

1. Record Nr.	UNISA996418167203316
Titolo	Handbook of Materials Modeling [[electronic resource] ] : Applications: Current and Emerging Materials // edited by Wanda Andreoni, Sidney Yip
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-319-44680-0
Edizione	[2nd ed. 2020.]
Descrizione fisica	1 online resource (930 illus., 849 illus. in color. eReference.)
Disciplina	620.11015118
Soggetti	Physics Nanotechnology Mechanics Mechanics, Applied Chemistry, Physical and theoretical Condensed matter Numerical and Computational Physics, Simulation Solid Mechanics Theoretical and Computational Chemistry Condensed Matter Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The Handbook of Materials Modeling, 2nd edition is a six-volume major reference serving a steadily growing community at the intersection of two mainstreams of global research: computational science and materials science and technology. This extensively expanded new edition reflects the significant developments in all aspects of computational materials research over the past decade, featuring progress in simulations at multiple scales and increasingly more realistic materials models. Thematically separated into two mutually dependent sets – “Methods: Theory and Modeling (MTM)” and “Applications: Current and Emerging Materials (ACE)” – the handbook

runs the entire gamut from theory and methods to simulations and applications. Readers benefit from its in-depth coverage of a broad methodological spectrum extending from advanced atomistic simulations of rare events to data-driven artificial intelligence strategies for materials informatics in the set MTM, as well as forefront emphasis on materials of far-ranging societal importance such as photovoltaics and energy-relevant oxides, and cutting-edge applications to materials for spintronic devices, graphene, cement, and glasses in the set ACE. The thorough, interconnected coverage of methods and applications, together with a line-up of internationally acclaimed editors and authors, will ensure the Handbook of Material Modeling's standing as an enduring source of learning and inspiration for a global community of computational materials scientists. .

2. Record Nr.	UNINA9910855391003321
Autore	Glaz Joseph
Titolo	Handbook of Scan Statistics // edited by Joseph Glaz, Markos V. Koutras
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2024
ISBN	9781461480334
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (812 pages)
Collana	Mathematics and Statistics Series
Altri autori (Persone)	KoutrasMarkos V
Disciplina	519.5
Soggetti	Statistics Bioinformatics Biometry Social sciences - Statistical methods Statistical Theory and Methods Biostatistics Estadística matemàtica Statistics in Social Sciences, Humanities, Law, Education, Behavioral Sciences, Public Policy Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

## Nota di contenuto

Preface -- I. History and Early Developments -- II. Methods and Techniques in Research and Scan Statistics -- III. One Dimensional Scan Statistics -- IV. Two and Three Dimensional Scan Statistics -- V. Biological Sciences -- VI. Biosurveillance and Reconnaissance -- VII. Engineering and Physical Sciences -- VIII. Ecology and Environmental Sciences -- IX. Information Sciences -- X. Medical Sciences -- XI. Public Health -- XII. Reliability and Quality Control -- XIII. Social Sciences -- XIV. Veterinary and Animal Science.

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## Sommario/riassunto

Scan statistics, one of the most active research areas in applied probability and statistics, has seen a tremendous growth during the last 25 years. Google Scholar lists about 3,500 hits to references of articles on scan statistics since the year 2020, resulting in over 850 hits to articles per year. This is mainly due to extensive and diverse areas of science and technology where scan statistics have been employed, including: atmospheric and climate sciences, business, computer science, criminology, ecology, epidemiology, finance, genetics and genomics, geographic sciences, medical and health sciences, nutrition, pharmaceutical sciences, physics, quality control and reliability, social networks and veterinary science. This volume of the Handbook of Scan Statistics is a collection of forty chapters, authored by leading experts in the field, outlines the research and the breadth of applications of scan statistics to the numerous areas of science and technology listed above. These chapters present an overview of the theory, methods and computational techniques, related to research in the area of scan statistics and outline future developments. It contains extensive references to research articles, books and relevant computer software. Handbook of Scan Statistics is an excellent reference for researchers and graduate students in applied probability and statistics, as well as for scientists in research areas where scan statistics are used. This volume may also be used as a textbook for a graduate level course on scan statistics. .

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