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KEY=MECHANICAL - MARISSA LANE

The Effect of Sterilization Methods on Plastics and Elastomers, 2nd Edition

William Andrew **This extensively updated second edition was created for medical device, medical packaging, and food packaging design engineers, material product technical support, and research/development personnel. This comprehensive databook contains important characteristics and properties data on the effects of sterilization methods on plastics and elastomers. It provides a ready reference for comparing materials in the same family as well as materials in different families. Data is presented on 43 major plastic and elastomer packaging materials, including biodegradable or organic polymers. New to this edition are resin chapters containing textual summary information including: category; general description; applications; resistances to particular sterilization methods; and regulatory status considerations for use in medical devices and medical/food packaging. The resin chapter material supplier trade name product data is presented in graphical and tabular format, with results normalized to SI units, retaining the familiar format of the best selling first edition and allowing easy comparison between materials and test conditions.**

Infection Prevention and Control in Healthcare, Part I: Facility Planning, An Issue of Infectious Disease Clinics of North America

Elsevier Health Sciences **Infection Prevention and Control in Healthcare, Part I: Facility Planning, An Issue of Infectious Disease Clinics of North America, E-Book**

Chitin and Chitosan: Properties and Applications

John Wiley & Sons **Offers a comprehensive guide to the isolation, properties and applications of chitin and chitosan** Chitin and Chitosan: Properties and Applications presents a comprehensive review of the isolation, properties and applications of chitin and chitosan. These promising biomaterials have the potential to be broadly applied and there is a growing market for these biopolymers in areas such as medical and pharmaceutical, packaging, agricultural, textile, cosmetics, nanoparticles and more. The authors - noted experts in the field - explore the isolation, characterization and the physical and chemical properties of chitin and chitosan. They also examine their properties such as hydrogels, immunomodulation and biotechnology, antimicrobial activity and chemical enzymatic modifications. The book offers an analysis of the myriad medical and pharmaceutical applications as well as a review of applications in other areas. In addition, the authors discuss regulations, markets and perspectives for the use of chitin and chitosan. This important book: Offers a thorough review of the isolation, properties and applications of chitin and chitosan. Contains information on the wide-ranging applications and growing market demand for chitin and chitosan Includes a discussion of current regulations and the outlook for the future Written for Researchers in academia and industry who are working in the fields of chitin and chitosan, Chitin and Chitosan: Properties and Applications offers a review of these promising biomaterials that have great potential due to their material properties and biological functionalities.

Russell, Hugo and Ayliffe's Principles and Practice of Disinfection, Preservation and Sterilization

John Wiley & Sons **The new edition of this established and highly respected text is THE definitive reference in its field. It details methods for the elimination or prevention/control of microbial growth, and features: New chapters on bioterrorism and community healthcare New chapters on microbicide regulations in the EU, USA and Canada Latest material on microbial resistance to microbicides Updated material on new and emerging technologies, focusing on special problems in hospitals, dentistry and pharmaceutical practice Practical advice on problems of disinfection and antiseptics in healthcare A systematic review of sterilization methods, with uses and advantages outlined for each Evaluation of disinfectants and their mechanisms of action with respect to current regulations The differences between European and North American regulations are highlighted throughout, making this a truly global work, ideal for worldwide healthcare professionals working in infectious diseases and infection control.**

Mechanical Behavior of Biomaterials

Woodhead Publishing **Mechanical Behaviour of Biomaterials focuses on the interface between engineering and medicine, where new insights into engineering aspects will prove to be extremely useful in their relation to the biomedical sciences and their applications. The book's main objective focuses on the mechanical behavior of biomaterials, covering key aspects, such as mechanical properties, characterization and performance. Particular emphasis is given to fatigue, creep and wear, fracture, and stress and strain relationships in biomaterials. Chapters look at both experimental and theoretical results. Readers will find this to be an essential reference for academics, biomechanical researchers, medical doctors, biologists, chemists, physicists, mechanical, biomedical and materials engineers and industrial professionals. Presents contributions from international experts Provides insights at the interface of disciplines, such as engineering and the medical and dental sciences Presents a comprehensive understanding on the mechanical properties of biomaterials Covers surface and bulk properties**

The Effect of Radiation on Properties of Polymers

William Andrew **The Effect of Radiation on Properties of Polymers** examines the effects of radiation on plastics and elastomers. Polymers are required in products or parts for a range of cutting-edge applications that are exposed to radiation, in areas such as space, medicine, and radiation processing. This book focuses on the effects of radiation exposure within that environment, providing in-depth data coverage organized by category of polymer. Aspects such as radiation impact on mechanical and thermal properties, including glass transition and heat deflection temperatures, are described, demonstrating how changes in these properties affect the performance of plastic or elastomer parts. The effect of radiation on electrical properties is also included. Supporting introductory chapters explain the key concepts of radiation, including the physical, mechanical, and thermal properties of plastics and elastomers. This is a vital resource for plastics engineers, product designers, and R&D professionals, working on products or parts for radioactive environments, as well as engineers and scientists in the medical, nuclear, and radiation processing industries. The book also supports researchers and scientists in plastics engineering, polymer processing and properties, polymer and coatings chemistry, materials science, and radiation. Brings together highly valuable data on the effect of radiation on the properties of polymers and elastomers Enables the reader to compare properties and to select the best possible materials for specific applications Supported by detailed explanations and analysis, ensuring that the reader understands how to interpret and utilize the data

Wood Structure and Properties '10

Arbora Publishers

The Anterior Cruciate Ligament: Reconstruction and Basic Science E-Book

Elsevier Health Sciences **The Anterior Cruciate Ligament: Reconstruction and Basic Science, 2nd Edition**, by Dr. Chadwick Prodromos, provides the expert guidance you need to effectively select the right procedure and equipment, prevent complications, and improve outcomes for every patient. Written and edited by world leaders in hamstring, allograft, and

bone-patellar tendon-bone (BTB) ACL reconstruction, this revised reference is a must-have resource for the full range of anterior cruciate ligament reconstruction techniques, plus fixation devices, rehabilitation, revision ACLR surgery, and much more! Covers the latest clinical and technical information on pain control, genetics and biologics, the use of ultrasound, and much more. Features dozens of new chapters that offer up-to-date information on pain control after ACLR, single vs. double bundle repairs, genetics and collagen type, all-inside techniques, biologics, pediatrics, ACL ganglion cysts, prognosis for ACLR success, allografts vs. autografts, and more. Provides the experience and insight of a "dream team" of ACL experts, including James Andrews on sports medicine, Frank Noyes on HTO and ACLR, and Andrew Amis on the benefits of the older femoral tunnel placement technique.

Mechanics of Biomaterials

Fundamental Principles for Implant Design

Cambridge University Press **Combining materials science, mechanics, implant design and clinical applications, this self-contained text provides a complete grounding to the field.**

Chronic Wounds, Wound Dressings and Wound Healing

Springer Nature **This book addresses wound care in vascular surgery, neurosurgery and lower extremity ulcers, while also providing detailed information on the latest concepts in antimicrobial therapy. The book presents essential content on the assessment, care, measurement and repair of wounds, and describes important scientific aspects as well as current clinical techniques. Due to the various topics covered, the book offers a valuable resource not only for plastic surgeons, but also for neurosurgeons, vascular surgeons and all clinicians who are interested in learning about current antimicrobial agents and their use.**

YY/T 0758-2021: Translated English of Chinese Standard

(YY/T0758-2021, YYT 0758-2021)

General requirements for medical laser fiber

<https://www.chinesestandard.net> **This Standard specifies general requirements for medical laser optical fibers. This Standard applies to medical laser optical fibers (hereinafter referred to as optical fibers) that transmit laser light. This Standard does not apply to optical fibers with gain function. If the optical fiber forms part of the equipment and cannot be removed from the equipment, the equipment must comply with the relevant national standards (such as GB 9706.1, GB 9706.20, GB 7247.1, etc.), and refer to the implementation of this Standard. However, if the optical fiber can be removed from the equipment, the removed unit shall comply with the applicable requirements of this Standard.**

Sterilization Manual for Health Centers

[Pan Amer Health Org](#) **This updated sterilisation manual informs health workers about the simple protocols and procedures that have been developed to prevent hospital-acquired infections both inside and outside the sterilisation plant. The guidelines included in this manual show the steps to follow in cleaning, preparing, sterilizing, storing and transporting hospital equipment so as to obtain sterile material. It is very important to be aware of this information in order to provide patients with safe health care.**

The Effect of Sterilization on Plastics and Elastomers

[William Andrew](#) **The Effect of Sterilization Methods on Plastics and Elastomers, Fourth Edition brings together a wide range of essential data on the sterilization of plastics and elastomers, thus enabling engineers to make optimal material choices and design decisions. The data tables in this book enable engineers and scientists to select the right materials and sterilization method for a given product or application. The book is a unique and essential reference for anybody working with plastic materials that are likely to be exposed to sterilization methods, be it in medical device or packaging development, food packaging or other applications.**

Presents essential data and practical guidance for engineers and scientists working with plastics in applications that require sterile packaging and equipment Updated edition removes obsolete data, updates manufacturers, verifies data accuracy, and adds new plastics materials for comparison Provides essential information and guidance for FDA submissions required for new medical devices

UHMWPE Biomaterials Handbook

Ultra High Molecular Weight

Polyethylene in Total Joint

Replacement and Medical Devices

Academic Press UHMWPE Biomaterials Handbook describes the science, development, properties and application of of ultra-high molecular weight polyethylene (UHMWPE) used in artificial joints. This material is currently used in 1.4 million patients around the world every year for use in the hip, knee, upper extremities, and spine. Since the publication of the 1st edition there have been major advances in the development and clinical adoption of highly crosslinked UHMWPE for hip and knee replacement. There has also been a major international effort to introduce Vitamin E stabilized UHMWPE for patients. The accumulated knowledge on these two classes of materials are a key feature of the 2nd edition, along with an additional 19 additional chapters providing coverage of the key engineering aspects (biomechanical and materials science) and clinical/biological performance of UHMWPE, providing a more complete reference for industrial and academic materials specialists, and for surgeons and clinicians who require an understanding of the biomaterials properties of UHMWPE to work successfully on patient applications. The UHMWPE Handbook is the comprehensive reference for professionals, researchers, and clinicians working with biomaterials technologies for joint replacement New to this edition: 19 new chapters keep readers up to date with this fast moving topic, including a new section on UHMWPE biomaterials; highly crosslinked UHMWPE for hip and knee replacement; Vitamin E stabilized UHMWPE for patients; clinical performance, tribology an biologic interaction of UHMWPE State-of-the-art coverage of UHMWPE technology, orthopedic applications, biomaterial characterisation and engineering aspects from recognised leaders in the field

Thermal Processing of Food

Potential Health Benefits and Risks

John Wiley & Sons **This is the latest and most authoritative documentation of current scientific knowledge regarding the health effects of thermal food processing. Authors from all over Europe and the USA provide an international perspective, weighing up the risks and benefits. In addition, the contributors outline those areas where further research is necessary.**

Unfolding the Biopolymer Landscape

Bentham Science Publishers **The need for the development of biomaterials as scaffold for tissue regeneration is driven by the increasing demands for materials that mimic functions of extracellular matrices of body tissues. Unfolding the Biopolymer Landscape provides a unique account of “biopolymeric interventions” inherent to biotechnological applications, soft tissue engineering, ophthalmic drug delivery, biotextiles, environmentally responsive systems, neurotherapeutics, and emulsions-based formulations for food and pharmaceutical applications. Chapters in this volume also cover biomedical applications and implications of cationic polymers, collagen-based substrates, multifunctional polymers, shape memory biopolymers, hybrid semisynthetic biomaterials, microbial exopolysaccharides, biomaterials mimicking the extracellular microenvironment, derivatized polysaccharides, and metallic biomaterials. Each chapter is distinctly written by experts in the respective fields and emphasis is given on the mechanistic profile of the performance of biopolymers and biomedical applications. This book provides both basic and advanced biopolymer information for scientific experts and early career researchers in the field of drug delivery, tissue engineering, nanomedicine, food technology, peptide science, biomaterial design, and nutrition. This volume provides a unique account of “biopolymeric interventions” inherent to biotechnological applications, soft tissue engineering, ophthalmic drug delivery, biotextiles, environmentally responsive systems, neurotherapeutics, and emulsions-based formulations for food and pharmaceutical applications.**

Tendon Injuries

Basic Science and Clinical Medicine

Springer Science & Business Media **Tendon ailments are a significant cause of morbidity among athletes of all levels and are increasing in prevalence. Their management is often empirical, and para-scientific, only looking at the biological aspects of tendon ailments. This book conveys a comprehensive and concise body of knowledge on the management of tendon problems in sportspeople with practical details of clinical protocols. Tendon Injuries: Basic Science and Clinical Medicine is specifically dedicated to the clinical aspects of tendinopathy and provides the required knowledge and scientific basis for the sports medicine practitioner, orthopedic specialist and student facing upper and lower limb tendon ailments in athletes. A comprehensive review of tendon disorders is given and modern criteria of management outlined to form the basis of effective clinical management of this group of patients.**

Fundamentals of Biomaterials

Springer **This text for advanced undergraduate and graduate students covers the fundamental relationships between the structure and properties of materials and biological tissues. The successful integration of material and biological properties, shape, and architecture to engineer a wide range of optimized designs for specific functions is the ultimate aim of a biomaterials scientist. Relevant examples illustrate the intrinsic and tailored properties of metal, ceramic, polymeric, carbon-derived, composite, and naturally derived biomaterials. Fundamentals of Biomaterials is written in a single voice, ensuring clarity and continuity of the text and content. As a result, the reader will be gradually familiarized with the field, starting with materials and their properties and eventually leading to critical interactions with the host environment. Classical and novel examples illuminate topics from basic material properties to tissue engineering, nanobiomaterials, and guided tissue regeneration. This comprehensive and engaging text: integrates materials and biological properties to understand biomaterials function and design provides the basics of biological tissue components and hierarchy includes recent topics from tissue engineering and guided tissue regeneration to nanoarchitecture of biomaterials and their surfaces contains perspectives/case studies from widely-recognized experts in the field features chapter-ending summaries to help readers to identify the key, take-home messages.**

YY/T 0681.1-2018: Translated

English of Chinese Standard. (YYT 0681.1-2018, YY/T0681.1-2018, YYT0681.1-2018)

Test methods for sterile medical device package - Part 1: Test guide for accelerated aging [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net]

<https://www.chinesestandard.net> [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net] This Part of YY/T 0681 specifies the guide for designed accelerated aging solutions. This Part applies to the rapid determination of the sterile integrity of the sterile barrier system specified in GB/T 19633.1-2015 and the effects that physical properties of its packaging material components are affected by the elapsed time.

Plasma Assisted Decontamination of Biological and Chemical Agents

Springer Science & Business Media **Plasma decontamination is a rapidly expanding area of modern science and engineering. An increasing number of engineers are using plasma methods for decontamination of chemical and biological agents. Plasma decontamination is effectively applied today to clean and sterilize different surfaces, high volume air and water streams, industrial exhausts, and even living tissue of animals and humans. This book provides a fundamental introduction to virtually all aspects of modern plasma decontamination, as well as the most recent technological achievements in the area. The book is segmented into four specific sections of modern plasma decontamination: (1) plasma bio-decontamination, including disinfection and sterilization of surfaces, water**

and air streams; (2) plasma decontamination of chemical agents, including cleaning of air, water, and industrial exhaust gases from different pollutants and especially volatile organic compounds VOC; (3) plasma treatment of living tissue, including different subjects of plasma medicine from skin sterilization to tissue engineering; (4) major electric discharges applied for the plasma-assisted decontamination of chemical and biological agents.

Block's Disinfection, Sterilization, and Preservation

Lippincott Williams & Wilkins **With more international contributors than ever before, Block's Disinfection, Sterilization, and Preservation, 6th Edition, is the first new edition in nearly 20 years of the definitive technical manual for anyone involved in physical and chemical disinfection and sterilization methods. The book focuses on disease prevention—rather than eradication—and has been thoroughly updated with new information based on recent advances in the field and understanding of the risks, the technologies available, and the regulatory environments.**

YY 0053-2016: Translated English of Chinese Standard. YY0053-2016

Hemodialysis and Relevant Therapies - Haemodialysers, Haemodiafilters, Haemofilters and Haemoconcentrators [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net]

<https://www.chinesestandard.net> [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net] This Standard specifies the technical requirements for haemodialysers,

haemodiafilters, haemofilters and haemoconcentrators used for human body; the instruments involved in this document indicate the above-mentioned products.

Emerging Applications of 3D Printing During CoVID 19 Pandemic

Springer Nature This book presents various practical breakthroughs of 3D printing (3DP) technologies in developing different types of tool and gadgets to be used against COVID-19 pandemic. It presents multidisciplinary aspects of 3DP technology in social, medical, administration, and scientific areas. This book presents state-of-the-art applications of 3DP technology in the development of PPE, ventilators, respiratory equipments, and customized drugs. It provides a comprehensive collection of the technical notes, research designs, literature prospective, and clinical applications of 3DP technologies to effectively deal with the COVID-19 pandemic. This book will be beneficial for the medical professionals, pharmacists, manufacturing enterprises, and young scholars in understanding the real potential of 3DP technologies in aiding humans-based activities against the COVID-19 crisis. Having interdisciplinary applications in applied science, this book will also be useful for wide range of academicians, research scholars and industry stakeholders.

Essentials of Neuroanesthesia

Academic Press **Essentials of Neuroanesthesia** offers useful insights on the anesthetic management of neurosurgical and neurologic patients. This book covers all topics related to neuroanesthesia, providing essential knowledge on the brain and spinal cord. Sections include chapters on anatomy, physiology, and pharmacology, along with specific chapters related to various neurosurgical and neurological problems and their anesthetic management. This book provides an understanding of related issues, such as palliative care, evidence based practice of neuroanesthesia, sterilization techniques, biostatistics, and ethical issues, and is useful for trainees, clinicians, and researchers in the fields of neurosurgery, neurocritical care, neuroanesthesia, and neurology. Offers useful insights on the anesthetic management of neurosurgical and neurologic patients Discusses related issues, such as palliative care, evidence based practice of neuroanesthesia, sterilization techniques, biostatistics, and ethical issues Useful for trainees, clinicians, and researchers in the fields of neurosurgery, neurocritical care, neuroanesthesia, and neurology

Sterilisation of Biomaterials and Medical Devices

Elsevier The effective sterilisation of any material or device to be implanted in or used in close contact with the human body is essential for the elimination of harmful agents such as bacteria. Sterilisation of biomaterials and medical devices reviews established and commonly used technologies alongside new and emerging processes. Following an introduction to the key concepts and challenges involved in sterilisation, the sterilisation of biomaterials and medical devices using steam and dry heat, ionising radiation and ethylene oxide is reviewed. A range of non-traditional sterilisation techniques, such as hydrogen peroxide gas plasma, ozone and steam formaldehyde, is then discussed together with research in sterilisation and decontamination of surfaces by plasma discharges. Sterilisation techniques for polymers, drug-device products and tissue allografts are then reviewed, together with antimicrobial coatings for 'self-sterilisation' and the challenge presented by prions and endotoxins in the sterilisation of reusable medical devices. The book concludes with a discussion of future trends in the sterilisation of biomaterials and medical devices. With its distinguished editors and expert team of international contributors, Sterilisation of biomaterials and medical devices is an essential reference for all materials scientists, engineers and researchers within the medical devices industry. It also provides a thorough overview for academics and clinicians working in this area. Reviews established and commonly used technologies alongside new and emerging processes Introduces and reviews the key concepts and challenges involved in sterilisation Discusses future trends in the sterilisation of biomaterials and medical devices

Handbook of Food Process Design

John Wiley & Sons "This book will offer a comprehensive account of the design of all major food processing systems, including both established and novel unit operations. The range of equipment available for any given process will be described, including the basic theoretical principles and modes of operation. Advantages and limitations of the equipment within various relevant parameters (such as size, processing time, cost and energy requirements) will be explained and schematic diagrams will be provided to show the stages of each process component in detail. The book also covers computer-aided design and control systems, cost considerations and cleaning and sanitation methods. Practical examples of process design scenarios will be included to help the reader in specifying and designing their own operations. All chapters will follow the following format:1. Purpose of unit operation2. What are the end products of the

process?3. Process flow sheet, material and energy balances, and schematic diagram of the process and its components4. Basic theoretical principles and mode of operations.5. Different types of equipment available with their advantages and limitations. What are the parameters we need to know? For example, time, energy, size, and other factors.6. Empirical data and rules of thumb used to facilitate the various design calculations, simplified equations and shortcut methods.7. Simple equations, tables, and graphs to estimate the design parameters.8. Process control, operations and maintenance of the unit operations.9. Advanced levels of process design for complicated systems. Computer aided process/plant design.10. Cleaning and sanitation methods.11. Capital and operating cost for different size of the equipments.12. Summary and future needs.13. Worked out examples related to design"--

Handbook of Food Process Design, 2 Volume Set

John Wiley & Sons In the 21st Century, processing food is no longer a simple or straightforward matter. Ongoing advances in manufacturing have placed new demands on the design and methodology of food processes. A highly interdisciplinary science, food process design draws upon the principles of chemical and mechanical engineering, microbiology, chemistry, nutrition and economics, and is of central importance to the food industry. Process design is the core of food engineering, and is concerned at its root with taking new concepts in food design and developing them through production and eventual consumption. Handbook of Food Process Design is a major new 2-volume work aimed at food engineers and the wider food industry. Comprising 46 original chapters written by a host of leading international food scientists, engineers, academics and systems specialists, the book has been developed to be the most comprehensive guide to food process design ever published. Starting from first principles, the book provides a complete account of food process designs, including heating and cooling, pasteurization, sterilization, refrigeration, drying, crystallization, extrusion, and separation. Mechanical operations including mixing, agitation, size reduction, extraction and leaching processes are fully documented. Novel process designs such as irradiation, high-pressure processing, ultrasound, ohmic heating and pulsed UV-light are also presented. Food packaging processes are considered, and chapters on food quality, safety and commercial imperatives portray the role process design in the broader context of food production and consumption.

Computational Fluid Dynamics in Food Processing

CRC Press Since many processes in the food industry involve fluid flow and heat and mass transfer, Computational Fluid Dynamics (CFD) provides a powerful early-stage simulation tool for gaining a qualitative and quantitative assessment of the performance of food processing, allowing engineers to test concepts all the way through the development of a process or system. Published in 2007, the first edition was the first book to address the use of CFD in food processing applications, and its aims were to present a comprehensive review of CFD applications for the food industry and pinpoint the research and development trends in the development of the technology; to provide the engineer and technologist working in research, development, and operations in the food industry with critical, comprehensive, and readily accessible information on the art and science of CFD; and to serve as an essential reference source to undergraduate and postgraduate students and researchers in universities and research institutions. This will continue to be the purpose of this second edition. In the second edition, in order to reflect the most recent research and development trends in the technology, only a few original chapters are updated with the latest developments. Therefore, this new edition mostly contains new chapters covering the analysis and optimization of cold chain facilities, simulation of thermal processing and modeling of heat exchangers, and CFD applications in other food processes.

Ageing of Composites

Elsevier Ageing of composites is a highly topical subject given the increasing use of composites in structural applications in many industries. Ageing of composites addresses many of the uncertainties about the long-term performance of composites and how they age under conditions encountered in service. The first part of the book reviews processes and modelling of composite ageing including physical and chemical ageing of polymeric composites, ageing of glass-ceramic matrix composites, chemical ageing mechanisms, stress corrosion cracking, thermo-oxidative ageing, spectroscopy of ageing composites, modelling physical and accelerated ageing and ageing of silicon carbide composites. Part two examines ageing of composites in transport applications including aircraft, vehicles and ships. Part three reviews ageing of composites in non-transport applications such as implants in medical devices, oil and gas refining, construction, chemical processing and underwater applications. With its distinguished editor and international team of contributors, Ageing of composites is a valuable reference guide for composite manufacturers and

developers. It also serves as a source of information for material scientists, designers and engineers in industries that use composites, including transport, chemical processing and medical engineering. Addresses many of the uncertainties about the long-term performance of composites and how they age under conditions encountered in service Reviews processes and modelling of composite ageing including chemical ageing mechanisms and stress corrosion cracking Discusses ageing of composites in both transport and non-transport applications ranging from aircraft to implants in medical devices

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YY0341.1-2020

Non-active surgical implants -
Osteosynthesis and spinal implants
- Part 1: Particular requirements for osteosynthesis implants [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net]

<https://www.chinesestandard.net> [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net] This part of YY 0341 specifies the special requirements for non-active surgical implants for osteosynthesis, including the terms and definitions, requirements, test methods, manufacturing, sterilization, packaging and information provided by the manufacturer, etc. of osteosynthesis implants. This part of YY0341 applies to osteosynthesis implants, not to the coating part of osteosynthesis implants with surface coating.

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YY/T0619-2017

Medical Endoscopes - Rigid Resectoscope [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net]

<https://www.chinesestandard.net> [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net] This Standard specifies the classification and composition, requirements and test methods of rigid resectoscope. This Standard is applicable to the rigid resectoscope (hereinafter referred to as resectoscope). The resectoscope is clinically applicable to the cutting, vaporizing and coagulating operations against the diseased tissues under the direct viewing of endoscope and using the high-frequency current thermal effect.

Packaging for Nonthermal Processing of Food

John Wiley & Sons A comprehensive review of the many new developments in the growing food processing and packaging field Revised and updated for the first time in a decade, this book discusses packaging implications for recent nonthermal processing technologies and mild food preservation such as high pressure processing, irradiation, pulsed electric fields, microwave sterilization, and other hurdle technologies. It reviews typical nonthermal processes, the characteristics of food products after nonthermal treatments, and packaging parameters to preserve the quality and enhance the safety of the products. In addition, the critical role played by packaging materials during the development of a new nonthermal processed product, and how the package is used to make the product attractive to consumers, is discussed. Packaging for Nonthermal Processing of Food, Second Edition provides up to date assessments of

consumer attitudes to nonthermal processes and novel packaging (both in the U.S. and Europe). It offers a brand new chapter covering smart packaging, including thermal, microbial, chemical, and light sensing biosensors, radio frequency identification systems, and self-heating and cooling packaging. There is also a new chapter providing an overview of packaging laws and regulations in the United States and Europe. Covers the packaging types required for all major nonthermal technologies, including high pressure processing, pulsed electric field, irradiation, ohmic heating, and others Features a brand new chapter on smart packaging, including biosensors (thermal-, microbial-, chemical- and light-sensing), radio frequency identification systems, and self-heating and cooling packaging Additional chapters look at the current regulatory scene in the U.S. and Europe, as well as consumer attitudes to these novel technologies Editors and contributors bring a valuable mix of industry and research experience Packaging for Nonthermal Processing of Food, Second Edition offers many benefits to the food industry by providing practical information on the relationship between new processes and packaging materials, to academia as a source of fundamental knowledge about packaging science, and to regulatory agencies as an avenue for acquiring a deeper understanding of the packaging requirements for new processes.

Sterilization of Food in Retort Pouches

Springer Science & Business Media The subject of sterilization of food in cans has been studied both experimentally and theoretically, but limited work has been undertaken to study the sterilization of food in pouches. This book examines the interaction between fluid mechanics, heat transfer and microbial inactivation during sterilization of food in pouches. Such interaction is complex and if ignored would lead to incorrect information not only on food sterility but also on food quality.

Plastics in Medical Devices

Properties, Requirements and Applications

Elsevier No book has been published that gives a detailed description of all the types of plastic materials used in medical devices, the unique requirements that the materials need to comply with and the ways standard plastics can be modified to meet such needs. This book will start with an introduction to medical devices, their classification and some of the regulations (both US and global) that affect their design, production

and sale. A couple of chapters will focus on all the requirements that plastics need to meet for medical device applications. The subsequent chapters describe the various types of plastic materials, their properties profiles, the advantages and disadvantages for medical device applications, the techniques by which their properties can be enhanced, and real-world examples of their use. Comparative tables will allow readers to find the right classes of materials suitable for their applications or new product development needs.

Sterile Services Department

The Stationery Office Provides guidance to help health planners, estates and facilities managers, sterile services managers and capital planning and design teams to plan and design a sterile services department. It discusses the objectives of a sterile services department (SSD) and service requirements, particularly focusing on: raising standards in decontamination services by optimising the built environment: service requirements strategy: calculating the optimum capacity of an SSD to eradicate bottlenecks: determining the most appropriate location of an SSD. Design guidance based on the above service objectives is outlined. Finally, the finer details of the individual spaces within an SSD are discussed.

Materials and Coatings for Medical Devices

Cardiovascular

ASM International "The Materials Information Society, MPMD-Materials and Processes for Medical Devices."

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YY/T1512-2017

Biological Evaluation of Medical

Devices - Guidance on the Conduct of Biological Evaluation within a Risk Management Process [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net]

<https://www.chinesestandard.net> [After payment, write to & get a FREE-of-charge, unprotected true-PDF from: Sales@ChineseStandard.net] This Standard is applicable to the biological evaluation of medical devices in accordance with the requirements in GB/T 16886.1-2011. This Standard does not add or modify the requirements in GB/T 16886.1-2011. This Standard does not include requirements of regulatory inspection or certification and assessment activities. This Standard is applicable to all the biological evaluation of various types of medical devices, including active, passive, implantable and non-implantable medical devices.

Lasers in Dentistry

Handbook of Biomaterial Properties

Springer This book provides tabular and text data relating to normal and diseased tissue materials and materials used in medical devices. Comprehensive and practical for students, researchers, engineers, and practicing physicians who use implants, this book considers the materials aspects of both implantable materials and natural tissues and fluids. Examples of materials and topics covered include titanium, elastomers, degradable biomaterials, composites, scaffold materials for tissue engineering, dental implants, sterilization effects on material properties, metallic alloys, and much more. Each chapter author considers the intrinsic and interactive properties of biomaterials, as well as their appropriate applications and historical contexts. Now in an updated second edition, this book also contains two new chapters on the cornea and on vocal folds, as well as updated insights, data, and citations for several chapters.

Working with Stem Cells

Springer **The content covered encompass not only the theoretic and methodological aspects for culturing human pluripotent stem cells, but also the establishment of induced pluripotent stem cells and their differentiation into specific cellular subtypes. This book has the most updated methods and technologies in an accessible and clear language, presenting protocols developed and optimized by researchers that use them every day. Stem cell research is a growing field that offers the potential to comprehend mechanisms of neural development and tissue regeneration and maintenance as well as the development-related human diseases and the establishment of novel therapies. Questions of basic biology can also be exploited by this cutting-edge approach.**