

1. Record Nr.	UNINA9910437927503321
Titolo	Modeling and control of dialysis systems . Volume 2 Biofeedback systems and soft computing techniques of dialysis // Ahmad Taher Azar (ed.)
Pubbl/distr/stampa	Berlin ; ; New York, : Springer, c2013
ISBN	9783642275586 3642275583
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (XXVIII, 860 p. 174 illus.)
Collana	Studies in computational intelligence, , 1860-949X ; ; 405
Altri autori (Persone)	AzarAhmad Taher
Disciplina	617.4/61059
Soggetti	Hemodialysis Hemodialysis - Computer simulation Biological control systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	Overview of Dialysis Treatment and Modeling Techniques -- Online dialysis Monitoring and Continuous Therapy -- Biofeedback Systems and soft computing Techniques of dialysis -- Overview of Peritoneal Dialysis and Modeling Techniques -- Challenges and General Guidelines.
Sommario/riassunto	This book is the first text of its kind that presents both the traditional and the modern aspects of dialysis modeling and control in a clear, insightful and highly comprehensive writing style. It provides an in-depth analysis of the mathematical models and algorithms, and demonstrates their applications in real world problems of significant complexity. It explains concepts in a clear, matter-of-fact style. The material of this book will be useful to advanced undergraduate and graduate biomedical engineering students. Also, researchers and practitioners in the field of dialysis, control systems, soft computing will benefit from it. In order to make the reader aware of the applied side of the subject, the book includes: Chapter openers with a chapter outline, chapter objectives, key terms list, and abstract. Solved numerical examples to illustrate the application of a particular concept, and also to encourage good problem-solving

skills. More than 1000 questions to give the readers a better insight to the subject. Case studies to understand the significance of the joint usage of the dialysis modeling and control techniques in interesting problems of the real world. latest information, including latest research surveys and references related to the subjects.
