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Sommario/riassunto	This book introduces the applications of laser in surface modification, such as laser cladding of Stellite alloys and metal-ceramic composites. Besides, nanomaterials including carbon nanotubes and Al ₂ O ₃ nanoparticles are brought into the laser processing, to form high-temperature resistance, chemical stability, and wear- and oxidation-resistant composite coatings. The readers will get more knowledge about the basic principle and application of laser cladding and laser surface hardening technologies, and gain a deep insight into the process and characteristics of the nanomaterial-assisted laser surface enhancement. It provides references for the researchers, engineers, and students in the fields of mechanical engineering, laser processing, and material engineering.