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Altri autori (Persone)	WuJunfeng CaoZiwei CheZhigang
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Nota di contenuto	Characteristics and current situation of laser shock peening -- Laser shock peening system for industrial application -- Process stability factors and safety protection of laser shock peening -- Numerical analysis of mechanical effect of laser shock peening -- Evaluations of strengthening effect of the metals with laser shock peening.
Sommario/riassunto	This book highlights the fundamentals and latest progresses in the research and applications of laser shock peening (LSP). As a novel technology for surface treatment, LSP greatly improves the resistance of metallic materials to fatigue and corrosion. The book presents the mechanisms, techniques, and applications of LSP in a systematic way. It discusses a series of new progresses in fatigue performance improvement of metal parts with LSP. It also introduces lasers,

equipment, and techniques of newly developed industry LSP, with a detailed description of the novel LSP blisk. The book demonstrates in details numerical analysis and simulation techniques and illustrates process stability control, quality control, and analysis determination techniques. It is a valuable reference for scientists, engineers, and students in the fields of laser science, materials science, astronautics, and aeronautics who seek to understand, develop, and optimize LSP processes.

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