

## Handbook Of Silicon Photonics Gbv

This book reviews the latest research on bioproducts from various economically important insects, such as silkworms, honey bees, lac and drosophila, and termites, and discusses their general, biomedical and industrial applications in detail. It includes chapters focusing on insects as a food source, probiotics, silk-based biomaterials, insect pheromones, insects as biomedicine source, pupa oil chemistry, non-protein compounds from Lepidopteran insects, insect chitin and chitosan, polyphenols and flavonoids. Model insects like Bombyx mori or bees were domesticated in Asian countries thousands of years ago. Over time, natural products from these animals became industrialized and today they attracting increasing attention thanks to their sustainability and their manifold applications in agriculture and biomedicine. The book is intended for entomologists, material scientists, natural product researchers and biotechnologists.

Home SOSGender, Violence, and Survival in Crisis Ordinary CambodiaJohn Wiley & Sons

This handbook provides a comprehensive review of the entire field of laser micro and nano processing, including not only a detailed introduction to individual laser processing techniques but also the fundamentals of laser-matter interaction and lasers, optics, equipment, diagnostics, as well as monitoring and measurement techniques for laser

processing. Consisting of 11 sections, each composed of 4 to 6 chapters written by leading experts in the relevant field. Each main part of the handbook is supervised by its own part editor(s) so that high-quality content as well as completeness are assured. The book provides essential scientific and technical information to researchers and engineers already working in the field as well as students and young scientists planning to work in the area in the future. Lasers found application in materials processing practically since their invention in 1960, and are currently used widely in manufacturing. The main driving force behind this fact is that the lasers can provide unique solutions in material processing with high quality, high efficiency, high flexibility, high resolution, versatility and low environmental load. Macro-processing based on thermal process using infrared lasers such as CO<sub>2</sub> lasers has been the mainstream in the early stages, while research and development of micro- and nano-processing are becoming increasingly more active as short wavelength and/or short pulse width lasers have been developed. In particular, recent advances in ultrafast lasers have opened up a new avenue to laser material processing due to the capabilities of ultrahigh precision micro- and nanofabrication of diverse materials. This handbook is the first book covering the basics, the state-of-the-art and important applications of the dynamic and rapidly expanding discipline of laser micro- and nanoengineering. This comprehensive source makes readers familiar with a broad spectrum of approaches to solve all relevant problems in science and technology. This handbook is the ultimate desk reference for

all people working in the field.

Sustainable design is a collective process whereby the built environment achieves unprecedented levels of ecological balance through new and retrofit construction, with the goal of long-term viability and humanization of architecture. Focusing on the environmental context, sustainable design merges the natural, minimum resource conditioning solutions of the past (daylight, solar heat, and natural ventilation) with the innovative technologies of the present. The desired result is an integrated “intelligent” system that supports individual control with expert negotiation for resource consciousness. International experts in the field address the fundamental questions of sustainable design and landscape management: How should the sustainability of landscapes and buildings be evaluated? Which targets have to be set and which thresholds should not be exceeded? What forms of planning and governance structures exist and to what extent do they further the goals of sustainability? Gathering 30 peer-reviewed entries from the Encyclopedia of Sustainability Science and Technology, Sustainable Built Environments provides comprehensive, multidisciplinary coverage of these issues and other aspects of sustainable building and landscape design.

With the ongoing release of 3D movies and the emergence of 3D TVs, 3D imaging technologies have penetrated our daily lives. Yet choosing from the numerous 3D vision methods available can be frustrating for scientists and engineers, especially without a comprehensive resource to consult. Filling this gap, Handbook of 3D Machine

### Vision: Optical Metro

The two-volume set of LNCS 11655 and 11656 constitutes the proceedings of the 10th International Conference on Advances in Swarm Intelligence, ICSI 2019, held in Chiang Mai, Thailand, in June 2019. The total of 82 papers presented in these volumes was carefully reviewed and selected from 179 submissions. The papers were organized in topical sections as follows: Part I: Novel methods and algorithms for optimization; particle swarm optimization; ant colony optimization; fireworks algorithms and brain storm optimization; swarm intelligence algorithms and improvements; genetic algorithm and differential evolution; swarm robotics. Part II: Multi-agent system; multi-objective optimization; neural networks; machine learning; identification and recognition; social computing and knowledge graph; service quality and energy management.

Hebrew manuscripts are considered to be invaluable documents and artefacts of Jewish culture and history. Research on Hebrew manuscript culture is progressing rapidly and therefore its topics, methods and questions need to be enunciated and reflected upon. The case studies assembled in this volume explore various fields of research on Hebrew manuscripts. They show paradigmatically the current developments concerning codicology and palaeography, book forms like the scroll and codex, scribes and their writing material, patrons, collectors and censors, manuscript and book collections, illuminations and fragments, and, last but not least, new methods of material analysis applied to manuscripts. The principal focus of this volume is the

material and intellectual history of Hebrew book cultures from antiquity to the Middle Ages and Early Modern Period, its intention being to heighten and sharpen the reader's understanding of Jewish social and cultural history in general.

Based on rich empirical data about cases of organizations working to build a more sustainable future, this volume tests the applicability of the formal knowledge base about management and organizations, while refining, modifying and extending it to increase its usefulness in addressing the challenges of organizing for sustainable effectiveness.

Offering a comprehensive overview of the current situation in the country, The Handbook of Contemporary Cambodia provides a broad coverage of social, cultural, political and economic development within both rural and urban contexts during the last decade. A detailed introduction places Cambodia within its global and regional frame, and the handbook is then divided into five thematic sections: Political and Economic Tensions Rural Developments Urban Conflicts Social Processes Cultural Currents The first section looks at the major political implications and tensions that have occurred in Cambodia, as well as the changing parameters of its economic profile. The handbook then highlights the major developments that are unfolding within the rural sphere, before moving on to consider how cities in Cambodia, and particularly Phnom Penh, have become primary sites of change. The fourth section covers the major processes that have shaped social understandings of the country, and how Cambodians have

come to understand themselves in relation to each other and the outside world. Section five analyses the cultural dimensions of Cambodia's current experience, and how identity comes into contact with and responds to other cultural themes. Bringing together a team of leading scholars on Cambodia, the handbook presents an understanding of how sociocultural and political economic processes in the country have evolved. It is a cutting edge and interdisciplinary resource for scholars and students of Southeast Asian Studies, as well as policymakers, sociologists and political scientists with an interest in contemporary Cambodia.

Welcome to the first volume of the Yearbook of Nanotechnology in Society! Nanotechnology, hailed as “the next industrial revolution” (NSTC 2000) and criticized for being little more than “hype” (Berube 2006), is the site of a great deal of social and intellectual contest. With some ten billion dollars being spent worldwide on nanotechnology research and development annually and a market forecast of trillions of dollars in sales in the medium-term future (Lux Research 2006), nations and firms are pursuing nano-related goals with high levels of both effort and expectations. Yet according to the Woodrow Wilson International Center's web-based Nanotechnology Consumer Products Inventory, most of the more than 500 nano-products on the market as of this writing are basic consumer items—cosmetics, clothing, athletic equipment and the like—with modest, incremental improvements on their non-nano counterparts. Nanotechnology is also the site of an increasing amount of scholarship dedicated to

understanding the interactions between society and an emerging knowled- based technological endeavor. Searching the Web of Science indices in social science and humanities for nanotech\* and nanoparticle\*, for example, yields 231 hits since 1990, but 75 percent of these occur in 2004 through 2007. This scholarship attempts to fathom the implications of nanotechnologies for society, as well as the implications for nanotechnologies of society. Some of it is also engaged in dialogue with both the public and with nanotechnology researchers about the hope and the hype described above. This unique collection brings a rarely-seen indigenous and global perspective to the study of gender and psychology. Within these chapters, researchers who live and work in the countries and cultures they study examine gender-based norms, values, expression, and relations across diverse Western and non-Western societies. Familiar as well as less-covered locations and topics are analyzed, including China, New Zealand, Israel, Turkey, Central America, the experience of refugees, and gendered health inequities across Africa such as in the treatment of persons with HIV. Included, too, are examples of culturally appropriate interventions to address disparities, and data on the extent to which these steps toward equality are working. Structurally, the volume is divided into three sections. The first two parts of the book take readers on a journey to different regions of the world to illustrate the most recent trends in research concerning gender issues, and then outline present implications and future prospects for the psychological analysis of both gender & culture. The third section of the book

has an applied perspective and focuses on the cultural norms and values reinforcing gender equality as well as cultural and social barriers to them. A sampling of the topics covered: Sexual orientation across culture and time. A broader conceptualization of sexism in Poland. An analysis of gender roles within the family in Switzerland Modern-day dowries in South Asian international arranged marriages. The current state of gender equality in the United States of America. Socio-cultural determinants of gender disparity in Ghana. Psychology of Gender Through the Lens of Culture is a milestone toward core human rights and goals worldwide, and a critical resource for psychologists, sociologists, anthropologists, gender studies researchers, public policy makers and all those interested in promoting gender equality throughout the world. Each of the chapters in this reader is written by leading scholars in the area of relationships, reflecting the diversity of the field and including both contemporary and key historical papers for comprehensive coverage of research. This book offers a broad overview of the field of cognitive engineering and neuroergonomics, covering emerging practices and future trends toward the harmonious integration of human operators and computational systems. It gathers both theoretical and practice-oriented studies on mental workload and stress, activity theory, human reliability, error and risk. It covers applications in various field, and corresponding strategies to make assistive technologies more user-oriented. Further, the book describes key advances in our understanding of cognitive processes,

including mechanisms of perception, memory, reasoning, and motor response, with a particular focus on their role in interactions between humans and other elements of computer-based systems. Gathering the proceedings of the AHFE 2021 Conferences on Neuroergonomics and Cognitive Engineering, Industrial Cognitive Ergonomics and Engineering Psychology, and Cognitive Computing and Internet of Things, held virtually on July 25-29, 2021, from USA, this book offers extensive information and a thought-provoking guide for researchers and practitioners in cognitive engineering, neuroergonomics and their applications.

This book provides a much-needed analysis of the current research in the global epidemic of electronic bullying. Scholars and professionals from the Americas, Europe, and Asia offer data, insights, and solutions, acknowledging both the social psychology and technological contexts underlying cyberbullying phenomena. Contributors address questions that are just beginning to emerge as well as longstanding issues concerning family and gender dynamics, and provide evidence-based prevention and intervention strategies for school and home. The global nature of the book reflects not only the scope and severity of cyberbullying, but also the tenacity of efforts to control and eradicate the problem. Included in the coverage:

- Gender issues and cyberbullying in children and adolescents: from gender differences to gender identity measures.
- Family relationships and cyberbullying.
- Examining the incremental impact of cyberbullying on outcomes over and above traditional bullying in North America.
- A

review of cyberbullying and education issues in Latin America. • Cyberbullying prevention from child and youth literature. • Cyberbullying and restorative justice. Cyberbullying across the Globe is an essential resource for researchers, graduate students, and other professionals in child and school psychology, public health, social work and counseling, educational policy, and family advocacy.

Praise for the Second Edition: "The authors present an intuitive and easy-to-read book. ... accompanied by many examples, proposed exercises, good references, and comprehensive appendices that initiate the reader unfamiliar with MATLAB." —Adolfo Alvarez Pinto, International Statistical Review "Practitioners of EDA who use MATLAB will want a copy of this book. ... The authors have done a great service by bringing together so many EDA routines, but their main accomplishment in this dynamic text is providing the understanding and tools to do EDA. —David A Huckaby, MAA Reviews

Exploratory Data Analysis (EDA) is an important part of the data analysis process. The methods presented in this text are ones that should be in the toolkit of every data scientist. As computational sophistication has increased and data sets have grown in size and complexity, EDA has become an even more important process for visualizing and summarizing data before making assumptions to generate hypotheses and models. Exploratory Data Analysis with MATLAB, Third Edition presents EDA methods from a computational perspective and uses numerous examples and applications to show how the methods are used in practice. The authors use MATLAB code, pseudo-code, and

algorithm descriptions to illustrate the concepts. The MATLAB code for examples, data sets, and the EDA Toolbox are available for download on the book's website. New to the Third Edition Random projections and estimating local intrinsic dimensionality Deep learning autoencoders and stochastic neighbor embedding Minimum spanning tree and additional cluster validity indices Kernel density estimation Plots for visualizing data distributions, such as beanplots and violin plots A chapter on visualizing categorical data

The essential health behavior text, updated with the latest theories, research, and issues Health Behavior: Theory, Research and Practice provides a thorough introduction to understanding and changing health behavior, core tenets of the public health role. Covering theory, applications, and research, this comprehensive book has become the gold standard of health behavior texts. This new fifth edition has been updated to reflect the most recent changes in the public health field with a focus on health behavior, including coverage of the intersection of health and community, culture, and communication, with detailed explanations of both established and emerging theories. Offering perspective applicable at the individual, interpersonal, group, and community levels, this essential guide provides the most complete coverage of the field to give public health students and practitioners an authoritative reference for both the theoretical and practical aspects of health behavior. A deep understanding of human behaviors is essential for effective public health and health care management. This

guide provides the most complete, up-to-date information in the field, to give you a real-world understanding and the background knowledge to apply it successfully. Learn how e-health and social media factor into health communication. Explore the link between culture and health, and the importance of community. Get up to date on emerging theories of health behavior and their applications. Examine the push toward evidence-based interventions, and global applications. Written and edited by the leading health and social behavior theorists and researchers, *Health Behavior: Theory, Research and Practice* provides the information and real-world perspective that builds a solid understanding of how to analyze and improve health behaviors and health.

The European Union as we know it came into being in 1993, when the Treaty of Maastricht entered into force and the preceding European Economic Community (EEC) was absorbed into a more overtly political Union which aspired to pursue a Common Foreign and Security Policy (CFSP). In 1999, a politico-military arm was added to the CFSP; originally the European Security and Defence Policy (ESDP), it is now known as the Common Security and Defence Policy (CSDP).

"The Open Access version of this book, available at <https://www.taylorfrancis.com/books/oa-edit/10.1201/9781003181590>, has been made

available under a Creative Commons Attribution-Non Commercial-No Derivatives 4.0 license." Geospatial information plays an important role in managing location

dependent pandemic situations across different communities and domains. Geospatial

information and technologies are particularly critical to strengthening urban and rural resilience, where economic, agricultural, and various social sectors all intersect. Examining the United Nations' SDGs from a geospatial lens will ensure that the challenges are addressed for all populations in different locations. This book, with worldwide contributions focused on COVID-19 pandemic, provides interdisciplinary analysis and multi-sectoral expertise on the use of geospatial information and location intelligence to support community resilience and authorities to manage pandemics. Bringing together a wide range of original empirical research from locations and interconnected geographical contexts from Europe, Australasia, Asia, Africa, Central and Latin America, this book sets out a different agenda for mobility - one which emphasizes the enduring connectedness between, and embeddedness within, places during and after the experience of mobility. These issues are examined through the themes of home and family, neighbourhoods and city spaces and allow the reader to engage with migrants' diverse practices which are specifically local, yet spatially global. This book breaks new ground by arguing for a spatial understanding of translocality that situates the migrant experience within/across particular 'locales' without confining it to the territorial boundedness of the nation state. It will be of interest to academics and students of social and cultural geography, anthropology and transnational studies. This book reflects a current state of the art and future perspectives of Digital Heritage focusing on not interpretative reconstruction and including as well as bridging practical

and theoretical perspectives, strategies and approaches. Comprehensive key challenges are related to knowledge transfer and management as well as data handling within a interpretative digital reconstruction of Cultural Heritage including aspects of digital object creation, sustainability, accessibility, documentation, presentation, preservation and more general scientific compatibility. The three parts of the book provide an overview of a scope of usage scenarios, a current state of infrastructures as digital libraries, information repositories for an interpretative reconstruction of Cultural Heritage; highlight strategies, practices and principles currently used to ensure compatibility, reusability and sustainability of data objects and related knowledge within a 3D reconstruction work process on a day to day work basis; and show innovative concepts for the exchange, publishing and management of 3D objects and for inherit knowledge about data, workflows and semantic structures.

Written by world renowned experts in surgical oncology, this book examines various types of cancer and their treatment options based on 'Level of Evidence' tables. The text provides an up-to-date review of the knowledge required by surgical oncologists, from basic biology, to the application of regional chemotherapy, minimally invasive surgery and palliative care.

This book brings together the many concepts and discoveries in liquid crystal colloids contributed over the last twenty years and scattered across numerous articles and book chapters. It provides both a historical overview of the development of the field and a

clear perspective on the future applications in photonics. The book covers all phenomena observed in liquid crystal colloids with an emphasis on experimental tools and applications of topology in condensed matter, as well as practical micro-photonics applications. It includes a number of spectacular manifestations of new topological phenomena not found or difficult to observe in other systems. Starting from the early works on nematic colloids, it explains the basics of topological defects in ordered media, charge and winding, and the elastic forces between colloidal particles in nematics. Following a detailed description of experimental methods, such as optical tweezing and particle tracking, the book eases the reader into the theoretical part, which deals with elastic deformation of nematic liquid crystals due to inclusions and surface alignment. This is discussed in the context of basic mean field Landau-de Gennes Q-tensor theory, with a brief explanation of the free-energy minimization numerical methods. There then follows an excursion into the topology of complex nematic colloidal structures, colloidal entanglement, knotting and linking. Nematic droplets, shells, handlebodies and chiral topological structures are addressed in separate chapters. The book concludes with an extensive chapter on the photonic properties of nematic dispersions, presenting the concept of integrated soft matter photonics and discussing the concepts of nematic and chiral nematic microlasers, surface-sensitive photonic devices and smectic microfibers. The text is complemented by a large bibliography, explanatory sketches and beautiful micrographs.

Plasma etching has long enabled the perpetuation of Moore's Law. Today, etch compensation helps to create devices that are smaller than 20 nm. But, with the constant downscaling in device dimensions and the emergence of complex 3D structures (like FinFet, Nanowire and stacked nanowire at longer term) and sub 20 nm devices, plasma etching requirements have become more and more stringent. Now more than ever, plasma etch technology is used to push the limits of semiconductor device fabrication into the nanoelectronics age. This will require improvement in plasma technology (plasma sources, chamber design, etc.), new chemistries (etch gases, flows, interactions with substrates, etc.) as well as a compatibility with new patterning techniques such as multiple patterning, EUV lithography, Direct Self Assembly, ebeam lithography or nanoimprint lithography. This book presents these etch challenges and associated solutions encountered throughout the years for transistor realization. Helps readers discover the master technology used to pattern complex structures involving various materials Explores the capabilities of cold plasmas to generate well controlled etched profiles and high etch selectivities between materials Teaches users how etch compensation helps to create devices that are smaller than 20 nm

This is a comprehensive treatment of the field of SPR sensors, in three parts. Part I introduces principles of surface plasmon resonance bio-sensors, electromagnetic theory of surface plasmons, theory of SPR sensors and molecular interactions at sensor surfaces. Part II examines the development of SPR sensor instrumentation and

functionalization methods. Part III reviews applications of SPR biosensors in the study of molecules, and in environmental monitoring, food safety and medical diagnostics. Nanostructured Materials for Next-Generation Energy Storage and Conversion: Photovoltaic and Solar Energy, is volume 4 of a 4-volume series on sustainable energy. Photovoltaic and Solar Energy while being a comprehensive reference work, is written with minimal jargon related to various aspects of solar energy and energy policies. It is authored by leading experts in the field, and lays out theory, practice, and simulation studies related to solar energy and allied applications including policy, economic and technological challenges. Topics covered include: introduction to solar energy, fundamentals of solar radiation, heat transfer, thermal collection and conversion, solar economy, heating, cooling, dehumidification systems, power and process heat, solar power conversion, policy and applications pertinent to solar energy as viable alternatives to fossil fuels. The aim of the book is to present all the information necessary for the design and analysis of solar energy systems for engineers, material scientists, economics, policy analysts, graduate students, senior undergraduates, solar energy practitioner, as well as policy or lawmakers in the field of energy policy, international energy trade, and libraries which house technical handbooks related to energy, energy policy and applications.

This book adds a new dimension to the sustainability assessment of food waste reduction and valorisation: policy analysis. Featuring a transdisciplinary analysis by key experts in the field, it identifies the drivers of change in food-waste reduction and valorisation technologies by looking, for example, at the regulatory framework and at policy actions undertaken by local and global actors. The book explores the development of regulations and policies for food-waste prevention, management, and valorisation at a global as well as European Union level. It also discusses the notion of food waste in legal terms and investigates the effects of the lack of a standard, universal definition of food waste on the efficient use of by-products, promising processes and products for technological and commercial exploitation. Utilising mathematical mapping methods to assess food consumption impacts and providing supply chain models that allow the testing of consumption scenarios, the book goes on to discuss a series of emerging technologies (tested at lab scale and/ or pilot scale) and opportunities for the valorisation of food waste.

Photonics has long been considered an attractive substrate for next generation implementations of machine-learning concepts. Reservoir Computing tremendously facilitated the realization of recurrent neural networks in analogue hardware. This concept exploits the properties of complex nonlinear dynamical

systems, giving rise to photonic reservoirs implemented by semiconductor lasers, telecommunication modulators and integrated photonic chips.

This Handbook provides the knowledge and tools needed to understand how displacement is lived, governed, and mediated as an unfolding and grounded process bound up in spatial inequities of power and injustice. The handbook ensures, first, that internal displacements and their everyday (re)occurrences are not overlooked; second, it questions 'who counts' by including 'displaced' people who are less obviously identifiable and a clearly circumscribed or categorised group; third, it stresses that while displacement suggests mobility, there are also periods and spaces of enforced stillness that are not adequately reflected in the displacement literature; and fourth, it re-evokes and explores the 'place' in displacement by critically interrogating peoples' 'right to place' and the significance of placemaking, unmaking, and remaking in the contemporary world. The 50-plus chapters are organised across seven themes designed to further develop interdisciplinary study of the technologies, journeys, traces, governance, more-than-human, representation, and resisting of displacement. Each of these thematic sections begin with an intervention which spotlights actions to creatively and strategically intervene in displacement. The interventions explore myriad meanings and manifestations of displacement and

its contestation from the perspective of displaced people, artists, writers, activists, scholar-activists, and scholars involved in practice-oriented research. The Handbook will be an essential companion for academics, students, and practitioners committed to forging solidarity, care, and home in an era of displacement.

"World Health Organization, London School of Hygiene and Tropical Medicine, South African Medical Research Council"--Title page.

Bjorn Krondorfer, one of the leading scholars in this field, has collected 35 key texts that have shaped this field within the wider area of the study of gender, religion and culture. The texts in this critical reader engage actively and critically with the position of men in society and church, men's privileged relation to the sacred and to religious authority, the ideals of masculinity as engendered by religious discourse, and alternative trajectories of being in the world, whether spiritually, relationally or sexually. Each of the texts is introduced by the editor and accompanied by bibliographies that make this the ideal tool for study.

Drawing on 15 years of fieldwork and over 300 interviews, Home SOS argues that the home is central to the violence and gendered contingency of existence in crisis ordinary Cambodia. Provides an original book-length study which brings domestic violence and forced eviction into twin view Offers relational insights

between different violences to build an integrated understanding of women's experiences of home life Mobilises the crisis ordinary as a critical pedagogy and imaginary through which to understand everyday gendered politics of survival Positions domestic violence and forced eviction as manifestations of intimate war against women's homes and bodies located inside and outside of the traditional purview of war Reaffirms and reprioritises the home as a political entity which is foundational to the concerns of human geography

The Multi-Country Study, which began in 1997, aims to: Obtain reliable estimates of the prevalence of violence against women in different countries throughout the world, in a consistent, standardized manner which will allow for inter-country comparisons; Document the association between domestic violence against women and a range of health outcomes; Identify risk and protective factors for domestic violence against women, and compare them between settings; Explore and compare the coping strategies used by women experiencing domestic violence; Use the findings nationally and internationally to advocate for an increased response to domestic and sexual violence against women.

A two-volume reference set for all ceramicists, both in research and working in industry The only definitive reference covering the entire field of advanced ceramics from fundamental science and processing to application Contributions from over 50 leading researchers from

around the world This new Handbook will be an essential resource for ceramicists. It includes contributions from leading researchers around the world, and includes sections on: Basic Science of Advanced Ceramic, Functional Ceramics (electro-ceramics and optoelectro-ceramics) and engineering ceramics. Contributions from over 50 leading researchers from around the world

This Book Features The Influence And Interaction Of Sanskrit With Prakrit, Hindi Apabhramsha, Urdu, Bangla, Tamil, Telugu, Kannada, Malayalam, Assamese, Punjabi, Kashmiri And Gujarati. It Modestly Attempts To Cover Various Aspects Of Mutual Reciprocation Between Sanskrit And Other Indian Languages.

This volume contains leading edge research and authoritative reviews in meteor science. It provides a comprehensive view of meteoroid research including the dynamics, sources and distribution of these bodies. Techniques for investigation of meteor phenomena in the book include conventional and large aperture radar systems, spacecraft detection, optical systems, spectral measurements, and laboratory based interplanetary dust particle studies.

This book offers a close look at forced evictions, drawing on empirical studies and conceptual frameworks from both the Global North and South. It draws attention to arenas where multiple logics of urban dispossession, violence and insecurity are manifest, and where wider socio-economic, political and legal struggles converge. The authors highlight the need to apply emotional and affective registers of dispossession and insecurity to the socio-political and financial economies driving forced evictions across geographic scales. The chapters each consider the distinct urban logics of precarious housing or involuntary displacements that stretch across London, Barcelona, Rio de Janeiro, Shanghai and Colombo. A timely addition to

existing literature on urban studies, this collection will be of great interest to policy makers and scholars of human geography, development studies, and sociology.

Adolescence is a time when coping is very important, when many new experiences and responsibilities are thrust upon individuals. Young people need to cope in a variety of settings, including school, home, peer groups and the workplace, and with a range of life problems such as divorce and examinations. Frydenberg provides a clear account of current research and thinking on coping, illustrated by the voices of young people throughout the book. Adolescent Coping focuses on how young people manage a range of life problems, and on the coping styles of particular groups, such as the gifted and those with illness. The author addresses the relationships between coping and age, gender and ethnicity, and between family functioning and coping. She also considers the measurements of coping, how we learn to cope, and such areas as social support and depression.

Water has always been a source of risks and opportunities in the Middle East and North Africa. Yet rapidly changing socioeconomic, political, and environmental conditions make water security a different, and more urgent, challenge than ever before. This report shows that achieving water security means much more than coping with water scarcity. It means managing water resources in a sustainable, efficient, and equitable way. It also involves delivering water services reliably and affordably, to reinforce relationships between service providers and water users and contribute to a renewed social contract. Water security also entails mitigating water-related risks such as floods and droughts. Water security is an urgent target, but it is also a target within reach. A host of potential solutions to the region's water management challenges exist. To make these solutions work, clear incentives are needed to

change the way water is managed, conserved, and allocated. To make these solutions work, countries in the region will also need to better engage water users, civil society, and youth. The failure of policies to address water challenges can have severe impacts on people's well-being and political stability. The strategic question for the region is whether countries will act with foresight and resolve to strengthen water security, or whether they will wait to react to the inevitable disruptions of water crises.

Global value chains (GVCs) powered the surge of international trade after 1990 and now account for almost half of all trade. This shift enabled an unprecedented economic convergence: poor countries grew rapidly and began to catch up with richer countries. Since the 2008 global financial crisis, however, the growth of trade has been sluggish and the expansion of GVCs has stalled. Meanwhile, serious threats have emerged to the model of trade-led growth. New technologies could draw production closer to the consumer and reduce the demand for labor. And trade conflicts among large countries could lead to a retrenchment or a segmentation of GVCs. World Development Report 2020: Trading for Development in the Age of Global Value Chains examines whether there is still a path to development through GVCs and trade. It concludes that technological change is, at this stage, more a boon than a curse. GVCs can continue to boost growth, create better jobs, and reduce poverty provided that developing countries implement deeper reforms to promote GVC participation; industrial countries pursue open, predictable policies; and all countries revive multilateral cooperation.

[Copyright: c157f275780a64e086786db0104b82bb](https://www.worldbank.org/publications/wdr/2020)