Thin

Thin

The HBO Documentary film Thin takes us inside the walls of Renfrew Center, a residential facility for the treatment of women with eating disorders, closely following four young women (ages 15 - 30) who have spent their lives starving themselves; often to the verge of death. The film deftly chronicles the pervasiveness of restrictive eating behaviors (most of the women profiled learned dysfunctional eating habits from their mothers while growing up), as well as the failure of our current health-insurance industry to address its clients' needs, while never shifting focus from the women themselves. Director Lauren Greenfield documents with astonishing depth the daily rituals, spontaneous friendships and startling swings between recovery and relapse that make up life at the center. The result is a powerful new insight into one of our society's most insidious open secrets.

Thin-film Design

This text presents several new thin-film design methods that can produce multiple stopbands as well as passbands. It is written for thin-film designers and students with advanced knowledge of multilayer, optical thin-film coatings. The text focuses on coatings that have high reflectance performance requirements in more than one spectral wavelength band or region. Relatively basic exercises are provided for students as well as challenging ones for researchers.

Thin-Film Solar Cells

The first comprehensive book on thin-film solar cells, potentially a key technology for solving the energy production problem in the 21st century in an environmentally friendly way. It covers a wide range of scientific and technological aspects of thin film semiconductors - deposition technologies, growth mechanisms and the basic properties of amorphous and nano-crystalline silicon - as well as the optimum design theory and device physics of high-efficiency solar cells, especially of single-junction and multi-junction solar cells. The development of large-area solar cell modules using single and multi-junction solar cells is also considered. Examples of recent photovoltaic systems are presented and analysed.

Physics of Thin-Film Photovoltaics

PHYSICS OF THIN-FILM PHOTOVOLTAICS Tackling one of the hottest topics in renewables, thin-film photovoltaics, the authors present the latest updates, technologies, and applications, offering the most up-to-date and thorough coverage available to the engineer, scientist, or student. It appears rather paradoxical that thin-film photovoltaics (PVs) are made of materials that seem unacceptable from the classical PV perspective, and yet they often outperform classical PV. This exciting new volume solves that paradox by switching to a new physics paradigm. Many concepts here fall beyond the classical PV scope. The differences lie in device thinness (microns instead of millimeters) and morphology (non-crystalline instead of crystalline). In such structures, the charge carriers can reach electrodes without recombination. On the other hand, thin disordered structures render a possibility of detrimental lateral nonuniformities (“recombination highways”), and their energy spectra give rise to new recombination modes. The mechanisms of thermal exchange and device degradation are correspondingly unique. The overall objective of this book is to give a self-contained in-depth discussion of the physics of thin-film systems in a manner accessible to both researchers and students. It covers most aspects of the physics of thin-film PV, including device operations, material structure and parameters, thin-film junction formation, analytical and numerical modeling, concepts

of large area effects and lateral non-uniformities, physics of shunting (both shunt growth and effects), and device degradation. Also, it reviews a variety of physical diagnostic techniques proven with thin-film PV. Whether for the veteran engineer or the student, this is a must-have for any library. This outstanding new volume: Covers not only the state-of-the-art of thin-film photovoltaics, but also the basics, making this volume useful not just to the veteran engineer, but the new-hire or student as well Offers a comprehensive coverage of thin-film photovoltaics, including operations, modeling, non-uniformities, piezo-effects, and degradation Includes novel concepts and applications never presented in book format before Is an essential reference, not just for the engineer, scientist, and student, but the unassuming level of presentation also makes it accessible to readers with a limited physics background Is filled with workable examples and designs that are helpful for practical applications Is useful as a textbook for researchers, students, and faculty for understanding new ideas in this rapidly emerging field Audience: Industrial professionals in photovoltaics, such as engineers, managers, research and development staff, technicians, government and private research labs; also academic and research universities, such as physics, chemistry, and electrical engineering departments, and graduate and undergraduate students studying electronic devices, semiconductors, and energy disciplines

Nanostructured Surfaces and Thin Films Synthesis by Physical Vapor Deposition

This Special Issue deals with the synthesis of nanostructured surfaces and thin films by means of physical vapor deposition techniques such as pulsed laser deposition, magnetron sputtering, HiPIMS, or e-beam evaporation, among others. The nanostructuration of the surface modifies the way a material interacts with the environment, changing its optical, mechanical, electrical, tribological, or chemical properties. This can be applied in the development of photovoltaic cells, tribological coatings, optofluidic sensors, or biotechnology to name a few. This issue includes research presenting novel or improved applications of nanostructured thin films, such as photovoltaic solar cells, thin-film transistors, antibacterial coatings or chemical and biological sensors, while also studying the nanostructuration mechanisms, from a fundamental point of view, that produce rods, columns, helixes or hexagonal grids at the nanoscale.

Functional Oxide Based Thin-Film Materials

This Special Issue on Functional Oxide-Based Thin-Film Materials touches on the latest advancements in several aspects related to material science: the synthesis of novel oxide, photoluminescence characteristics, photocatalytic ability, energy storage, light emitter studies, low-emissivity glass coatings, and investigations of both nanostructure and thin-film properties. It represents an amalgamation of specialists working with device applications and shedding light on the properties and behavior of thin-film oxides (e.g., GaOx, Ga2O3, HfO2, LiNbO3, and doped ZnO, among numerous others). The papers cover many aspects of thin-film science and technology, from thin film to nanostructure and from material properties to optoelectronic applications, thus reflecting the many interests of the community of scientists active in the field.

Thin Films - Fundamentals, Deposition Techniques and Applications

Thin films are key components of modern technology. Ranging from a few nanometers to several micrometers in thickness and composed of a wide variety of materials, they play a crucial role in numerous applications. Their unique properties, related to the exciting physical phenomena that emerge in many materials when dimensions are reduced, make them a subject of intense research across various fields. This volume brings together contributions from experts in materials science and engineering, serving as a valuable resource for scientists, engineers, and students seeking to expand their knowledge of thin film fabrication and its practical applications. It is intended to serve as a helpful reference for both students and professionals seeking clear and detailed information on the fundamentals, technologies, and applications of thin films.

Glass Transition, Dynamics and Heterogeneity of Polymer Thin Films

Mobility Gradient of Polystyrene in Films Supported on Solid Substrates, by Yoshihisa Fujii, Hiroshi Morita, Atsushi Takahara and Keiji Tanaka Probing Properties of Polymers in Thin Films Via Dewetting, by Günter Reiter Heterogeneous and Aging Dynamics in Single and Stacked Thin Polymer Films, by Koji Fukao, Takehide Terasawa, Kenji Nakamura, Daisuke Tahara Heterogeneous Dynamics of Polymer Thin Films as Studied by Neutron Scattering, by Rintaro Inoue and Toshiji Kanaya

Handbook of Thin Film Deposition

Handbook of Thin Film Deposition, Fourth Edition, is a comprehensive reference focusing on thin film technologies and applications used in the semiconductor industry and the closely related areas of thin film deposition, thin film micro properties, photovoltaic solar energy applications, materials for memory applications and methods for thin film optical processes. The book is broken up into three sections: scaling, equipment and processing, and applications. In this newly revised edition, the handbook will also explore the limits of thin film applications, most notably as they relate to applications in manufacturing, materials, design and reliability. - Offers a practical survey of thin film technologies aimed at engineers and managers involved in all stages of the process: design, fabrication, quality assurance, applications and the limitations faced by those processes - Covers core processes and applications in the semiconductor industry and new developments within the photovoltaic and optical thin film industries - Features a new chapter discussing Gates Dielectrics

Instrumental Thin-Layer Chromatography

Instrumental Thin-Layer Chromatography delivers comprehensive coverage of this separation tool with particular emphasis on how this tool can be used in advanced laboratories and integrated into problem-solving scenarios. Significant improvements in instrumentation have outpaced the development of information resources that describe the latest state-of-the-art and demonstrate the full capabilities of TLC. This book provides a contemporary picture of the fundamentals and practical applications of TLC at a level suitable for the needs of professional scientists with interests in project management where TLC is a common tool. Compact, highly focused chapters convey essential information that defines modern TLC and how it can be effectively implemented in most areas of laboratory science. Numerous figures and tables provide access to material not normally found in a single source yet are required by working scientists. - Contributions written by recognized authoritative and visionary experts - Focuses on state-of-the-art instrumental thin-layer chromatography and advanced applications across many areas - Provides guidance on the analysis of complex, dirty mixtures of compounds - Offers a cost-effective analytic technique for laboratories working under strict budgets

Physics of Thin Films

Physics of Thin Films: Advances in Research and Development, Volume 6 reviews the rapid progress that has been made in research and development concerning the physics of thin films, with emphasis on metallic films. Topics covered include anodic oxide films, thin metal films and wires, and multilayer magnetic films. This volume is comprised of five chapters and begins with a discussion on the dielectric properties and the technique of plasma anodization which are relevant to the applications of anodic oxide films in electronic devices. Conduction, polarization, and dielectric breakdown effects are also considered. The next chapter examines studies on size-dependent electrical conduction in thin metal films and wires, paying particular attention to both classical and quantum size effects and some of the anisotropic characteristics of epitaxial metal films. The reader is then introduced to the optical properties of metal films and interactions in multilayer magnetic films. This text concludes with a chapter that looks at diffusion in metallic films and presents experimental results for phase-forming systems, miscible systems, and lateral diffusion. This monograph will be of value to students and practitioners of physics, especially those interested in thin films.

Plasma Deposited Thin Films

In Summary, the objective of this book is to present in one volume a review of the plasma deposition process and the present understanding of the most important and widely used plasma deposited thin film materials, devices and their applications.

Advanced Characterization Techniques for Thin Film Solar Cells

The book focuses on advanced characterization methods for thin-film solar cells that have proven their relevance both for academic and corporate photovoltaic research and development. After an introduction to thin-film photovoltaics, highly experienced experts report on device and materials characterization methods such as electroluminescence analysis, capacitance spectroscopy, and various microscopy methods. In the final part of the book simulation techniques are presented which are used for ab-initio calculations of relevant semiconductors and for device simulations in 1D, 2D and 3D. Building on a proven concept, this new edition also covers thermography, transient optoelectronic methods, and absorption and photocurrent spectroscopy.

Organic Nanostructured Thin Film Devices and Coatings for Clean Energy

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 an

Practical Production of Optical Thin Films

This book deals with the typical equipment, materials, processes, monitoring, and control used in the practical fabrication/production of optical thin films. It focuses on the practical elements needed to actually produce optical coatings.

Chemical Solution Deposition of Functional Oxide Thin Films

This is the first text to cover all aspects of solution processed functional oxide thin-films. Chemical Solution Deposition (CSD) comprises all solution based thin- film deposition techniques, which involve chemical reactions of precursors during the formation of the oxide films, i. e. sol-gel type routes, metallo-organic decomposition routes, hybrid routes, etc. While the development of sol-gel type processes for optical coatings on glass by silicon dioxide and titanium dioxide dates from the mid-20th century, the first CSD derived electronic oxide thin films, such as lead zirconate titanate, were prepared in the 1980’s. Since then CSD has emerged as a highly flexible and cost-effective technique for the fabrication of a very wide variety of functional oxide thin films. Application areas include, for example, integrated dielectric capacitors, ferroelectric random access memories, pyroelectric infrared detectors, piezoelectric micro-electromechanical systems, antireflective coatings, optical filters, conducting-, transparent conducting-, and superconducting layers, luminescent coatings, gas sensors, thin film solid-oxide fuel cells, and photoelectrocatalytic solar cells. In the appendix detailed “cooking recipes” for selected material systems are offered.

Thin Liquid Films

This book is a treatise on the thermodynamic and dynamic properties of thin liquid films at solid surfaces and, in particular, their rupture instabilities. For the quantitative study of these phenomena, polymer thin films (sometimes referred to as “ultrathin”) have proven to be an invaluable experimental model system. What is it that makes thin film instabilities special and interesting? First, thin polymeric films have an important range of applications. An understanding of their instabilities is therefore of practical relevance for the design of such films. The first chapter of the book intends to give a snapshot of current applications, and

an outlook on promising future ones. Second, thin liquid films are an interdisciplinary research topic, which leads to a fairly heterogeneous community working on the topic. It justifies attempting to write a text which gives a coherent presentation of the field which researchers across their specialized communities might be interested in. Finally, thin liquid films are an interesting laboratory for a theorist to confront a well-established theory, hydrodynamics, with its limits. Thin films are therefore a field in which a highly fruitful exchange and collaboration exists between experimentalists and theorists. The book stretches from the more concrete to more abstract levels of study: we roughly progress from applications via theory and experiment to rigorous mathematical theory. For an experimental scientist, the book should serve as a reference and guide to what is the current consensus of the theoretical underpinnings of the field of thin film dynamics. Controversial problems on which such a consensus has not yet been reached are clearly indicated in the text, as well as discussed in a final chapter. From a theoretical point of view, the field of dewetting has mainly been treated in a mathematically ‘light’ yet elegant fashion, often making use of scaling arguments. For the untrained researcher, this approach is not always easy to follow. The present book attempts to bridge between the ‘light’ and the ‘rigorous’, always with the ambition to enhance insight and understanding - and to not let go the elegance of the theory.

Polymer Thin Films

This book provides a timely overview of a current state of knowledge of the use of polymer thin film for important technological applications. Polymer thin film book covers the scientific principles and technologies that are necessary to implement the use of polymer electronic device. A wide-ranging and definitive coverage of this emerging field is provided for both academic and practicing scientists. The book is intended to enable readers with a specific background, e.g. polymer nanotechnology, to become acquainted with other specialist aspects of this multidisciplinary field. Part A of the book covers the fundamental of the key aspect related to the development and improvement of polymer thin film technology and part B covers more advanced aspects of the technology are dealt with nano-polymer layer which provide an up-to-date survey of current research directions in the area of polymer thin film and its application skills.

Thin Films: Preparation, Characterization, Applications

This book is about thin films; what they are, how they are prepared, how they are characterized, and what they are used for. The contents of this book not only showcase the diversity of thin films, but also reveals the commonality among the work performed in a variety of areas. The chapters in this volume are based on invited papers presented by prominent researchers in the field at a Symposium on \"Thin Films: Preparation, Characterization, Applications\" at the 221st National Meeting of the American Chemical Society held in San Diego, California. The coverage of the symposium was extensive; topics ranged from highly-ordered metal adlayers on well-defined electrode surfaces to bio-organic films on non-metallic nanoparticles. An objective of this book is for the readers to be able to draw from the experience and results of others in order to improve and expand the understanding of the science and technology of their own thin films systems.

A Refresher Guide to Thin Film Technology

Thin films have significantly impacted the present modern era of technology and are considered the backbone of advanced applications in various fields, such as optical devices, environmental applications, telecommunications devices, energy storage, photovoltaic solar cells, integrated circuits, and others. The critical issue for all applications of thin films depends on their morphology and stability. The morphology of thin films strongly depends on the deposition techniques. Hence due to its multidisciplinary nature, a background in thin film technology requires skills such as chemistry, physics, electrical engineering, and materials science and engineering

Silicon Based Thin Film Solar Cells

Silicon Based Thin Film Solar Cells explains concepts related to technologies for silicon (Si) based photovoltaic applications. Topics in this book focus on ‘new concept’ solar cells. These kinds of cells can make photovoltaic power production an economically viable option in comparison to the bulk crystalline semiconductor technology industry. A transition from bulk crystalline Si solar cells toward thin-film technologies reduces usage of active material and introduces new concepts based on nanotechnologies. Despite its importance, the scientific development and understanding of new solar cells is not very advanced, and educational resources for specialized engineers and scientists are required. This textbook presents the fundamental scientific aspects of Si thin films growth technology, together with a clear understanding of the properties of the material and how this is employed in new generation photovoltaic solar cells. The textbook is a valuable resource for graduate students working on their theses, young researchers and all people approaching problems and fundamental aspects of advanced photovoltaic conversion.

Thin Section Petrography, Geochemistry and Scanning Electron Microscopy of Archaeological Ceramics

Thin section petrography, geochemistry, scanning electron microscopy and X-ray diffraction are key scientific methods used to investigate the raw materials, origins and production technology of archaeological pottery, ceramic building materials, ancient refractories and plaster. Using over 400 colour figures of a diverse range of artefact types and archaeological periods from 50 countries worldwide, this book outlines the mineralogical, chemical and microstructural composition of ancient ceramics and provides comprehensive guidelines for their scientific study within archaeology. The core of the book is dedicated to the versatile approach of ceramic petrography. This is complimented by a detailed account of the principles of bulk instrumental geochemistry, as well as the SEM microanalysis and XRD characterisation of ceramics. The book is intended as a reference manual for research as well as a course text for specialist training on scientific ceramic analysis.

Metallurgical Coatings and Thin Films 1992

One of the increasingly important requirements for high technology materials is that they possess near-surface properties different to their bulk properties. Specific surface properties are generally achieved through the use of these films or coatings or by modifying the structure or composition of the near surface. This two-volume work contains 157 papers covering a wide range of topics involving films, coatings, and modified surfaces. All aspects of the development of deposition technologies are addressed including basic research, applied research, applications development and full scale industrial production. The work will be of interest to materials scientists, physicists, electronic, chemical and mechanical engineers, and chemists.

Organic Thin Films and Surfaces: Directions for The Nineties

Physics of Thin Films has been one of the longest running continuing series in thin film science consisting of 20 volumes since 1963. The series contains some of the highest quality studies of the properties ofvarious thin films materials and systems.In order to be able to reflect the development of todays science and to cover all modern aspects of thin films, the series, beginning with Volume 20, will move beyond the basic physics of thin films. It will address the most important aspects of both inorganic and organic thin films, in both their theoretical as well as technological aspects. Therefore, in order to reflect the modern technology-oriented problems, the title has been slightly modified from Physics of Thin Films to Thin Films.Edited by Abraham Ulman, Organic Thin Films and Surfaces: Directions for the Nineties will be the first volume to link two dynamic areas in the physical sciences--organic thin films and surface science. Contributions from leading experts in the field cover a range of important topics on the processing, characterization, and applications of organic thin films.

Thin Sheet Glass from Switzerland, Belgium, and the Federal Republic of Germany

In this third edition, more than 40 renowned authorities introduce and update chapters on the theory, fundamentals, techniques, and instrumentation of thin-layer chromatography (TLC) and high-performance thin-layer chromatography (HPTLC), highlighting the latest procedures and applications of TLC to 19 important compound classes and coverage of TLC applications by compound type. Easily adaptable to industrial scenarios , the Handbook of Thin-Layer Chromatography, Third Edition supports practical research strategies with extensive tables of data, offers numerous figures that illustrate techniques and chromatograms, and includes a glossary as well as a directory of equipment suppliers.

Handbook of Thin-Layer Chromatography

Thin-film solar cells are cheap and easy to manufacture but require improvements as their efficiencies are low compared to that of the commercially dominant crystalline-silicon solar cells. An optoelectronic model is formulated and implemented along with the differential evolution algorithm to assess the efficacy of grading the bandgap of the CIGS, CZTSSe, and AlGaAs photon-absorbing layer for optimizing the power-conversion efficiency of thin-film CIGS, CZTSSe, and AlGaAs solar cells, respectively, in the two-terminal single-junction format. Each thin-film solar cell is modeled as a photonic device as well as an electronic device. Solar cells with two (or more) photon-absorbing layers can also be handled using the optolelectronic model, whose results will stimulate experimental techniques for bandgap grading to enable ubiquitous small-scale harnessing of solar energy.

Theory of Graded-Bandgap Thin-Film Solar Cells

** The abstract is shortened due to advanced notations. See the PDF for the full abstract ** In this thesis, the aim is to understand mechanisms behind epitaxial growth, control the crystallinity and properties of grown films, and differentiate between two types of epitaxy: conventional epitaxy, driven by strong chemical bonds between the film and substrate, and van der Waals epitaxy (vdWE), characterized by weaker van der Waals forces, enabling stress-free growth without strict lattice matching. I investigated the epitaxial growth of transition metal oxides and nitrides (NiO, CrN, MoOx (x = 2, 3)) thin films synthesized by reactive magnetron sputtering on various substrates, including silicon, sapphire (c-plane and r-plane) and mica.

Growth and epitaxy of oxide thin films from conventional to van der Waals epitaxy

From New York Times bestselling author Bethenny Frankel, the book that started it all: Naturally Thin. Bethenny Frankel, reality TV star, “Queen of Cocktails,” and “Mommy Mogul” has always had a passion for preparing and enjoying healthful, natural foods and sharing that love. The New York Times bestseller Naturally Thin shows how anyone can banish their Heavy Habits, embrace Thin Thoughts, and enjoy satisfying meals, snacks, and drinks without the guilt. Armed with Bethenny’s rules, you will say: -I know when I am really hungry -When I’m really hungry, I look for high-volume, fiber-rich foods -I can have any food I want -I love the taste of real food With more than thirty simple, delicious recipes (including her famous SkinnyGirl Margarita), a one-week program to jump-start readers on the Naturally Thin lifestyle, and warm, witty encouragement on every page, Frankel serves up a book for a healthier and thinner life.

Naturally Thin

This comprehensive reference provided a systematic examination of both the theory and applications of thin liquid films - giving a critical review of major concepts and unresolved or controversial problems, as well as revealing experimental methods. It includes results previously unpublished. Combining the work of 20 leading researchers, Thin Liquid Films furnishes a fundamental overview of thermodynamics of thin liquid films. Generously illustrated with equations, tables and drawling and containing more than 2,200 citations to pertinent literature, this is an authoritative reference for physical, surface, and colloid chemists, biophysicists

and physicists; chemical engineers and advanced graduate students in chemistry, chemical engineering, biophysics and physics.

Cathodic Deposition of Thin Metallic Films

The author of the #1 New York Times bestseller 10-Day Green Smoothie Cleanse returns with this revolutionary guidebook filled with the crucial mental strategies that will provide the missing piece in your weight loss journey once and for all. After helping dieters lose over two-million pounds in two years, JJ Smith realized the most important, yet most overlooked, factor for permanent weight loss is mental mastery. In Think Yourself Thin, Smith helps you uncover the root of your struggle and address the spiritual or emotional issues tied to your eating behavior. By applying the strategies outlined in this book, you will have the tools you need to take control of your weight, and thus your health, and experience the joy of having your dream body. Divided into four parts, Smith's book uncovers the five psychological stages required to lose weight and keep it off. Smith also introduces the all-new SUCCESS System detailing the mental habits and approaches necessary for permanent weight loss. Filled with inspiring, motivational success stories and user-friendly principles that provide the guidance you need to eat in a manner that helps the body burn fat and lose weight, Think Yourself Thin makes long-term weight loss a reality by starting with what matters most.

Thin Liquid Films

Thin-layer chromatography (TLC) has become a common and much favoured separation technique in laboratories in widely varied fields in recent years. Much of the credit for the introduction of this technique into analytical practice at the l 2 end of the 1950s is due to E. Stahl • • This method is simple and is characterized by high separation ability and sufficient sensitivity3; however, some analysts feel that it has passed the peak in its development and will gradually be replaced by the more modem high-performance liquid chromatography (HPLC). This is undoubtedly a very important analytical technique utilizing the specific separa tion properties of a large number of sorbents and the possibility of regulating 4 the flow-rate of the mobile phase by adjusting the pressure • Standardization of the experimental conditions is simpler in HPLC than in TLC, where the activity of the sorbent and flow-rate of the eitlent in the thin layer depend markedly on the relative humidity of the laboratory atmosphere and on the composition of the gaseous phase in the elution chamber. In addition, systems for quantitative detection of the separated ~ones are better developed for HPLC than for classical TLC, where, until recently, cumbersome and often even insufficiently reproducible chemical or gravimetric analysis of the extracts of scraped-off spots or densitometry of the separated zones, located first by pyrolysis or reaction s with suitable detection agents, were the predominant determination methods .

Mechanics of Solids with Applications to Thin Bodies

Essay from the year 2009 in the subject Business economics - Miscellaneous, grade: 1,3, , language: English, abstract: Tradeoffs are inevitably entailed when effectively managing information technology within an enterprise. Over many years, thick client PC's were the first choice in order to deploy a wide range of services and applications. So-called thick client (also known as "fat" client) devices are computationally capable and flexible. However, those thick clients became a target point of innumerable worms, viruses, and other malware attacks which results in information leaks and organizational discipline as well as considerable effort to maintain and centrally control. Therefore, many companies take the advantages of the thin client technology into consideration in order to address the challenges organizations face with thick clients.

Think Yourself Thin

The ultimate cheat sheet that sets out a workable and flexible plan for successful weight loss to fit every lifestyle and diet choice. In this "worst-case diet survival handbook", nutritionist and founder of Foodtrainers™, Lauren Slayton offers strategies and tips to avoid the most disastrous diet booby traps. Along

with her no-nonsense nutrition and exercise advice, readers will discover that the missing component of most weight-loss schemes is planning. Planning to succeed and planning for the obstacles on the way to slim are as vital as what and when to eat and how to incorporate fat-burning activity into your day. All too many dieters give up when they hit a few road bumps created by work, family, socializing, travel, fatigue or indifference. Slayton comes to the rescue with: • The Big 10 “Do-Not-Pass-Go” Basics, from high protein breakfast to “closing the kitchen” after dinner! • Top Ten Things to Avoid to Get Healthy and Slim Down Fast • The 4 P’s -- Plan, Purchase, Prep and Promise -- to get and stay on track • The 4-Step Treat Training Strategy to survive the “Witching Hour” Dozens of smart, simple ways to cope with the big obstacles to slim: family, restaurants, travel, entertaining, alcohol and more. Slayton provides the know-how and the what-to-do-when-things-go-south to help readers keep on track, no matter what diet they follow.

Thin-Layer Chromatography with Flame Ionization Detection

This volume discusses the most recent developments in plasma physics and surface engineering related to the preparation and applications of nanostructured thin films and nanodispersion strengthened coatings. The book contains the following major sections: Hard and Tribological Coatings; Recent Progress in the Development of Plasma Deposition Equipment; Film Characterization, Control of Structure and Properties; Nanopowders and Nanoparticles in Surface Engineering Technologies; Biocompatible Thin Films. The chapters review the remarkable progress in these areas and provide examples of successful new industrial applications in plasma deposition, surface engineering, nanostructured thin films, and nanodispersion-strengthened coatings. Each chapter comes with a complete reference list to the relevant literature, making it an invaluable guide for engineers and researchers in these exciting fields. This book presents the latest scientific developments in nanostructured coating and deposition processes and suggests ideas on how to implement the latest breakthroughs in nanotechnology in mechanics, electronics, and bioengineering applications.

Emerging Technologies in Business. Thin Client Technology

HPTLC - High Performance Thin-Layer Chromatography

The Little Book of Thin

This volume comprises the expert contributions from the invited speakers at the 17th International Conference on Thin Films (ICTF 2017), held at CSIR-NPL, New Delhi, India. Thin film research has become increasingly important over the last few decades owing to the applications in latest technologies and devices. The book focuses on current advances in thin film deposition processes and characterization including thin film measurements. The chapters cover different types of thin films like metal, dielectric, organic and inorganic, and their diverse applications across transistors, resistors, capacitors, memory elements for computers, optical filters and mirrors, sensors, solar cells, LED's, transparent conducting coatings for liquid crystal display, printed circuit board, and automobile headlamp covers. This book can be a useful reference for students, researchers as well as industry professionals by providing an up-to-date knowledge on thin films and coatings.

Nanostructured Thin Films and Nanodispersion Strengthened Coatings

HPTLC - High Performance Thin-Layer Chromatography

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