Silicon Carbide Nanostructures Fabrication Structure And Properties Engineering Materials And Processes

Encyclopedia of Surface and Colloid ScienceChemical AbstractsSilicon Carbide and Related Materials 2004Advanced Silicon Carbide Devices and ProcessingApplications of NanomaterialsLow -dimensional SiC NanostructuresFIB NanostructuresNew Developments in Porous Silicon: Relation with Other Nanostructured Porous MaterialsHandbook of Nanostructured Thin Films and Coatings: Nanostructured thin films and coatings : functional propertiesMechanical Properties of Impact-assembled Nanoparticles Composites Fabrication, Measurements and SimulationNanostructured and Advanced Materials for Applications in Sensor, Optoelectronic and Photovoltaic TechnologyInternational Aerospace AbstractsComposites Industry AbstractsPhysics and Technology of Silicon Carbide DevicesDekker Encyclopedia of Nanoscience and NanotechnologyAdvances in Ceramic Matrix CompositesSilicon-based NanomaterialsCeramic AbstractsMetallurgical Coatings and Thin Films Materials Science & EngineeringMemoirs of the Institute of Scientific and Industrial Research, Osaka UniversitySilicon Carbide NanostructuresNano- and MicromaterialsSilicon CarbideJournal of the Physical Society of JapanSilicon Carbide and Related Materials 2003Proceedings of the 30th International Conference on Metallurgical Coatings and Thin FilmsSilicon Carbide Technology for Micro- and Nano-electromechnical Systems ApplicationsAdvanced Structural CeramicsMaterial ScienceSilicon Carbide BiotechnologyAdvanced Hierarchical Nanostructured MaterialsFuture Material Research and Industry ApplicationNanostructures in Electronics and PhotonicsPhysics BriefsNanostructured Thin Films and CoatingsAdvancing Silicon Carbide Electronics Technology IISmart CeramicsFrontiers of Multifunctional Integrated NanosystemsLaser Focus World

Encyclopedia of Surface and Colloid Science

Ceramic matrix composites (CMCs) have proven to be useful for a wide range of applications because of properties such as their light weight, toughness and temperature resistance. Advances in ceramic matrix composites summarises key advances and types of processing of CMCs. After an introductory chapter, the first part of the book reviews types and processing of CMCs, covering processing, properties and applications. Chapters discuss nanoceramic matric composites, silicon carbide-containing alumina nanocomposites and advances in manufacture by various infiltration techniques including heat treatments and spark plasma sintering. The second part of the book is dedicated to understanding the properties of CMCs with chapters on Finite Element Analysis, tribology and wear and self-healing CMCs. The final part of the book examines the applications of CMCs, including those in the structural engineering, nuclear and fusion energy, turbine, metal cutting and microelectronics industries. Advances in ceramic matrix composites is an essential text for researchers and engineers in the field of CMCs and industries such as aerospace and automotive engineering. Reviews types and

processing of CMCs, covering processing, properties and applications

Chemical Abstracts

Silicon Carbide (SiC) and its polytypes, used primarily for grinding and high temperature ceramics, have been a part of human civilization for a long time. The inherent ability of SiC devices to operate with higher efficiency and lower environmental footprint than silicon-based devices at high temperatures and under high voltages pushes SiC on the verge of becoming the material of choice for high power electronics and optoelectronics. What is more important, SiC is emerging to become a template for graphene fabrication, and a material for the next generation of sub-32nm semiconductor devices. It is thus increasingly clear that SiC electronic systems will dominate the new energy and transport technologies of the 21st century. In 21 chapters of the book, special emphasis has been placed on the materials aspects and developments thereof. To that end, about 70% of the book addresses the theory, crystal growth, defects, surface and interface properties, characterization, and processing issues pertaining to SiC. The remaining 30% of the book covers the electronic device aspects of this material. Overall, this book will be valuable as a reference for SiC researchers for a few years to come. This book prestigiously covers our current understanding of SiC as a semiconductor material in electronics. The primary target for the book includes students, researchers, material and chemical engineers, semiconductor manufacturers and professionals who are interested in silicon carbide and its continuing progression.

Silicon Carbide and Related Materials 2004

Advanced Silicon Carbide Devices and Processing

Authored by leading experts from around the world, the three-volume Handbook of Nanostructured Thin Films and Coatings gives scientific researchers and product engineers a resource as dynamic and flexible as the field itself. The first two volumes cover the latest research and application of the mechanical and functional properties of thin films and coatings, while the third volume explores the cutting-edge organic nanostructured devices used to produce clean energy. This second volume, Nanostructured Thin Films and Coatings: Functional Properties, focuses on functional properties (i.e., optical, electronic, and electrical) and related devices and applications. It also addresses topics such as: Large-scale fabrication of functional thin films using nanoarchitecture via chemical routes Fabrication and characterization of SiC nanostructured/nanocomposite films Low-dimensional nanocomposite fabrication and its applications Optical and optoelectronic properties of silicon nanocrystals embedded in SiO2 matrix Electrical properties of silicon nanocrystals embedded in amorphous SiO2 matrix Optical aspects of properties and applications of sol-gel-derived nanostructured thin

films Controllably micro/nanostructured films and devices Thin-film shape memory alloy for microsystem applications A complete resource, this handbook provides the detailed explanations that newcomers need, as well as the latest cutting-edge research and data for experts. Covering a wide range of mechanical and functional technologies, including those used in clean energy, these books also feature figures, tables, and images that will aid research and help professionals acquire and maintain a solid grasp of this burgeoning field. The Handbook of Nanostructured Thin Films and Coatings is composed of this volume and two others: Nanostructured Thin Films and Coatings: Mechanical Properties Organic Nanostructured Thin Film Devices and Coatings for Clean Energy

Applications of Nanomaterials

Low -dimensional SiC Nanostructures

The principal aim of this NATO Advanced Study Institute (ASI) "Nanostructured and Advanced Materials for Applications in Sensor, Optoelectronic and Photovoltaic Technology" was to present a contemporary overview of the field of nanostructured and advanced electronic materials. Nanotechnology is an emerging scientific field receiving significant worldwide attention. On a nanometer scale, materials or structures may possess new and unique physical properties. Some of these are now known to the scientific community, but there may well be many properties not yet known to us, rendering it as a fascinating area of research and a suitable subject for a NATO ASI. Yet another aspect of the field is the possibility for creating meta-stable phases with unconventional properties and the ultra-miniaturization of current devices, sensors, and machines. Such nanotechnological and related advanced materials have an extremely wide range of potential applications, viz. nanoscale electronics, sensors, optoelectronics, photonics, nano-biological systems, na- medicine, energy storage systems, etc. This is a wide-ranging subject area and therefore requires the formation of multi-disciplinary teams of physicists, chemists, materials scientists, engineers, molecular biologists, pharmacologists, and others to work together on the synthesis and processing of materials and structures, the understanding of their physical properties, the design and fabrication of devices, etc. Hence, in formulating our ASI, we adopted an int- disciplinary approach, bringing together recognised experts in the various fields while retaining a level of treatment accessible to those active in specific individual areas of research and development.

FIB Nanostructures

New Developments in Porous Silicon: Relation with Other Nanostructured Porous Materials

Global electro-optic technology and markets.

Handbook of Nanostructured Thin Films and Coatings: Nanostructured thin films and coatings : functional properties

Mechanical Properties of Impact-assembled Nanoparticles Composites Fabrication, Measurements and Simulation

Nanostructured and Advanced Materials for Applications in Sensor, Optoelectronic and Photovoltaic Technology

International Aerospace Abstracts

Volume is indexed by Thomson Reuters CPCI-S (WoS). Silicon Carbide (SiC), Gallium Nitride (GaN) and Diamond are examples of wide-bandgap semiconductors having chemical, electrical and optical properties which make them very attractive for the fabrication of high-power and high-frequency electronic devices, as well as of light-emitters and sensors which have to operate under harsh conditions.

Composites Industry Abstracts

FIB Nanostructures reviews a range of methods, including milling, etching, deposition, and implantation, applied to manipulate structures at the nanoscale. Focused Ion Beam (FIB) is an important tool for manipulating the structure of materials at the nanoscale, and substantially extends the range of possible applications of nanofabrication. FIB techniques are widely used in the semiconductor industry and in materials research for deposition and ablation, including the fabrication of nanostructures such as nanowires, nanotubes, nanoneedles, graphene sheets, quantum dots, etc. The main objective of this book is to create a platform for knowledge sharing and dissemination of the latest advances in novel areas of FIB for nanostructures and related materials and devices, and to provide a comprehensive introduction to the field and directions for further research. Chapters written by leading scientists throughout the world create a fundamental bridge between focused ion beam and nanotechnology that is intended to stimulate readers' interest in developing new types of

nanostructures for application to semiconductor technology. These applications are increasingly important for the future development of materials science, energy technology, and electronic devices. The book can be recommended for physics, electrical engineering, and materials science departments as a reference on materials science and device design.

Physics and Technology of Silicon Carbide Devices

The Book Has Been Designed To Cover All Relevant Topics In B.E. (Mechanical/Metallurgy / Material Science / Production Engineering), M.Sc. (Material Science), B.Sc. (Honours), M.Sc. (Physics), M.Sc. (Chemistry), Amie And Diploma Students. Students Appearing For Gate, Upsc, Net, Slet And Other Entrance Examinations Will Also Find Book Quite Useful.In Nineteen Chapters, The Book Deals With Atomic Structure, The Structure Of Solids; Crystal Defects; Chemical Bonding; Diffusion In Solids; Mechanical Properties And Tests Of Materials; Alloys, Phase Diagrams And Phase Transformations; Heat Treatment; Deformation Of Materials; Oxidation And Corrosion; Electric, Magnetic, Thermal And Optical Properties; Semiconductors; Superconductivity; Organic Materials; Composites; And Nanostructured Materials.Special Features: * Fundamental Principles And Applications Are Discussed With Explanatory Diagrams In A Clear Way. * A Full Coverage Of Background Topics With Latest Development Is Provided. * Special Chapters On Nanostructured Materials, Superconductivity, Semiconductors, Polymers, Composites, Organic Materials Are Given . * Solved Problems, Review Questions, Problems, Short-Question Answers And Typical Objective Type Questions Alongwith Suggested Readings Are Given With Each Chapter.

Dekker Encyclopedia of Nanoscience and Nanotechnology

The book presents an in-depth review and analysis of Silicon Carbide device processing. The main topics are: (1) Silicon Carbide Discovery, Properties and Technology, (2) Processing and Application of Dielectrics in Silicon Carbide Devices, (3) Doping by Ion Implantation, (4) Plasma Etching and (5) Fabrication of Silicon Carbide Nanostructures and Related Devices. The book is also suited as supplementary textbook for graduate courses. Keywords: Silicon Carbide, SiC, Technology, Processing, Semiconductor Devices, Material Properties, Polytypism, Thermal Oxidation, Post Oxidation Annealing, Surface Passivation, Dielectric Deposition, Field Effect Mobility, Ion Implantation, Post Implantation Annealing, Channeling, Surface Roughness, Dry Etching, Plasma Etching, Ion Etching, Sputtering, Chemical Etching, Plasma Chemistry, Micromasking, Microtrenching, Nanocrystal, Nanowire, Nanotube, Nanopillar, Nanoelectromechanical Systems (NEMS).

Advances in Ceramic Matrix Composites

Proceedings of the NATO Advanced Research Workshop, Illmenau, Germany from 12 to 16 July 2003

Silicon-based Nanomaterials

An overview of the recent developments and prospects in this highly topical area, covering the synthesis, characterization, properties and applications of hierarchical nanostructured materials. The book concentrates on those materials relevant for research and development in the fields of energy, biomedicine and environmental protection, with a strong focus on 3D materials based on nanocarbons, mesoporous silicates, hydroxides, core-shell particles and helical nanostructures. Thanks to its clear concept and application-oriented approach, this is an essential reference for experienced researchers and newcomers to the field alike.

Ceramic Abstracts

Metallurgical Coatings and Thin Films

Silicon Carbide (SiC) is a wide-band-gap semiconductor biocompatible material that has the potential to advance advanced biomedical applications. SiC devices offer higher power densities and lower energy losses, enabling lighter, more compact and higher efficiency products for biocompatible and long-term in vivo applications ranging from heart stent coatings and bone implant scaffolds to neurological implants and sensors. The main problem facing the medical community today is the lack of biocompatible materials that are also capable of electronic operation. Such devices are currently implemented using silicon technology, which either has to be hermetically sealed so it cannot interact with the body or the material is only stable in vivo for short periods of time. For long term use (permanent implanted devices such as glucose sensors, brain-machine-interface devices, smart bone and organ implants) a more robust material that the body does not recognize and reject as a foreign (i.e., not organic) material is needed. Silicon Carbide has been proven to be just such a material and will open up a whole new host of fields by allowing the development of advanced biomedical devices never before possible for long-term use in vivo. This book not only provides the materials and biomedical engineering communities with a seminal reference book on SiC that they can use to further develop the technology, it also provides a technology resource for medical doctors and practitioners who are hungry to identify and implement advanced engineering solutions to their everyday medical problems that currently lack long term, cost effective solutions. Discusses Silicon Carbide biomedical materials and technology in terms of their properties, processing, characterization, and application, in one book, from leading professionals and scientists Critical assesses existing literature, patents and FDA approvals for clinical trials, enabling the rapid assimilation of important data from the current disparate sources and promoting the transition from technology research and development to clinical trials Explores long-term use and applications in vivo in devices and applications with advanced sensing and semiconducting properties, pointing to new product devekipment particularly

within brain trauma, bone implants, sub-cutaneous sensors and advanced kidney dialysis devices

Materials Science & Engineering

Memoirs of the Institute of Scientific and Industrial Research, Osaka University

A variety of nanomaterials have excellent optoelectronic and electronic properties for novel device applications. At the same time, and with advances in silicon integrated circuit (IC) techniques, compatible Si-based nanomaterials hold promise of applying the advantages of nanomaterials to the conventional IC industry. This book focuses not only on silicon nanomaterials, but also summarizes up-to-date developments in the integration of non-silicon nanomaterials on silicon. The book showcases the work of leading researchers from around the world who address such key questions as: Which silicon nanomaterials can give the desired optical, electrical, and structural properties, and how are they prepared? What nanomaterials can be integrated on to a silicon substrate and how is this accomplished? What Si-based nanomaterials may bring a breakthrough in this field? These questions address the practical issues associated with the development of nanomaterial-based devices in applications areas such as solar cells, luminous devices for optical communication (detectors, lasers), and high mobility transistors. Investigation of silicon-based nanostructures is of great importance to make full use of nanomaterials for device applications. Readers will receive a comprehensive view of Si-based nanomaterials, which will hopefully stimulate interest in developing novel nanostructures or techniques to satisfy the requirements of high performance device applications. The goal is to make nanomaterials the main constituents of the high performance devices of the future.

Silicon Carbide Nanostructures

This book covers the area of advanced ceramic composites broadly, providing important introductory chapters to fundamentals, processing, and applications of advanced ceramic composites. Within each section, specific topics covered highlight the state of the art research within one of the above sections. The organization of the book is designed to provide easy understanding by students as well as professionals interested in advanced ceramic composites. The various sections discuss fundamentals of nature and characteristics of ceramics, processing of ceramics, processing and properties of toughened ceramics, high temperature ceramics, nanoceramics and nanoceramic composites, and bioceramics and biocomposites.

Nano- and Micromaterials

Silicon Carbide

Journal of the Physical Society of Japan

Volume is indexed by Thomson Reuters CPCI-S (WoS). These 278 peer-reviewed papers selected from the SSITE International Conference on Future Material Research and Industry Application (FMRIA 2011), held on December 1-2, 2011, in Macau (China), are grouped into the chapters: industrial engineering and materials science, applied chemical engineering, mechanical engineering and computer science, biomaterials science and environmental engineering, applied mechanics and structural engineering. The work is an excellent guide to the current state-of-the art of these subjects.

Silicon Carbide and Related Materials 2003

The symposium entitled "New Developments in Porous Silicon. Relation with Other Nanostructured Porous Materials" took place in Strasbourg on 4-7 June 1996 hosted by the EMRS Society. Its objectives were to assess the recent developments in porous silicon research and make the 'porous Si community' more aware of related porous materials. The 71 papers contained in these proceedings account for about 80% of the work presented at the meeting and cover nine different topic areas. Chapter 1 focuses on some recent advances in porous Si fabrication and a new formation mechanism involving specific point defects, extensions to the basic anodization process for preparing macropore arrays, multilayers as well as both thin and thick high porosity layers and the realisation of luminescent porous structures from device quality &agr;-Si:H material. Controlled chemical modification of the internal surface of porous Si, an important emerging technique for both stabilising, understanding and introducing new functionality into the properties of the material is discussed in chapter 2 along with the new and exciting developments taking place in the nanocomposites area. The papers in chapter 3 discuss photochemical effects, properties of 'wet' and 'dry' porous Si layers and new approaches to characterising 'wet' material along with an important highlight of the symposium - blue emission in oxide-free layers. Chapter 4 covers many new developments and the refining of existing techniques regarding characterising porous Si and chapter 5 reviews the luminescent silicon nanostructures that have been fabricated other than anodization. The presentation of various porous materials and overviews on the fabrication characterisation and applications of porous alumina are covered in chapter 6, and chapter 7 focuses on the growing interest in porous Si multilayer structures and the potential for realising practical SiLEDs with chapter 8 covering the work that has been presented in this field. New applications for porous Si materials which has an enormous world-wide interest is discussed in the final chapter of the proceedings.

Proceedings of the 30th International Conference on Metallurgical Coatings and Thin Films

Since the production of the first commercially available blue LED in the late 1980s, silicon carbide technology has grown into a billion-dollar industry world-wide in the area of solid-state lighting and power electronics. With this in mind we organized this book to bring to the attention of those well versed in SiC technology some new developments in the field with a particular emphasis on particularly promising technologies such as SiC-based solar cells and optoelectronics. We have balanced this with the more traditional subjects such as power electronics and some new developments in the improvement of the MOS system for SiC MOSFETS. Given the importance of advanced microsystems and sensors based on SiC, we also included a review on 3C-SiC for both microsystem and electronic applications.

Silicon Carbide Technology for Micro- and Nano-electromechnical Systems Applications

Advanced Structural Ceramics

The contributors to this second volume focus on functional properties, including optical, electronic, and electrical properties, as well as related devices and applications.

Material Science

Silicon Carbide Biotechnology

This book brings together the most up-to-date information on the fabrication techniques, properties, and potential applications of low dimensional silicon carbide (SiC) nanostructures such as nanocrystallites, nanowires, nanotubes, and nanostructured films. It also summarizes the tremendous achievements acquired during the past three decades involving structural, electronic, and optical properties of bulk silicon carbide crystals. SiC nanostructures exhibit a range of fascinating and industrially important properties, such as diverse polytypes, stability of interband and defect-related green to blue luminescence, inertness to chemical surroundings, and good biocompatibility. These properties have generated an increasing interest in the materials, which have great potential in a variety of applications across the fields of nanoelectronics, optoelectronics, electron field emission, sensing, quantum information, energy conversion and storage, biomedical engineering, and medicine. SiC is also a most promising substitute for silicon in high power, high temperature, and high frequency microelectronic devices. Recent breakthrough pertaining to the synthesis of ultra-high quality SiC single-

crystals will bring the materials closer to real applications. Silicon Carbide Nanostructures: Fabrication, Structure, and Properties provides a unique reference book for researchers and graduate students in this emerging field. It is intended for materials scientists, physicists, chemists, and engineers in microelectronics, optoelectronics, and biomedical engineering.

Advanced Hierarchical Nanostructured Materials

Recent advances in nanotechnology have paved the way for the development of new smart materials. The term "smart ceramics" refers to ceramic materials fabricated from ultrafine particles. They have attracted the attention of researchers and scientists thanks to their potential to manipulate the length scale in the nanorange, leading to better and some unusual material properties. Smart ceramics ensure control of particle size, surface contamination, and degree of agglomeration. They play a crucial role in challenging applications such as bone surgery (e.g., the development of substitutes for load-bearing bone parts) and in biomedical science, especially in tissue engineering, dental applications, and drug and antigen delivery using modified ceramics. Porous nanostructured ceramics have potential use in both simple and complex applications, such as bioimaging, sensors, paints and pigments, optics, and electronics, because of their surface- and size-dependent properties. For the synthesis of smart ceramics, the sol-gel route has been mainly utilized because of its ability to produce a large variety of compositions and to ensure homogeneous mixing of the constituent particles at low temperature. This book describes the innovations in technologies through the development of functionalized ceramic materials for various applications. It also describes recent and expected challenges, along with their potential solutions, in advanced techniques for the synthesis and characterization of nanostructured ceramics and their composites: bioceramics, bioactive ceramics, multifunctional nanoceramics, transparent ceramics, nanocore shells, nanowires, thin films, nanotubes, and nanorods. The applications include the environment, health care, electrochemical sensors, high-temperature superconductors, nuclear reactor fuels, electrical insulators, refractory materials, electrical transformers, and magnetic core memory. The book will benefit researchers, scientists, engineers, and technologists working in the industry and in national and international research laboratories; academics who are interested in traditional and advanced smart ceramic composites; and students pursuing their postgraduate, graduate, and undergraduate degrees in smart ceramics, nanomaterials, nanoscience, and engineering.

Future Material Research and Industry Application

This book provides a broad overview of nanotechnology as applied to contemporary electronics and photonics. The areas of application described are typical of what originally set off the nanotechnology revolution. An account of original research contributions from researchers all over the world, the book is extremely valuable for gaining an understanding of the latest developments in applied nanotechnology. Clearly structured and readable, the book is useful for both students and

researchers alike: students can learn about the various aspects of nanotechnology, and professional researchers can update themselves on the new developments in this dynamic field. The book covers nanoscale materials and devices for both electronics and optical technologies. The emphasis throughout is on experimental methods rather than theoretical modeling. The material will provide food for thought for researchers and research students keen to develop new technologies at the ultra-small scale and to open up new avenues for research.

Nanostructures in Electronics and Photonics

Physics Briefs

Applications of Nanomaterials: Advances and Key Technologies discusses the latest advancements in the synthesis of various types of nanomaterials. The book's main objective is to provide a comprehensive review regarding the latest advances in synthesis protocols that includes up-to-date data records on the synthesis of all kinds of inorganic nanostructures using various physical and chemical methods. The synthesis of all important nanomaterials, such as carbon nanostructures, Core-shell Quantum dots, Metal and metal oxide nanostructures, Nanoferrites, polymer nanostructures, nanofibers, and smart nanomaterials are discussed, making this a one-stop reference resource on research accomplishments in this area. Leading researchers from industry, academia, government and private research institutions across the globe have contributed to the book. Academics, researchers, scientists, engineers and students working in the field of polymer nanocomposites will benefit from its solutions for material problems. Provides an up-to-date data record on the synthesis of all kinds of organic and inorganic nanostructures using various physical and chemical methods Presents the latest advances in synthesis protocols Includes the latest techniques used in the physical and chemical characterization of nanomaterials Covers the characterization of all the important materials groups, such as carbon nanostructures, core-shell quantum dots, metal and metal oxide nanostructures, nanoferrites, polymer nanostructures and nanofibers

Nanostructured Thin Films and Coatings

Silicon (Si) is by far the most widely used semiconductor material for power devices. On the other hand, Si-based power devices are approaching their material limits, which has provoked a lot of efforts to find alternatives to Si-based power devices for better performance. With the rapid innovations and developments in the semiconductor industry, Silicon Carbide (SiC) power devices have progressed from immature prototypes in laboratories to a viable alternative to Si-based power devices in high-efficiency and high-power density applications. SiC devices have numerous persuasive advantages--high-breakdown voltage, high-operating electric field, high-operating temperature, high-switching frequency and low losses.

Silicon Carbide (SiC) devices belong to the so-called wide band gap semiconductor group, which offers a number of attractive characteristics for high voltage power semiconductors when compared to commonly used silicon (Si). Recently, some SiC power devices, for example, Schottky-barrier diodes (SBDs), metal-oxide-semiconductor field-effecttransistors (MOSFETs), junction FETs (JFETs), and their integrated modules have come onto the market. Physics and Technology of Silicon Carbide Devices abundantly describes recent technologies on manufacturing, processing, characterization, modeling, etc. for SiC devices.

Advancing Silicon Carbide Electronics Technology II

The future focus of nanotechnology will be on realizing new functions over greater scales. This book describes the creation of nano- and microscale structures and functions by controlling temperature, light, pressure, or carrier injections. It includes novel nano-integration technologies such as self-organization of surface nanostructures, quantum well structures, microlithography and micromachines, as well as new techniques of laser spectroscopy and new computational methods.

Smart Ceramics

Frontiers of Multifunctional Integrated Nanosystems

Laser Focus World

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION