

1. Record Nr.	UNINA9911019102503321
Autore	Chin Wilson
Titolo	Biofluids Modeling : Methods, Perspectives, and Solutions
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2023 ©2023
ISBN	9781119910589 1119910587 9781119910572 1119910579
Edizione	[1st ed.]
Descrizione fisica	1 online resource (503 pages)
Altri autori (Persone)	ChinJamie
Disciplina	612.1
Soggetti	Fluid dynamics Fluid mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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Sommario/riassunto

This book, 'Biofluids: Modeling Methods, Perspectives and Solutions' by Wilson C. Chin and Jamie A. Chin, explores the complex field of biofluid dynamics, focusing on the modeling and analysis of fluid flow within biological systems such as circulatory systems. It delves into the physics of fluid flow in biological conduits, addressing both Newtonian and non-Newtonian fluid dynamics. The text provides insights into mathematical models, differential equations, and numerical methods applicable to biofluids. Key topics include conduit and Darcy flow modeling, rheology, pressure diffusion in porous media, and the effect of non-Newtonian fluids in circular conduits. The book is aimed at students, researchers, and professionals in bioengineering, medical physics, and related fields, offering a comprehensive overview of biofluid dynamics with practical applications and advanced computational methods.

2. Record Nr.	UNISANNIORMG0029708
Autore	Pera, Giuseppe <1928-2007>
Titolo	Codice del lavoro / Giuseppe Pera, Vincenzo A. Poso
Pubbl/distr/stampa	Milano, : A. Giuffrè, 1999
ISBN	8814073198
Edizione	[2. ed. aggiornata al 1. gennaio 1999]
Descrizione fisica	XII, 1720 p. ; 17 cm
Collana	Raccolte legislative per l'università, i concorsi e la professione
Altri autori (Persone)	Poso, Vincenzo Antonio
Disciplina	344 344.01 344.4501 344.450102632 344.450102638
Soggetti	Lavoro - Legislazione Rapporti di lavoro - Legislazione
Collocazione	D (AR) 25 501
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Segue: Appendice di aggiornamento.