Record Nr. UNINA9910254337703321 Advanced Manufacturing Technologies [[electronic resource]]: Modern **Titolo** Machining, Advanced Joining, Sustainable Manufacturing / / edited by Kapil Gupta Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-56099-9 Edizione [1st ed. 2017.] 1 online resource (VIII, 294 p. 169 illus., 96 illus. in color.) Descrizione fisica Materials Forming, Machining and Tribology, , 2195-0911 Collana 670 Disciplina Soggetti Manufactures Sustainable development Ceramics Glass Composites (Materials) Composite materials Metals Manufacturing, Machines, Tools, Processes Sustainable Development Ceramics, Glass, Composites, Natural Materials Metallic Materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Fabrication of Micro-cutting Tools for Mechanical Micro-machining --Machining of Glass Materials: An Overview -- Thermal-Assisted Machining of Titanium Alloys -- Abrasive Water Jet Machining of Composite Materials -- Advanced Joining and Welding Techniques: An Overview -- Laser-Based Repair of Damaged Dies, Molds, and Gears --Friction Stir Welding—An Overview -- Ultrasonic Spot Welding—Low Energy Manufacturing for Lightweight Fuel Efcient Transport Applications -- Perspectives on Green Manufacturing -- Experimental Investigation and Optimization on MQL-Assisted Turning of Inconel-718 Super Alloy -- Dry and Near-Dry Electric Discharge Machining

## Sommario/riassunto

Processes -- Laser Metal Deposition Process for Product Remanufacturing.

This book provides details and collective information on working principle, process mechanism, salient features, and unique applications of various advanced manufacturing techniques and processes belong. The book is divided in three sessions covering modern machining methods, advanced repair and joining techniques and, finally, sustainable manufacturing. The latest trends and research aspects of those fields are highlighted.