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Autore	Vendan S. Arungalai
Titolo	Interdisciplinary Treatment to Arc Welding Power Sources [[electronic resource] /] / by S. Arungalai Vendan, Liang Gao, Akhil Garg, P. Kavitha, G. Dhivyasri, Rahul SG
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Descrizione fisica	1 online resource (237 pages)
Disciplina	671.5
Soggetti	Manufactures Production of electric energy or Materials Manufacturing, Machines, Tools, Processes Power Electronics, Electrical Machines and Networks Metallic Materials Control and Systems Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Evolution of Power Source and Critical Terminologies -- Classification of Arc Welding Power Sources -- Arc Welding Control System -- Power Source Applications and Challenges -- Sensors in Welding Data Acquisition -- Optimization Techniques of Welding Parameters -- References -- Conclusions -- Appendix.
Sommario/riassunto	This book presents the fundamentals of arc phenomena, various arc welding power sources, their control strategies, welding data acquisition, and welding optimization. In addition, it discusses a broad range of electrical concepts in welding, including power source characteristics, associated parameters, arc welding power source classification, control strategies, data acquisitions techniques, as well as optimization methods. It also offers advice on how to minimize the flaws and improve the efficacy and performance of welds, as well as insights into the mechanical behavior expressed in terms of electromagnetic phenomena, which is rarely addressed. The book provides a comprehensive review of interdisciplinary concepts, offering

researchers a wide selection of strategies, parameters, and sequences of operations to choose from.
