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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	High-power lasers and their material processing applications -- An overview -- Laser-assisted machining of materials -- Current status and future scope of application -- Laser-assisted micro-fabrication -- Laser-assisted welding of materials -- Direct laser cladding -- Laser surface engineering -- Laser-induced periodic surface structures -- Optical monitoring in laser processing -- Diode laser-assisted

materials processing -- Laser-assisted surface processing for biomedical applications.

Sommario/riassunto

Laser assisted fabrication involves shaping of materials using laser as a source of heat. It can be achieved by removal of materials (laser assisted cutting, drilling, etc.), deformation (bending, extrusion), joining (welding, soldering) and addition of materials (surface cladding or direct laser cladding). This book on 'Laser assisted Fabrication' is aimed at developing in-depth engineering concepts on various laser assisted macro and micro-fabrication techniques with the focus on application and a review of the engineering background of different micro/macro-fabrication techniques, thermal history of the treated zone and microstructural development and evolution of properties of the treated zone.
