1.	Record Nr.	UNINA9910484767403321
	Titolo	Intuitionistic and Type-2 Fuzzy Logic Enhancements in Neural and Optimization Algorithms: Theory and Applications / / edited by Oscar Castillo, Patricia Melin, Janusz Kacprzyk
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
	ISBN	9783030354459 3030354458
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (767 pages)
	Collana	Studies in Computational Intelligence, , 1860-9503 ; ; 862
	Disciplina	006.3 511.313
	Soggetti	Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Part I: Type-1 and Type-2 Fuzzy Logic -- Parameter adaptation in the imperialist competitive algorithm using generalized type-2 fuzzy logic -- A Mamdani fuzzy inference protocol aimed to identify heterogeneity of the allometric response in arithmetical space -- Fireworks Algorithm (FWA) with adaptation of parameters using Interval Type-2 Fuzzy Logic System -- Omnidirectional Four Wheel Mobile Robot Control with a Type-2 Fuzzy Logic Behavior-based Strategy.
	Sommario/riassunto	This book describes the latest advances in fuzzy logic, neural networks, and optimization algorithms, as well as their hybrid intelligent combinations, and their applications in the areas such as intelligent control, robotics, pattern recognition, medical diagnosis, time series prediction, and optimization. The topic is highly relevant as most current intelligent systems and devices use some form of intelligent feature to enhance their performance. The book also presents new and advanced models and algorithms of type-2 fuzzy logic and intuitionistic fuzzy systems, which are of great interest to researchers

in these areas. Further, it proposes novel, nature-inspired optimization algorithms and innovative neural models. Featuring contributions on theoretical aspects as well as applications, the book appeals to a wide audience. .