

1. Record Nr.	UNINA9910830838303321
Autore	Demoly Frederic
Titolo	4d printing 2 // Frederic Demoly, Jean-Claude Andre
Pubbl/distr/stampa	Hoboken, New Jersey : , : ISTE Ltd / John Wiley & Sons Inc, , [2022] ©2022
ISBN	1-394-17152-8 1-394-17150-1
Descrizione fisica	1 online resource (321 pages)
Collana	Systems and industrial engineering series
Disciplina	929.374
Soggetti	Additive manufacturing Three-dimensional printing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Who hasn't dreamed of seeing matter transformed in a way that suits you? This is the goal of 4D printing, using materials that can change in terms of shape and property under the effect of energy stimulation. From the description of the actions and actuators, the authors show the weaknesses that limit the industrialization of 4D printing processes; these are the modes of energy stimulation. To prepare for the future, two chapters are introduced: "Material-Process Duality in Industrial 4D Printing" and "How to Approach 4D Printing in Design". If the capture and reuse of 4D printing knowledge is necessary for this objective, the conclusion leaves the existing myth around the 4D printing theme and proposes a "draft" roadmap that should be the subject of reflection and scientific debate on a concept that is still immature, but full of promise.