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Titolo	Sharp Inequalities for Ordered Random Variables in Statistics and Reliability : Volume I: Standard Order Statistics / / by Narayanaswamy Balakrishnan, Tomasz Rychlik
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Altri autori (Persone)	RychlikTomasz
Disciplina	519.2
Soggetti	Statistics Statistical Theory and Methods Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences Desigualtats (Matemàtica) Estadística d'ordre Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	- Introduction and Notation -- Analytic Inequalities and Other Tools -- Deterministic Bounds -- General, Symmetric and Life IID Samples -- Sampling from Finite Populations -- IID Samples from Shape Restricted Families.
Sommario/riassunto	The book discusses various inequalities and sharp bounds for the usual order statistics as well as some functions of them. In particular, deterministic bounds, bounds for the case of IID samples from general, symmetric and life distributions, IID samples from shape restricted family of distributions, and samples from finite populations are all discussed in detail. An elaborate numerical evaluation and comparison of various bounds are also presented in order to illustrate their inherent differences as well as their precision. Furthermore, their applications to inference, reliability theory and characterizations are also highlighted. The book provides an in-depth exposure to various mathematical inequalities and bounds established historically as well as in recent years and their applications to order statistics and some

important functions of them. It thus presents an up-to-date discussion of all results in this important area of mathematical and statistical research. The results described here are general in nature and therefore could be useful in other areas of Probability and Statistics as well.

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