Category Normalized Citation Impact Thomson Reuters

Eventually, you will categorically discover a new experience and talent by spending more cash. still when? complete you understand that you require to get those all needs similar to having significantly cash? Why dont you try to acquire something basic in the beginning? Thats something that will guide you to understand even more with reference to the globe, experience, some places, as soon as history, amusement, and a lot more?

It is your entirely own period to pretense reviewing habit. accompanied by guides you could enjoy now is **Category Normalized Citation Impact Thomson Reuters** below.

Meaningful Metrics Robin Chin Roemer 2015-04

Publishing and the Academic World Ciaran Sugrue 2016-05-20 Within the Academy, itself a changing and increasingly entrepreneurial entity, publishing is no longer an option; it is the universal currency that secures a position, tenure and promotion; it is key to academic life. Providing a panoramic picture of the changing publishing climate, Academic Life and the Publishing Landscape will empower scholars by enabling them to navigate this changing terrain more successfully. This book provides guidance from a range of contributors who use their own wide expertise in writing and publication to document the challenges faced by scholars at different career stages and in different locations. It covers a wide range of debates on publishing, spilt into the following three sections: Mapping the Publication Landscape, Writing for Publication—Learning from Successful Voices, Further Challenges and Possibilities. With topics ranging from the process of preparing manuscripts for publication, including chapters on calculating journal rankings and understanding the Peer Review process, through to chapters on speaking to international audiences and writing for elite international journals, this book offers a unique perspective on how the changing nature of publishing works. This will be a useful guide for scholars across the globe looking to enhance their publication performance, and those questioning what needs to be done in order to understand, navigate and to (re-)position one's self and institution in this increasingly significant and rapidly altering terrain. Ciaran Sugrue is Professor of Education, University College Dublin, Ireland and has been Head of School from 2011-14. Sefika Mertkan is an Assistant Professor of Educational Leadership and Management at Eastern Mediterranean University.

Scholarly Book Reviewing in the Social Sciences and Humanities Ylva Lindholm-Romantschuk 1998 Unlike previous studies that have used techniques such as citation or co-citation analysis to measure scholarly communication, this book identifies scholarly monography as a primary means of communication in the humanities and social sciences. The diffusion and reception of this means of communication may be measured by examining book reviews in the scholarly journal literature, themselves significant indicators of scholarly communication.

Research evaluation metrics Das, Anup Kumar 2015-04-27

The Web of Knowledge Eugene Garfield 2000 This new ASIST monograph is the first to comprehensively address the history, theory, and practical applications of citation analysis, a field which has grown from Garfield's seed of an idea, and to examine its impact on scholarly research forty years after its inception. In bringing together the analyses, insights, and reflections of more than thirty-five leading lights, editors Cronin and Atkins have produced both a comprehensive survey of citation indexing and its applications and a beautifully-realized tribute to Eugene Garfield and his vision, in honor of his seventy-fifth birthday.

Research Management Jan Andersen 2017-11-15 Research Management: Europe and Beyond addresses the myriad responsibilities related to research management and administration. The book incorporates narratives from those working in the field to provide insight into the profession. The book also offers a unique perspective on the topic by incorporating global perspectives to address the growing interdisciplinary nature of research collaboration. The book outlines practical advice for those in the research management and administration profession at all levels of experience. It is also a useful tool that research institutions and research groups can use to assist in planning and streamlining their research support. Offers a deeper understanding of the research management and administrative landscape through single and collective definitions and experiences Provides an overview of the research environment and explores the international research arena Discusses some of the most complex issues in research management and administration by covering topics such as ethics, innovation, research impact, organizational structures, and processes for the project life cycle

Power Laws in the Information Production Process Leo Egghe 2005-01-20 Explains numerous informetric regularities based on a decreasing power law as size-frequency function, i.e. Lotka's law. It revives the historical formulation of Alfred Lotka of 1926 and shows the power of this power law, both in classical aspects of informetrics (libraries, bibliographies) and in 'new' applications such as social networks.

Handbook of Quantitative Science and Technology Research Henk F. Moed 2004-09-10 This handbook offers a state-of-the-art overview of quantitative science and technology research. It focuses on the development and application of indicators derived from data on scientific or scholarly publications and patents. It comprises 34 chapters written by leading specialists in the various sub-domains. These chapters deal with theoretical and methodological issues, illustrate applications, and highlight their policy context and relevance. Authors present a survey of the research topics they address, and show their most recent achievements. The 34 chapters are arranged into 5 parts: Disciplinary Approaches; General Methodology; The Science System; The Technology System; and The Science-Technology Interface. The Editor's Introduction provides a further specification of the handbook's scope and of the main topics addressed in its chapters. This handbook aims at four distinct groups of readers: – practitioners in the field of science and technology studies; – research students in this field; – scientists, scholars and technicians who are interested in a systematic, thorough analysis of their activities; – policy makers and administrators who wish to be informed about the potentialities and limitations of the various approaches and about their results.

Best Practices in Bibliometrics & Bibliometric Services Juan Ignacio Gorraiz 2022-01-06

Higher Education in the Global Age Daniel Araya 2013-11-20 Discussions on globalization now routinely focus on the economic impact of developing countries in Asia, Africa, the Middle East, the former Soviet Union and Latin America. Only twenty-five years ago, many developing countries were largely closed societies. Today, the growing power of "emerging markets" is reordering the geopolitical landscape. On a purchasing power parity basis, emerging economies now constitute half of the world's economic activity. Financial markets too are seeing integration: Asia now accounts for 1/3 of world stock markets, more than double that of just 15 years ago. Given current trajectories, most economists predict that China and India alone will account for half of global output by 2050 (almost a complete return to their positions prior to the Industrial Revolution). How is higher education shaping and being shaped by these massive tectonic shifts? As education rises as a geopolitical priority, it has converged with discussions on economic policy and a global labor market. As part of the Routledge Studies in Emerging Societies series, this edited collection focuses on the globalization of higher education, particularly the increasing symbiosis between advanced and developing countries. Bringing together senior scholars, journalists, and practitioners from around the world, this collection explores the relatively new and changing higher education landscape.

Performance-based Funding for Public Research in Tertiary Education Institutions Workshop Proceedings OECD 2010-12-01 This book takes stock of current thinking and practice around performance-based funding of public research in tertiary education institutions, as a tool to help governments meet their research goals.

Rankings and the Reshaping of Higher Education E. Hazelkorn 2011-03-08 University rankings have gained popularity around the world, and are now a significant factor shaping reputation. This book is the first comprehensive study of rankings from a global perspective, making an important contribution to our understanding of the rankings phenomenon. This book has also been published in Japanese.

World University Rankings and the Future of Higher Education Downing, Kevin 2016-10-06 Delivering quality education to students while remaining competitive at an international level is only one of the many challenges universities face today. To attain their goals, universities must adopt new strategies to achieve academic excellence. World University Rankings and the Future of Higher Education is a pivotal reference source for the latest scholarly research on the implementation of a ranking system for higher education institutions, providing a thorough overview of the impacts of these rankings on educational quality. Exploring the benefits and challenges of this system in a global context, this book is ideally designed for academicians, researchers, students, administrators, and policy makers interested in the effects of university rankings in the education sector and beyond.

Citation Analysis in Research Evaluation Henk F. Moed 2005-07-26 This book is written for members of the scholarly research community, and for persons involved in research evaluation and research policy. More specifically, it is directed towards the following four main groups of readers: – All scientists and scholars who have been or will be subjected to a quantitative assessment of research performance using citation analysis. – Research policy makers and managers who wish to become conversant with the basic features of citation analysis, and about its potentialities and limitations. – Members of peer review committees and other evaluators, who consider the use of citation analysis as a tool in their assessments. – Practitioners and students in the field of quantitative science and technology studies, informetrics, and library and information science. Citation analysis involves the construction and application of a series of indicators of the 'impact', 'influence' or 'quality' of scholarly work, derived from citation data, i.e. data on references cited in footnotes or bibliographies of scholarly research publications. Such indicators are applied both in the study of scholarly communication and in the assessment of research performance. The term 'scholarly' comprises all domains of science and scholarship, including not only those fields that are normally denoted as science – the natural and life sciences, mathematical and technical sciences – but also social sciences and humanities.

Augmentation of Brain Function: Facts, Fiction and Controversy Mikhail Lebedev 2018-09-14 Volume I, entitled "Augmentation of Brain Functions: Brain-Machine Interfaces", is a collection of articles on neuroprosthetic technologies that utilize brain-machine interfaces (BMIs). BMIs strive to augment the brain by linking neural activity, recorded invasively or noninvasively, to external devices, such as arm prostheses, exoskeletons that enable bipedal walking, means of communication and technologies that augment attention. In addition to many practical applications, BMIs provide useful research tools for basic science. Several articles cover challenges and controversies in this rapidly developing field, such as ways to improve information transfer rate. BMIs can be applied to the awake state of the brain and to the sleep state, as well. BMIs can augment action planning and decision making. Importantly, BMI operations evoke brain plasticity, which can have long-lasting effects. Advanced neural decoding algorithms that utilize optimal feedback controllers are key to the BMI performance. BMI approach can be combined with the other augmentation methods; such systems are called hybrid BMIs. Overall, it appears that BMI will lead to many powerful and practical brain-augmenting technologies in the future.

Applied Evaluative Informetrics Henk F. Moed 2017-09-08 This book presents an introduction to the field of applied evaluative informetrics, dealing with the use of bibliometric or informetric indicators in research assessment. It sketches the field's history, recent achievements, and its potential and limits. The book dedicates special attention to the application context of quantitative research assessment. It describes research assessment as an evaluation science, and distinguishes various assessment models, in which the domain of informetrics and the policy sphere are disentangled analytically. It illustrates how external, non-informetric factors influence indicator development, and how the policy context impacts the setup of an assessment process. It also clarifies common misunderstandings in the interpretation of some often used statistics. Addressing the way forward, the book expresses the author's critical views on a series of fundamental problems in the current use of research performance indicators in research assessment. Highlighting the potential of informetric techniques, a series of new features is proposed that could be implemented in future assessment processes. It sketches a perspective on altmetrics and proposes new lines in longer term, strategic indicator research. It is written for interested scholars from all domains of science and scholarship, and especially for all those subjected to research assessment, research students at advanced master and PhD level, research managers, funders and science policy officials, and to practitioners and students in the field.

Research Methodology Vinayak Bairagi 2019-01-30 This book offers a design research methodology intended to improve the quality of design research- its academic credibility, industrial significance and societal contribution by enabling more thorough, efficient and effective procedures.

Web Indicators for Research Evaluation Michael Thelwall 2016-10-06 In recent years there has been an increasing demand for research evaluation within universities and other research-based organisations. In parallel, there has been an increasing recognition that traditional citation-based indicators are not able to reflect the societal impacts of research and are slow to appear. This has led to the creation of new indicators for different types of research impact as well as timelier indicators, mainly derived from the Web. These indicators have been called altmetrics, webometrics or just web metrics. This book describes and evaluates a range of web indicators for aspects of societal or scholarly impact, discusses the theory and practice of using and evaluating web indicators for research assessment and outlines practical strategies for obtaining many web indicators. In addition to describing impact indicators for traditional scholarly outputs, such as journal articles and monographs, it also covers indicators for videos, datasets, software and other non-standard web outputs. The book describes strategies to analyse web indicators for individual publications as well as to compare the impacts of groups of publications. The practical part of the book includes descriptions of how to use the free software Webometric Analyst to gather and analyse web data. This book is written for information science undergraduate and Master's students that are learning about alternative indicators or scientometrics as well as Ph.D. students and other researchers and practitioners using indicators to help assess research impact or to study scholarly communication.

Citation Indexing, Its Theory and Application in Science, Technology, and Humanities Eugene Garfield 1983 A conceptual view of citation indexing; A historical view of citation indexing; The design and production of a citation index; The application of citation indexing to the patent literature; The citation index as a search tool; A science management tool; Citation analysis as a method of historical research into science; Mapping the structure of science; Citation analysis of sientific journals; Perspective on citation analysis of scientists.

University Rankings William Yat Wai Lo 2014-02-17 This book adopts a qualitative case study approach to provide the readers with a systematic delineation and interpretation of the implications of the university ranking phenomenon for Taiwan's higher education system. It reviews the literature on different theories concerning the global transformation of higher education and presents basic information on higher education in Taiwan. The author develops a four-dimensional framework for the analysis of the ranking phenomenon in the island-state. First, the technological/ecological dimension aims to look into how the rankings have impacted Taiwan's higher education based on empirical findings from five Taiwanese public universities. Next, the technological/geographical dimension examines how Taiwan can use rankings to promote its interests in global higher education. The two conceptual dimensions focus on the relationship between the rankings and power in higher education. They show how the phenomenon can be read and explained through theoretical lenses from ecological and geographical perspectives. From an ecological perspective, the empirical evidence suggests that the influence of rankings varies throughout the academic hierarchy in Taiwan. The theoretical analysis then illustrates the relationship between the ranking phenomenon and the power structure in academic hierarchy. Geographically, while the empirical analysis is based on data from Taiwan, the theoretical analysis offers essential insights that help readers to understand the changing global landscape of higher education and its implications in East Asia.

Springer Handbook of Science and Technology Indicators Wolfgang Glänzel 2019-10-30 This handbook presents the state of the art of quantitative methods and models to understand and assess the science and technology system. Focusing on various aspects of the development and application of indicators derived from data on scholarly publications, patents and electronic communications, the individual chapters, written by leading experts, discuss theoretical and methodological issues, illustrate applications, highlight their policy context and relevance, and point to future research directions. A substantial portion of the book is dedicated to detailed descriptions and analyses of data sources, presenting both traditional and advanced approaches. It addresses the main bibliographic metrics and indexes, such as the journal impact factor and the h-index, as well as altmetric and webometric indicators and science mapping techniques on different levels of aggregation and in the context of their value for the assessment of research performance as well as their impact on research policy and society. It also presents and critically discusses various national research evaluation systems. Complementing the sections reflecting on the science system, the technology section includes multiple chapters that explain different aspects of patent statistics, patent classification and database search methods to retrieve patent-related information. In addition, it examines the relevance of trademarks and standards as additional technological indicators. The Springer Handbook of Science and Technology Indicators is an invaluable resource for practitioners, scientists and policy makers wanting a systematic and thorough analysis of the potential and limitations of the various approaches to assess research and research performance.

The Handbook of Global Science, Technology, and Innovation Daniele Archibugi 2015-09-28 "Provides a state-of-the-art overview of science, technology, and innovation in the context of globalization and global policy"--

Rankings and the Reshaping of Higher Education Ellen Hazelkorn 2015-03-23 University rankings have gained popularity around the world and are now a significant factor shaping reputation. This second edition updates Ellen Hazelkorn's first comprehensive study of rankings from a global perspective, drawing in new original research and extensive analysis. It is essential reading for policymakers, managers and scholars.

Incentives and Performance Isabell M. Welpe 2014-11-07 This book contributes to the current discussion in society, politics and higher education on innovation capacity and the financial and non-financial incentives for researchers. The expert contributions in the book deal with implementation of incentive systems at higher education institutions in order to foster innovation. On the other hand, the book also discusses the extent to which governance structures from economy can be transferred to universities and how scientific performance can be measured and evaluated. This book is essential for decision-makers in knowledge-intensive organizations and higher-educational institutions dealing with the topic of performance management.

Theories of Informetrics and Scholarly Communication Cassidy R. Sugimoto 2016-02-22 Scientometrics have become an essential element in the practice and evaluation of science and research, including both the evaluation of individuals and national assessment exercises. Yet, researchers and practitioners in this field have lacked clear theories to guide their work. As early as 1981, then doctoral student Blaise Cronin published "The need for a theory of citing" —a call to arms for the fledgling scientometric community to produce foundational theories upon which the work of the field could be based. More than three decades later, the time has come to reach out the field again and ask how they have responded to this call. This book compiles the foundational theories that guide informetrics and scholarly communication research. It is a much needed compilation by leading scholars in the field that gathers together the theories that guide our understanding of authorship, citing, and impact.

Rankings and Accountability in Higher Education: Uses and Misuses Priscilla Toka Mmantsetsa Marope 2013 The growing impact of university rankings on public policy and on students choices has stirred controversy worldwide. This unique volume brings together the architects of university rankings and their critics to debate the uses and misuses of existing rankings. With voices from five continents, it provides a comprehensive overview of current thinking on the subject and sets out alternative approaches and complementary tools for a new era of transparent and informed use of higher education ranking tables.

The Metric Tide James Wilsdon 2016-01-20 'Represents the culmination of an 18-month-long project that aims to be the definitive review of this important topic. Accompanied by a scholarly literature review, some new analysis, and a wealth of evidence and insight... the report is a tour de force; a once-in-a-generation opportunity to take stock.' – Dr Steven Hill, Head of Policy, HEFCE, LSE Impact of Social Sciences Blog 'A must-read if you are interested in having a deeper understanding of research culture, management issues and the range of information we have on this field. It should be disseminated and discussed within institutions, disciplines and other sites of research collaboration.' – Dr Meera Sabaratnam, Lecturer in International Relations at the School of Oriental and African Studies, University of London, LSE Impact of Social Sciences Blog Metrics evoke a mixed reaction from the research community. A commitment to using data and evidence to inform decisions makes many of us sympathetic, even enthusiastic, about the prospect of granular, real-time analysis of our own activities. Yet we only have to look around us at the blunt use of metrics to be reminded of the pitfalls. Metrics hold real power: they are constitutive of values, identities and livelihoods. How to exercise that power to positive ends is the focus of this book. Using extensive evidence-gathering, analysis and consultation, the authors take a thorough look at potential uses and limitations of research metrics and indicators. They explore the use of metrics across different disciplines, assess their potential contribution to the development of research excellence and impact and consider the changing ways in which universities are using quantitative indicators in their management systems. Finally, they consider the negative or unintended effects of metrics on various aspects of research culture. Including an updated introduction from James Wilsdon, the book proposes a framework for responsible metrics and makes a series of targeted recommendations to show how responsible metrics can be applied in research management, by funders, and in the next cycle of the Research Excellence Framework. The metric tide is certainly rising. Unlike King Canute, we have the agency and opportunity – and in this book, a serious body of evidence – to influence how it washes through higher education and research.

Measuring Scholarly Impact Ying Ding 2014-11-06 This book is an authoritative handbook of current topics, technologies and methodological approaches that may be used for the study of scholarly impact. The included methods cover a range of fields such as statistical sciences, scientific visualization, network analysis, text mining, and information retrieval. The techniques and tools enable researchers to investigate metric phenomena and to assess scholarly impact in new ways. Each chapter offers an introduction to the selected topic and outlines how the topic, technology or methodological approach may be applied to metrics-related research. Comprehensive and up-to-date, Measuring Scholarly Impact: Methods and Practice is designed for researchers and scholars interested in informetrics, scientometrics, and text mining. The hands-on perspective is also beneficial to advanced-level students in fields from computer science and statistics to information science.

Editorial Peer Review Ann C. Weller 2001 This book is the first to provide an in-depth analysis of the peer review process in scholarly publishing. Author Weller offers a systematic review of published studies of editorial peer review in the following broad categories: general studies of rejection rates, studies of editors, studies of authors, and studies of reviewers. The book concludes with an examination of new models of editorial peer review and is intended to enhance the scientific communication process as it moves from a print to an electronic environment.

Hierarchy Theory Howard Hunt Pattee 1973

Essays of an Information Scientist: 1962-1973 Eugene Garfield 1977

The Evaluation of Research by Scientometric Indicators Peter Vinkler 2010-01-20 Aimed at academics, academic managers and administrators, professionals in scientometrics, information scientists and science policy makers at all levels. This book reviews the principles, methods and indicators of scientometric evaluation of information processes in science and assessment of the publication activity of individuals, teams, institutes and countries. It provides scientists, science officers, librarians and students with basic and advanced knowledge on evaluative scientometrics. Especially great stress is laid on the methods applicable in practice and on the clarification of quantitative aspects of impact of scientific publications measured by citation indicators. Written by a highly knowledgeable and well-respected scientist in the field Provides practical and realistic quantitative methods for evaluating scientific publication activities of individuals, teams, countries and journals Gives standardized descriptions and classification of the main categories of evaluative scientometrics

Building World-Class Universities Qi Wang 2013-04-20 Within higher education, world-class universities are commonly regarded as elite research institutions, and play a critical role in developing a nation's competitiveness in the global knowledge economy. An increasing number of countries, regions and higher education institutions in different parts of the world have joined the same battle for academic excellence. While emerging countries and their universities make every effort to enhance their capacity and boost their research performance, the academic superpowers endeavour to maintain - if not further improve- their global positions. "Building World-Class Universities: Different Approaches to a Shared Goal" intends to provide an in-depth picture of different approaches in pursuit of the shared goal of developing academic excellence, and to reflect the current trends in this field. Divided into three parts, the book covers: • building world-class universities from a national/regional perspective, • managing world-class universities from an institutional perspective, and • measuring world-class universities from a ranking/indicator perspective. This book not only represents a contribution to the ongoing discussion on the topic of building world-class universities, but can be seen as a continuation of the previous three volumes on this topic - "World-Class Universities and Ranking: Aiming beyond Status", "The World-Class University as Part of a New Higher Education Paradigm: From Institutional Qualities to Systemic Excellence", and "Paths to a World-Class University: Lessons from Practices and Experiences". All four books will be useful readings for students and academics in higher education generally, in addition to policy makers and informed practitioners.d practitioners

Multidimensional Journal Evaluation Stefanie Haustein 2012-04-26 Scientific communication depends primarily on publishing in journals. The most important indicator to determine the influence of a journal is the Impact Factor. Since this factor only measures the average number of citations per article in a certain time window, it can be argued that it does not reflect the actual value of a periodical. This book defines five dimensions, which build a framework for a multidimensional method of journal evaluation. The author is winner of the Eugene Garfield Doctoral Dissertation Scholarship 2011.

Beyond Bibliometrics Blaise Cronin 2014-05-16 A comprehensive, state-of-the-art examination of the changing ways we measure scholarly performance and research impact.

Scientometric Indicators Tibor Braun 1985 After a brief account of the recent trends in science indicators research, the authors propose a coherent system of scientometric indicators. These indicators are based on the publication performance of each country in 8 science fields and reflect the versatility of the impact of the publication activity in the country in question. The special aim of the indicator system is to characterize and compare the contribution of research-intensive, medium-sized and small countries to the world's overall scientific research activity. Indicator values for 32 such countries are reported and evaluated. Relations to other economic, social and science indicators are discussed.This book is intended both as a data source and an analytic tool for specialists engaged in science policy, science management, science indicators research, scientometrics and other areas of science as well as a tool for practising research scientists.

Computational Linguistics and Intelligent Text Processing Alexander Gelbukh 2014-04-18 This two-volume set, consisting of LNCS 8403 and LNCS 8404, constitutes the thoroughly refereed proceedings of the 14th International Conference on Intelligent Text Processing and Computational Linguistics, CICLing 2014, held in Kathmandu, Nepal, in April 2014. The 85 revised papers presented together with 4 invited papers were carefully reviewed and selected from 300 submissions. The papers are organized in the following topical sections: lexical resources; document representation; morphology, POS-tagging, and named entity recognition; syntax and parsing; anaphora resolution; recognizing textual entailment; semantics and discourse; natural language generation; sentiment analysis and emotion recognition; opinion mining and social networks; machine translation and multilingualism; information retrieval; text classification and clustering; text summarization; plagiarism detection; style and spelling checking; speech processing; and applications.

Scholarship in the Digital Age Christine L. Borgman 2010-08-13 An exploration of the technical, social, legal, and economic aspects of the scholarly infrastructure needed to support research activities in all fields in the twenty-first century. Scholars in all fields now have access to an unprecedented wealth of online information, tools, and services. The Internet lies at the core of an information infrastructure for distributed, data-intensive, and collaborative research. Although much attention has been paid to the new technologies making this possible, from digitized books to sensor networks, it is the underlying social and policy changes that will have the most lasting effect on the scholarly enterprise. In Scholarship in the Digital Age, Christine Borgman explores the technical, social, legal, and economic aspects of the kind of infrastructure that we should be building for scholarly research in the twenty-first century. Borgman describes the roles that information technology plays at every stage in the life cycle of a research project and contrasts these new capabilities with the relatively stable system of scholarly communication, which remains based on publishing in journals, books, and conference proceedings. No framework for the impending "data deluge" exists comparable to that for publishing. Analyzing scholarly practices in the sciences, social sciences, and humanities, Borgman compares each discipline's approach to infrastructure issues. In the process, she challenges the many stakeholders in the scholarly infrastructure—scholars, publishers, libraries, funding agencies, and others—to look beyond their own domains to address the interaction of technical, legal, economic, social, political, and disciplinary concerns. Scholarship in the Digital Age will provoke a stimulating conversation among all who depend on a rich and robust scholarly environment.

The Challenge of Scientometrics Loet Leydesdorff 2001 Scientometrics--the quantitative study of scientific communication--challenges science and technology studies by demonstrating that organized knowledge production and control is amenable to measurement. First, the various dimensions of the empirical study of the sciences are clarified in a methodological analysis of theoretical traditions, including the sociology of scientific knowledge and neo-conventionalism in the philosophy of science. Second, the author argues why the mathematical theory of communication enables us to address crucial problems in science and technology studies, both on the qualitative side (e.g., the significance of a reconstruction) and on the quantitative side (e.g., the prediction of indicators). A comprehensive set of probabilistic entropy measures for studying complex developments in networks is elaborated. In the third part of the study, applications to S&T policy questions (e.g., the emergence of a European R&D system), to problems of (Bayesian) knowledge representations, and to the study of the sciences in terms of 'self-organizing' paradigms of scientific communication are provided. A discussion of directions for further research concludes the study.

Library and Information Sciences Chuanfu Chen 2014-09-30 This book explores the development, trends and research of library and information sciences (LIS) in the digital age. Inside, readers will find research and case studies written by LIS experts, educators and theorists, most of whom have visited China, delivered presentations there and drafted their articles based on feedback they received. As a result, readers will discover the LIS issues and concerns that China and the international community have in common. The book first introduces the opportunities and challenges faced by the library and information literacy profession and discusses the key role of librarians in the future of information literacy education. Next, it covers trends in LIS education by examining the vision of the iSchool movement and detailing its practice in Syracuse University. The book then covers issues in information seeking and retrieval by showing how visual data mining technology can be used to detect the relationship and pattern between terms on the Q&A of a social media site. It also includes a case study regarding tracing information seeking behavior and usage on a multimedia website. Next, the book stresses the importance of building an academic accreditation framework for scientific datasets, explores the relationship between bibliometrics and university rankings, and details the birth and development of East Asian Libraries in North America. Overall, the book offers readers insight into the changing nature of LIS, including the electronic dissemination of information, the impact of the Internet on libraries, the changing responsibilities of library professionals, the new paradigm for evaluating information, and characteristics and functions of today's library personnel.