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	Nota di contenuto	On the roots of continuum mechanics in differential geometry -- a review -- Cosserat media -- Cosserat-type shells -- Cosserat-type rods -- Micromorphic media -- Electromagnetism and generalized continua -- Computational methods for generalized continua.
	Sommario/riassunto	The need of generalized continua models is coming from practice. Complex material behavior sometimes cannot be presented by the classical Cauchy continua. At present the attention of the scientists in this field is focused on the most recent research items • new models, • application of well-known models to new problems, • micro-macro aspects, • computational effort, and • possibilities to identify the constitutive equations The new research directions are discussed in this volume - from the point of view of modeling and simulation, identification, and numerical methods.