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	Titolo	Handbook of Computational Neurodegeneration / / edited by Panagiotis Vlamos, Ilias S. Kotsireas, Ioannis Tarnanas
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	Edizione	[1st ed. 2023.]
	Descrizione fisica	1 online resource (194 illus., 162 illus. in color. eReference.)
	Disciplina	612.8
	Soggetti	Neurosciences Bioinformatics Medical informatics Neural networks (Computer science) Neuroscience Computational and Systems Biology Health Informatics Mathematical Models of Cognitive Processes and Neural Networks
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Neurodegenerative disease modelling -- Information processing and visualization -- Digital health and mixed realities -- Data Mining, Metaheuristics, High-performance Computing -- Mathematical Modelling Methodologies in Neurodegeneration.
	Sommario/riassunto	The Handbook of Computational Neurodegeneration provides a comprehensive overview of the field and thus bridges the gap between standard textbooks of research on neurodegeneration and dispersed publications for specialists that have a narrowed focus on computational methods to study this complicated process. The handbook reviews the central issues and methodological approaches related to the field for which the reader pursues a thorough overview. It also conveys more advanced knowledge, thus serving both as an introductory text and as a starting point for an in-depth study of a specific area, as well as a quick reference source for the expert by reflecting the state of the art and future prospects. The book includes

topics that are usually missing in standard textbooks and that are only marginally represented in the specific literature. The broad scope of this handbook is reflected by five major parts that facilitate an integration of computational concepts, methods and applications in the study of neurodegeneration. Each part is intended to stand on its own, giving an overview of the topic and the most important problems and approaches, which are supported by examples, practical applications, and proposed methodologies. The basic concepts and knowledge, standard procedures and methods are presented, as well as recent advances and new perspectives.