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	Disciplina	624
	Soggetti	Civil engineering
		Mechanical engineering
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		Civil Engineering
		Mechanical Engineering
		Theoretical and Applied Mechanics
	Lingua di pubblicazione	Inglese
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	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references at the end of each chapters.
	Nota di contenuto	Limit Load Theorems for the Drucker-Prager Yield Condition with a Non-Associated Flow Rule -- A direct method for predicting the high-cycle fatigue regime of shape-memory alloys structures -- Shakedown within polycrystals: a direct numerical assessment -- On the size of the representative volume element used for the strength prediction: a statistical survey applied to the particulate reinforce metal matrix composites (PRMMCs) -- R-adaptivity in limit analysis -- Shakedown analysis under stochastic uncertainty by chance constrained programming -- Composite finite elements in structural analysis -- Recent progress on lower-bound shakedown analysis of road pavements -- Numerical yield design analysis of high-rise reinforced concrete walls in fire conditions -- Efficient shakedown solutions in complex loading domains -- Some Graphical Interpretations of Melan's Theorem for Shakedown Design -- High temperature limit analysis of pressure vessels and piping with local wall-thinning.
	Sommario/riassunto	This book offers a state-of-the-art overview and includes recent

developments of various direct computational analysis methods. It is based on recently developed and widely employed numerical procedures for limit and shakedown analysis of structures and their extensions to a wide range of physical problems relevant to the design of materials and structural components. The book can be used as a complementary text for advanced academic courses on computational mechanics, structural mechanics, soil mechanics and computational plasticity and it can be used a research text.