1. Record Nr. UNINA9910746097203321 Autore Stavropoulos Panagiotis Titolo Additive Manufacturing: Design, Processes and Applications / / by Panagiotis Stavropoulos Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2023 **ISBN** 3-031-33793-X Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (139 pages) Collana SpringerBriefs in Applied Sciences and Technology, , 2191-5318 Disciplina 621.988 Soggetti Industrial engineering Production engineering Materials Production management Industrial and Production Engineering Materials Engineering Production Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Introduction -- Chapter 2. Design for AM -- Chapter 3. AM Processes -- Chapter 4. AM Applications -- Chapter 5. Conclusions. . Sommario/riassunto This book is a comprehensive guide to additive manufacturing (AM) product development. It offers a practical, reader-friendly approach to integrating the stages of product development. It covers current design and manufacturing strategies with a step-by-step approach, divided into three pillars: design, processes, and applications. This book addresses the challenges hindering the industrial application of AM and provides a roadmap for its successful implementation. It discusses specific AM case studies and hybrid AM cell and production line setups. with the goal of achieving high-quality, low-cost products that are both flexible and productive. The book concludes with an examination of Industry 4.0 capabilities in decentralized manufacturing. It is aimed to be read by researchers and professionals in industry who are interested

in the development and potential of additive manufacturing, and will

help to lead to wider adoption of AM.