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	Nota di contenuto	General Basis and Bra-Ket Notation -- Tensor Analysis -- Elementary Differential Geometry -- Differential Forms -- Applications of Tensors and Differential Geometry -- Tensors and Bra-Ket Notation in Quantum Mechanics -- Appendices.
	Sommario/riassunto	This book comprehensively presents topics, such as Dirac notation, tensor analysis, elementary differential geometry of moving surfaces, and k-differential forms. Additionally, two new chapters of Cartan differential forms and Dirac and tensor notations in quantum mechanics are added to this second edition. The reader is provided with hands-on calculations and worked-out examples at which he will learn how to handle the bra-ket notation, tensors, differential geometry, and differential forms; and to apply them to the physical and engineering world. Many methods and applications are given in CFD, continuum mechanics, electrodynamics in special relativity, cosmology

in the Minkowski four-dimensional spacetime, and relativistic and non-relativistic quantum mechanics. Tensors, differential geometry, differential forms, and Dirac notation are very useful advanced mathematical tools in many fields of modern physics and computational engineering. They are involved in special and general relativity physics, quantum mechanics, cosmology, electrodynamics, computational fluid dynamics (CFD), and continuum mechanics. The target audience of this all-in-one book primarily comprises graduate students in mathematics, physics, engineering, research scientists, and engineers. .