1. Record Nr. UNISA996199395203316

Autore	DiNardo N. John
Titolo	Nanoscale characterization of surfaces and interfaces / / N. John DiNardo
Pubbl/distr/stampa	Weinheim, [Germany] : , : VCH, , 1994 ©1994
ISBN	1-281-84293-1 9786611842932 3-527-61595-4 3-527-61594-6
Descrizione fisica	1 online resource (176 p.)
Disciplina	530.427 620.44
Soggetti	Surfaces (Physics) Scanning tunneling microscopy Nanotechnology
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.
Nota di contenuto	Nanoscale Characterization of Surfaces and Interfaces; Nanoscale Characterization of Surfaces and Interfaces; List of Symbols and Abbreviations; 1 Introduction; 2 Scanning Tunneling Microscopy (STM); 2.1 Historical Perspective; 2.2 Theory; 2.2.1 Electron Tunneling and STM Imaging; 2.2.2 Scanning Tunneling Spectroscopy (STS); 2.2.3 Inelastic Tunneling Spectroscopy; 2.2.4 Ballistic Electron Emission Microscopy (BEEM); 2.3 Instrumentation; 2.3.1 Microscope Design: STM Heads; 2.3.2 Tips; 2.3.3 Vibration and Shock Isolation; 2.3.4 Electronics; 2.3.5 Microcomputer Control 2.6.2 Surface Diffusion2.6.3 Stepped Surfaces; 2.6.4 Adsorbate-Induced Reconstructions of Metal Surfaces; 2.6.5 Growth of Metallic Adlayers; 2.6.6 Resistivity in Polycrystalline Metals - Scanning Tunneling Potentiometry; 2.7 Insulators; 2.8 Layered Compounds .; 2.9 Charge Density Wave Systems; 2.10 Superconductors; 2.11 Molecular Films, Adsorbates, and Surface Chemistry; 2.11.1 Molecular Imaging; 2.11.2 Adsorption and Surface Chemistry; 2.12 Electrochemistry at

Liquid-Solid Interfaces; 2.1 3 Biological Systems; 2.14 Metrological Applications; 3 Atomic Force Microscopy
3.1 Atomic Force Imaging3.1.1 Graphite; 3.1.2 Insulators; 3.1.3 Metals; 3.1.4 Films; 3.1.5 Polymer Surfaces and Metal Films on Polymer Substrates; 3.1.6 Biological Molecules; 3.1.7 Adsorption Dynamics of Biological Molecules in Real Time; 3.2 Nanoscale Surface Forces; 3.3 Nanotribology; 3.4 Non-Contact Imaging; 3.4.1 Van der Waals Forces; 3.4.2 Electrostatic Forces; 3.4.3 Magnetic Forces; 4 Manipulation of Atoms and Atom Clusters on the Nanoscale; 4.1 Transfer of Atoms and Atom Clusters Between Tip and Sample; 4.2 Tip-Induced Lateral Motion of Atoms on Surfaces
4.3 Nanoscale Modification by Tip-Induced Local Electron-Stimulated Desorption4.4 Nanoscale Chemical Modification; 4.5 High-Temperature Nanofabrication; 4.6 Nanoscale Surface Modification Using the AFM; 4.7 Towards Nanoscale Devices; 5 Spin-offs of STM - Non-Contact Nanoscale Probes; 5.1 Scanning Near-Field Optical Microscope (SNOM); 5.2 Photon Scanning Tunneling Microscope (PSTM); 5.3 Scanning Thermal Profiler (STP); 5.4 Scanning Chemical Potential Microscope (SCPM); 5.5 Optical Absorption Microscope (OAM); 5.6 Scanning Ion Conductance Microscope (SICM); 6 Acknowledgements; 7 References

Sommario/riassunto

Derived from the highly acclaimed series Materials Science and Technology, this book provides in-depth coverage of STM, AFM, and related non-contact nanoscale probes along with detailed applications, such as the manipulation of atoms and clusters on a nanometer scale. The methods are described in terms of the physics and the technology of the methods and many high-quality images demonstrate the power of these techniques in the investigation of surfaces and the processes which occur on them.Topics include:Semiconductor Surfaces and Interfaces * Insulators * Layered Compounds * Charg

2. Record Nr. UNINA9910437833303321

Titolo	Nutritional and Physiological Functions of Amino Acids in Pigs / / edited by Francois Blachier, Guoyao Wu, Yulong Yin
Pubbl/distr/stampa	Vienna : , : Springer Vienna : , : Imprint : Springer, , 2013
ISBN	3-7091-1328-8
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (305 p.)
Altri autori (Persone)	BlachierFrancois WuGuoyao YinYulong
Disciplina	636.40892
Soggetti	Physiology Veterinary medicine Food science Animal Physiology Veterinary Science Food Science
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	Introduction -- Anatomical characteristics of the gastrointestinal tract and digestive glands of pigs during development -- Development of the gastrointestinal tract in pigs -- Development of the digestive glands in pigs -- Development and renewal of the intestinal villi in pigs -- Terminal digestion, amino acid absorption/metabolism and microbiota in the pig intestine during development -- Terminal digestion of polypeptides and amino acid absorption by the pig intestine epithelial cells during development -- Developmental amino acid metabolism in the pig small and large intestine epithelial cells -- Development of the micro-ecological system in small and large intestine of piglets -- Physiological functions of amino acids in pigs -- Structure and functions of amino acids: an overview -- Synthesis and degradation of proteins in pigs -- Factors that affect amino acid metabolism in pigs -- Amino acids and hormone secretion in pigs -- Amino acids, gene expression and cell signaling in the pig intestine -- Amino acids and immune functions -- Amino acids and obesity,

	diabetes and dyslipidemia -- Methodology for research on amino acid -- Methods for amino acid analysis -- Surgical techniques used for research in amino acid nutrition -- Measurement of protein digestibility in pigs -- Measurement of synthesis and degradation of proteins -- Methods for measuring amino acids of endogenous origin in pig intestines.
Sommario/riassunto	This book provides developmental data regarding piglets (with a focus on the gastrointestinal tract), data related to amino acid metabolism in pigs, data related to nutritional and physiological functions of amino acids in pigs, nutritional requirements for amino acids in pigs, signaling roles of amino acids, methodological aspects in amino acid research and the pig model for studying amino acid-related human diseases.