Locazione	FGBC
	Collocazione	DISSERT. A 517
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	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9911034960003321
	Autore	Mercier Bertrand
	Titolo	Simple Models for Understanding Nuclear Reactor Physics // by Bertrand Mercier
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
	ISBN	3-031-98532-X
	Edizione	[1st ed. 2025.]
	Descrizione fisica	1 online resource (287 pages)
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	Livello bibliografico	Monografia

Nota di contenuto

1. Chain reaction principle and effective multiplication factor -- 2. Reminders -- 3. Principle of fast neutron reactors -- 4. Why does it make sense to slow down neutrons? -- 5. Fermi's 4-factors formula.

Sommario/riassunto

This book provides engineers with a comprehensive understanding of nuclear reactor physics and neutronics, emphasizing the importance of simple models to validate complex computational results. It explains the rationale behind neutron slowing down and offers a straightforward method to evaluate the resonance escape probability in Fermi's 4-factors formula. The book includes exercises to assess the remaining three factors and demonstrates how to derive the diffusion approximation from the Boltzmann equation. It covers both one-group and two-group diffusion models, applying them to predict the reactivity of a nuclear reactor core. Special attention is given to the selection of the migration area. Additionally, the book addresses delayed neutrons, reactor kinetics, fission product poisoning, fuel evolution, fuel management, critical size, temperature effects, and xenon oscillations. Originally written for students, it contains 28 exercises with solutions provided in the appendix, making it an invaluable resource for both learning and practical application in the field.
