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	Autore	Cloud Michael J
	Titolo	Inequalities : With Applications to Engineering / / by Michael J. Cloud, Byron C. Drachman, Leonid P. Lebedev
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	Descrizione fisica	1 online resource (XIII, 239 p. 30 illus.) : online resource
	Disciplina	620.00151
	Soggetti	Functions of real variables
		Functions, Special
		Applied mathematics
		Engineering mathematics
		Real Functions
		Special Functions
		Mathematical and Computational Engineering
	Lingua di pubblicazione	Inglese
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	Nota di contenuto	Preface -- 1. Basic Review and Elementary Facts -- 2. Methods from the Calculus -- 3. Some Standard Inequalities -- 4. Inequalities in Abstract Spaces -- 5. Some Applications -- 6. Inequalities for Differential Equations -- 7. Brief Introduction to Interval Analysis -- Hints for Selected Problems -- References -- Appendix.
	Sommario/riassunto	This book offers a concise introduction to mathematical inequalities for graduate students and researchers in the fields of engineering and applied mathematics. It begins by reviewing essential facts from algebra and calculus and proceeds with a presentation of the central inequalities of applied analysis, illustrating a wide variety of practical applications. The text provides a gentle introduction to abstract spaces, such as metric, normed, and inner product spaces. It also provides full coverage of the central inequalities of applied analysis, such as Young's inequality, the inequality of the means, Hölder's inequality, Minkowski's inequality, the Cauchy–Schwarz inequality, Chebyshev's inequality, Jensen's inequality, and the triangle inequality. The second edition

features extended coverage of applications, including continuum mechanics and interval analysis. It also includes many additional examples and exercises with hints and full solutions that may appeal to upper-level undergraduate and graduate students, as well as researchers in engineering, mathematics, physics, chemistry, or any other quantitative science.