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Nota di contenuto	Preface -- Chapter 1 Introduction -- Chapter 2 Hierarchical multi-fidelity surrogates modeling -- Chapter 3 Non-Hierarchical multi-fidelity surrogates modeling -- Chapter 4 Sequential multi-fidelity surrogates modeling -- Chapter 5 Multi-fidelity surrogates assisted efficient global optimization -- Chapter 6 Multi-fidelity surrogates assisted reliability design optimization -- Chapter 7 Multi-fidelity surrogates assisted robust design optimization -- Chapter 8 Multi-fidelity surrogates assisted evolutional optimization -- Chapter 9 Engineering Applications -- Chapter 10 Concluding remarks.
Sommario/riassunto	This book investigates two types of static multi-fidelity surrogates modeling approaches, sequential multi-fidelity surrogates modeling approaches, the multi-fidelity surrogates-assisted efficient global optimization, reliability analysis, robust design optimization, and evolutionary optimization. Multi-fidelity surrogates have attracted a significant amount of attention in simulation-based design and

optimization in recent years. Some real-life engineering design problems, such as prediction of angular distortion in the laser welding, optimization design of micro-aerial vehicle fuselage, and optimization design of metamaterial vibration isolator, are also provided to illustrate the ability and merits of multi-fidelity surrogates in support of engineering design. Specifically, lots of illustrative examples are adopted throughout the book to help explain the approaches in a more “hands-on” manner. This book is a useful reference for postgraduates and researchers of mechanical engineering, as well as engineers of enterprises in related fields.
