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Autore	Sahraee Shahab
Titolo	Tensor Calculus and Differential Geometry for Engineers : With Solved Exercises // by Shahab Sahraee, Peter Wriggers
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Altri autori (Persone)	WriggersP
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Nota di contenuto	Algebra of Vectors -- Algebra of Tensors -- Algebra of Higher-Order Tensors -- Eigenvalues, Eigenvectors and Spectral Decompositions of Tensors -- Representation of Tensorial Variables in Curvilinear Coordinates -- Differentiation of Tensor Functions and Representation Theorems -- Gradient and Related Operators -- Integral Theorems and Differential Forms -- Differential Geometry of Surfaces and Curves.
Sommario/riassunto	The book contains the basics of tensor algebra as well as a comprehensive description of tensor calculus, both in Cartesian and curvilinear coordinates. Some recent developments in representation theorems and differential forms are included. The last part of the book presents a detailed introduction to differential geometry of surfaces and curves which is based on tensor calculus. By solving numerous exercises, the reader is equipped to properly understand the theoretical background and derivations. Many solved problems are provided at the end of each chapter for in-depth learning. All derivations in this text are carried out line by line which will help the reader to understand the basic ideas. Each figure in the book includes descriptive text that corresponds with the theoretical derivations to facilitate rapid learning.

