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Nota di contenuto	Fabricated; About the Authors; Acknowledgments; Contents; Preface; Chapter 1: Everything is becoming science fiction; Chapter 2: A machine that can make almost anything; Printing three-dimensional things; The ten principles of 3D printing; Chapter 3: Nimble manufacturing: Good, fast, and cheap; Somewhere between mass production and the local farmer's market; The blank canvas of the 21st century; Chapter 4: Tomorrow's economy of printable products; Like ants with factories; The experience economy; A future economy of printable products; Chapter 5: Printing in layers A manufacturing process at heart Two families of printers; Cleaning up design files; The raw materials; Chapter 6: Design software, the digital canvas; A word processor for drawing; Today's design software; What you design is not (necessarily) what you print; The next generation of design software: digital capture; Chapter 7: Bioprinting in "living ink"; The printer of youth; Tissue engineering; CAD for the body; The future; Chapter 8: Digital cuisine; Digital gastronomy; Feeding the quantified self; Processed food; Chapter 9: A factory in the classroom; Make to

learn: Children's engineering

Not a national crisis . . . but learning should be enjoyable Now let's see you draw that abstract equation on a graph; Barriers to classroom adoption; The road ahead; Chapter 10: Unleashing a new aesthetic; Computers that act like nature; Printing wavy walls and custom gargoyles; Chapter 11: Green, clean manufacturing; A tale of two plastic toys; Greener manufacturing; 3D printing a more beautiful landfill; Chapter 12: Ownership, safety, and new legal frontiers; Printing weapons, drugs, and shoddy products; Rip, mix, and burn physical things; Exclusivity vs. the freedom to innovate Chapter 13: Designing the future Tea. Earl Grey. Hot.; A bicycle for our imagination; The language of shapes; Changing the shape of design tools; Chapter 14: The next episode of 3D printing; The three episodes of 3D printing; Cofabrication of multiple materials; Moving from printing passive parts to active systems; The final episode-from analog to digital; Machines making machines; References; Index

Sommario/riassunto

Fabricated tells the story of 3D printers, humble manufacturing machines that are bursting out of the factory and into schools, kitchens, hospitals, even onto the fashion catwalk. Fabricated describes our emerging world of printable products, where people design and 3D print their own creations as easily as they edit an online document. A 3D printer transforms digital information into a physical object by carrying out instructions from an electronic design file, or "blueprint." Guided by a design file, a 3D printer lays down layer after layer of a raw material to
