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| Autore | Mattox D. M |
| Titolo | Handbook of physical vapor deposition (PVD) processing [[electronic resource] /] / Donald M. Mattox |
| Pubbl/distr/stampa | Amsterdam, : Elsevier, 2010 |
| ISBN | 1-282-73769-4<br>9786612737695<br>0-8155-2038-7<br>0-08-094658-5 |
| Edizione | [2nd ed.] |
| Descrizione fisica | 1 online resource (793 p.) |
| Disciplina | 671.735 |
| Soggetti | Physical vapor deposition<br>Electronic books. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Front Cover; Handbook of Physical Vapor Deposition (PVD) Processing; Copyright Page; Contents; Preface to First Edition; Preface to Second Edition; Acknowledgements; Acronyms; Biography; Chapter 1: Introduction; 1.1 Surface Engineering; 1.1.1 Physical Vapor Deposition (PVD) Processes; 1.1.2 Non-PVD Thin Film Atomistic Deposition Processes; 1.1.3 Applications of Vacuum-deposited Materials; 1.2 Thin Film Processing; 1.2.1 Stages of Fabrication; 1.2.2 Factors that Affect Film Properties; 1.2.3 Scale-Up and Manufacturability; 1.3 Process Documentation; 1.3.1 Process Specifications<br>1.3.2 Manufacturing Process Instructions (MPIs)1.3.3 Travelers; 1.3.4 Equipment and Calibration Logs; 1.3.5 Commercial/Military Standards and Specifications (Mil Specs); 1.4 Safety and Environmental Concerns; 1.5 Units; 1.5.1 Temperature Scales; 1.5.2 Energy Units; 1.5.3 Prefixes; 1.5.4 The Greek Alphabet; 1.6 Summary; Chapter 2: Substrate (""Real"") Surfaces and Surface Modification; 2.1 Introduction; 2.2 Materials and Fabrication; 2.2.1 Metals; 2.2.2 Ceramics and Glasses; 2.2.3 Polymers; 2.3 Atomic Structure and Atom-particle Interactions; 2.3.1 Atomic Structure and Nomenclature<br>2.3.2 Excitation and Atomic Transitions2.3.3 Chemical Bonding; 2.3.4 |

Probing and Detected Species; 2.4 Characterization of Surfaces and Near-surface Regions; 2.4.1 Elemental (Chemical) Compositional Analysis; 2.4.2 Phase Composition and Microstructure; 2.4.3 Molecular Composition and Chemical Bonding; 2.4.4 Surface Morphology; 2.4.5 Adsorption - Gases and Liquids; 2.4.6 Mechanical and Thermal Properties of Surfaces; 2.4.7 Surface Energy and Surface Tension; 2.4.8 Acidic and Basic Properties of Surfaces; 2.5 Bulk Properties; 2.5.1 Outgassing; 2.5.2 Outdiffusion
2.6 Modification of Substrate Surfaces2.6.1 Surface Morphology; 2.6.2 Surface Hardness; 2.6.3 Strengthening of Surfaces; 2.6.4 Surface Composition; 2.6.5 Surface ""Activation"" (""Functionalization""); 2.6.6 Surface ""Sensitization""; 2.7 Summary; Chapter 3: The ""Good"" Vacuum (Low Pressure) Processing Environment; 3.1 Introduction; 3.2 Gases and Vapors; 3.2.1 Gas Pressure and Partial Pressure; 3.2.2 Molecular Motion; 3.2.3 Gas Flow; 3.2.4 Ideal Gas Law; 3.2.5 Vapor Pressure and Condensation; 3.3 Gas-surface Interactions; 3.3.1 Residence Time; 3.3.2 Chemical Interactions
3.4 Vacuum Environment3.4.1 Origin of Gases and Vapors; 3.5 Vacuum Processing Systems; 3.5.1 System Design Considerations and ""Trade-Offs""; 3.5.2 Processing Chamber Configurations; 3.5.3 Equilibrium Conductance; 3.5.4 Pumping Speed and Mass Throughput; 3.5.5 Fixturing and Tooling; 3.5.6 Feedthroughs and Accessories; 3.5.7 Liners and Shields; 3.5.8 Fail-Safe Designs; 3.6 Vacuum pumping; 3.6.1 Mechanical Pumps; 3.6.2 Momentum Transfer Pumps; 3.6.3 Capture Pumps; 3.6.4 Hybrid Pumps; 3.7 Vacuum- and Plasma-Compatible Materials; 3.7.1 Metals; 3.7.2 Ceramic and Glass Materials; 3.7.3 Polymers
3.8 Assembly

Sommario/riassunto

This updated version of the popular handbook further explains all aspects of physical vapor deposition (PVD) process technology from the characterizing and preparing the substrate material, through deposition processing and film characterization, to post-deposition processing. The emphasis of the new edition remains on the aspects of the process flow that are critical to economical deposition of films that can meet the required performance specifications, with additional information to support the original material.  The book covers subjects seldom treated in the literature: substrate

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| Record Nr. | UNINA9910786332503321 |
| Autore | Constantine, of Rhodes, <active 10th century., > |
| Titolo | Constantine of Rhodes, on Constantinople and the Church of the Holy Apostles / / with a new edition of the Greek text by Ioannis Vassis ; edited by Liz James |
| Pubbl/distr/stampa | London ; ; New York : , : Routledge, , 2016 |
| ISBN | 1-317-16176-9<br>1-317-16177-7<br>1-315-57352-0<br>1-283-70570-2<br>1-4094-3168-1 |
| Descrizione fisica | 1 online resource (267 p.) |
| Altri autori (Persone) | JamesLiz<br>VassisIoannis |
| Disciplina | 881/.01 |
| Soggetti | Byzantine poetry |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | First published 2012 by Ashgate Publishing. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | section I. The poem -- section II. Constantine of Rhodes's poem and art history, by Liz James. |
| Sommario/riassunto | Constantine of Rhodes's tenth-century poem is an account of public monuments in Constantinople and of the Church of the Holy Apostles. On one level, the poem offers an account of what was visible but it cannot be read as a straightforward description. Rather, Constantine's work offers insights into Byzantine perceptions of works of art. This book supersedes the two previous editions of the poem, both dating to 1896, and provides the first full translation of the text. It consists of a new Greek edition of Constantine's poem, with an introductory essay, prepared by Ioannis Vassis, and a transla |