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Titolo	Socio-Inspired Optimization Methods for Advanced Manufacturing Processes // by Apoorva Shastri, Aniket Nargundkar, Anand J. Kulkarni
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Descrizione fisica	1 online resource (X, 128 p. 45 illus., 22 illus. in color.)
Collana	Springer Series in Advanced Manufacturing, , 1860-5168
Disciplina	631.45015118
Soggetti	Manufactures Artificial intelligence Computational intelligence Mathematical optimization Manufacturing, Machines, Tools, Processes Artificial Intelligence Computational Intelligence Optimization
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction -- A Brief Review of Socio-Inspired Metaheuristics -- Multi Cohort Intelligence Algorithm -- Optimization of Electric Discharge Machining (EDM) -- Optimization of Abrasive Water Jet Machining (AWJM) -- Optimization of Micro Milling Process -- Optimization of Micro Drilling Process -- Optimization of Cutting Forces in Micro Drilling of CFRP Composites for Aerospace Applications -- Optimization of Micro Turning Process -- Optimization of Machining Process Parameters of Titanium Alloy Under (MQL) Environment.
Sommario/riassunto	This book discusses comprehensively the advanced manufacturing processes, including illustrative examples of the processes, mathematical modeling, and the need to optimize associated parameter problems. In addition, it describes in detail the cohort intelligence methodology and its variants along with illustrations, to help readers gain a better understanding of the framework. The theoretical and statistical rigor is validated by comparing the solutions with evolutionary algorithms, simulation annealing, response surface

methodology, the firefly algorithm, and experimental work. Lastly, the book critically reviews several socio-inspired optimization methods. .

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