1. Record Nr. UNISA990003199570203316

Titolo	Aspekte der Modernität / herausgegeben von Hans Steffen
Pubbl/distr/stampa	Göttingen : Vadenhoeck & Ruprecht, 1965
Descrizione fisica	197 p. ; 21 cm
Collana	Kleine Vadenhoeck-Reihe ; 217
Disciplina	830
Soggetti	Letteratura tedesca - Saggi
Collocazione	II.3.E.29
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910617305103321

Autore	Marasso Simone Luigi
Titolo	High Resolution Manufacturing from 2D to 3D/4D Printing : Applications in Engineering and Medicine / / edited by Simone Luigi Marasso, Matteo Cocuzza
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-13779-5
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (297 pages)
Collana	Biomedical and Life Sciences Series
Disciplina	621.988
Soggetti	Biomaterials Nanotechnology Biomedical engineering Polymers Microfluidics Biomedical Engineering and Bioengineering Biomedical Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto	Introduction to high resolution manufacturing from 2D to 3D/4D printing -- Technologies evolutions and Design Considerations -- Vat photopolymerization -- Stereolithography -- Digital Light Processing -- Continuous liquid interface production -- Materials -- Multi-photon polymerization -- 2PP -- Materials -- Powder bed fusion -- Selective Laser Sintering -- Materials -- Commodity Polymers -- Engineering Polymers -- High-Performance Polymers -- Thermoplastic Elastomers -- The role of fillers -- Ink-jet printing -- Polyjet printing -- Aerosol jet printing -- Materials -- Volumetric 3D printing -- Computed Axial Lithography -- Xolography -- Materials -- Impact on different research fields and case studies -- Biomedical applications -- Cells culture, Microfluidics, rapid diagnostic tools -- Electronic applications -- Sensors and biosensors, actuators, integrated circuits -- Energy applications -- Supercapacitors, Energy harvesting -- Photonic applications -- Woodpile structures, light guides, optical fiber -- Future outlook.
Sommario/riassunto	This book provides a comprehensive presentation of the most frequently used high resolution manufacturing techniques available, as well as the polymeric materials used for each of the techniques. Divided into two parts covering the technologies and materials used and the impact on different research fields and case studies, High Resolution Manufacturing from 2D to 3D/4D Printing: Applications in Engineering and Medicine addresses issues like throughput improvement by volumetric 3D printing and presenting novel applications and case studies. In addition, this book also covers the latest breakthrough developments and innovations to help readers understand the future applications of this technology across various disciplines, including biomedicine, electronics, energy, and photonics.