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Titolo	Functionally Graded Materials [[electronic resource] /] / by Rasheedat Modupe Mahamood, Esther Titilayo Akinlabi
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Descrizione fisica	1 online resource (XXI, 103 p. 50 illus., 17 illus. in color.)
Collana	Topics in Mining, Metallurgy and Materials Engineering, , 2364-3293
Disciplina	620.11
Soggetti	Structural materials Manufactures Lasers Photonics Structural Materials Manufacturing, Machines, Tools, Processes Optics, Lasers, Photonics, Optical Devices
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction to Functionally Graded Materials -- Types of Functionally Graded Materials and their Areas Of Application -- Processing Methods of Functionally Graded Materials -- Additive Manufacturing of Functionally Graded Materials -- Experimental Analysis of Functionally Graded Materials from Laser Deposition Process (Case Study) -- Future Research Direction in FGM and Summary.
Sommario/riassunto	This book presents the concept of functionally graded materials as well as their use and different fabrication processes. The authors describe the use of additive manufacturing technology for the production of very complex parts directly from the three dimension computer aided design of the part by adding material layer after layer. A case study is also presented in the book on the experimental analysis of functionally graded material using laser metal deposition process.