1. Record Nr. UNISA996202862703316

Titolo	63rd Conference on Glass Problems [[electronic resource]] : a collection of papers presented at the 63rd Conference on Glass Problems : October 22-23, 2002, Fawcett Center for Tomorrow, The Ohio State University / / Charles H. Drummond III, editor
Pubbl/distr/stampa	Westerville, OH, : American Ceramic Society, c2003
ISBN	1-282-31467-X 9786612314674 0-470-29477-9 0-470-29522-8
Descrizione fisica	1 online resource (306 p.)
Collana	Ceramic engineering & science proceedings, , 0196-6219 ; ; v. 24/1
Altri autori (Persone)	DrummondCharles H (Charles Henry)
Disciplina	666.1
Soggetti	Glass manufacture Glass
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"The conference was sponsored by the Departments of Materials Science and Engineering at the Ohio State University and the University of Illinois at Urbana-Champaign."-- p. vii.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	63rd Conference on Glass Problems; Contents; Foreword; Preface; Acknowledgments; TV-Panel Production: The Simulation of the Forming Process; Model Based Control of Glass Melting Furnaces and Forehearths; Modeling of Glass Melting Furnaces and Validation of Models; State of the Art in Glass Melt Tank Designs and Construction; A Technical and Economic Assessment of Efforts t o Advance Glass Melting Practices; Ceramic Sensors for the Glass Industry; Heating of Glass Forming Batch Blankets; Modern Recycling Technologies in Glass - A Survey of the State of the Art The Next Step Up in the Evolution of the Dog-House Development and Commercialization of the Next Generation Oxygen/Fuel Burner; Bubbles and Blister; Sampling Glass Raw Materials; Criteria for the Selection of Refractories for Special Glass Meting Tanks; Performance of Fusion-Cast a-p Alumina Crowns in Industrial Oxy-Fuel Furnaces: Post-Campaign Experience.; Furnace Life Extension: Debris Removal and Ceramic Welding; ACT^^ Platinum Coatings - Complete Protection

for ZAC Furnace Blocks; Glass Tank Reinforcements
Casting of a Chrome-Alumina Monolithic Lining for Melting Insulation Fiber Glass in a Cold-Top Electric Melter Ceramic Welding Update: Innovation Drives Material Development and Application Technique; Using Oxygen Enrichment to Extend Regenerative Furnace Life and Enhance Glass Production

Sommario/riassunto	This volume is part of the Ceramic Engineering and Science Proceeding (CESP) series. This series contains a collection of papers dealing with issues in both traditional ceramics (i.e., glass, whitewares, refractories, and porcelain enamel) and advanced ceramics. Topics covered in the area of advanced ceramic include bioceramics, nanomaterials, composites, solid oxide fuel cells, mechanical properties and structural design, advanced ceramic coatings, ceramic armor, porous ceramics, and more.

2.

Record Nr.	UNINA9910773489103321
Autore	Clagett Helen Lord
Titolo	Guide to the Law and Legal Literature of Paraguay / / by Helen L. Clagett
Pubbl/distr/stampa	Washington : , : The Library of Congress, , 1947
Descrizione fisica	1 online resource (vi, 59 pages)
Collana	Latin American Series (Library of Congress), ; ; 14
Disciplina	349.89
Soggetti	Legal research - Paraguay Law - Paraguay
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.

3. Record Nr. UNISA996203158703316

Autore	Budevski E (Evgeni)
Titolo	Electrochemical phase formation and growth [[electronic resource]] : an introduction to the initial stages of metal deposition / / E. Budevski, G. Staikov, W.J. Lorenz
Pubbl/distr/stampa	Weinheim ; ; New York, : VCH, c1996
ISBN	1-281-75852-3 9786611758523 3-527-61493-1 3-527-61492-3
Descrizione fisica	1 online resource (424 p.)
Collana	Advances in electrochemical science and engineering
Altri autori (Persone)	StaikovGeorgi LorenzW. J
Disciplina	541.37 670.7/32 670.732
Soggetti	Electroplating Metals - Surfaces Crystal growth
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 (p. [343]-380) and indexes.
Nota di contenuto	Electrochemical Phase Formation and Growth; Contents; 1 Fundamentals of Electrocrystallization of Metals; 1.1 Thermodynamic and Kinetic Aspects; 1.2 Metal Deposition Mechanisms; 1.3 Topics of this Book; 2 Crystalline Metal Surfaces; 2.1 Structural Aspects; Close-packed 2D and 3D crystal structures; Crystal imperfections and surface inhomogeneities; Surface reconstruction; Surface roughness and the kink position; Step roughness; 2.2 Atomic Dynamics; Atom exchange frequencies; Local, partial, and overall current densities; Kink atoms and the Nernst equilibrium potential Exchange current density of kink atomsConcentration of adatoms; Exchange current density of adatoms; Mean residence time and surface displacement of adatoms; 2.3 Surface Profile Mobility; Surface diffusion and mean displacement of adatoms; Surface diffusion . The exact solution; Direct transfer; Current density on a stepped crystal face; 2.4

Conclusions; 3 Underpotential Deposition of Metals-2D Phases; 3.1 Historical Background; 3.2 Phenomenology; 3.3 Thermodynamics; Thermodynamic formalism; Adsorption isotherm models; Experimental results; 3.4 Structures of 2D Meads Phases
Degree of registryInternal strain; Electrochemical results; Comparative and ex situ UHV results; In situ surface analytical results; 3.5 Kinetics; Quasi-homogeneous substrate surface approach; Inhomogeneous substrate surface approach; Phase transitions; 3.6 2D and 3D Me-S Alloy Formation; Phenomenology; Thermodynamics; Structures of 2D and 3D Me-alloys; Kinetics; 3.7 Conclusion; 4 Initial Stages of Bulk Phase Formation; 4.1 Equilibrium Form of Crystals and Forms of Growth; Equilibrium form; Crystal-substrate interaction; Gibbs-Wulff-Kaishew theorem; Two dimensional crystal; Forms of growth
Energy of cluster formation3D nucleation; 2D nucleation; Gibbs-Thomson equation; 4.2 Nucleation Rate; Classical approach (Volmer and Weber); Kinetic approach (Becker and Doering); Binding energies and energy of nucleation; Atomistic model; Nucleation rate equation; Small cluster model; Experimental results; 4.3 3D Phase Formation on UPD Modified Foreign Substrate Surfaces; UPD-OPD transitions; Nucleation and growth; Epitaxy; Experimental results; 4.4 Conclusions; 5 Growth of Crystalline Faces; 5.1 Dislocation-Free Crystal Faces; Preparation of single crystal faces by electrodeposition
Double pulse techniqueNucleation rate-overvoltage dependence; Time distribution of the nucleation events; Form of growth of monatomic layers; Propagation rate of monatomic steps; Space distribution of nucleation events; Propagation rate of polyatomic steps; Mechanism of metal deposition and adatom concentration; 5.2 Growth Kinetics of Perfect Faces; Mononuclear layer-by-layer growth; Multinuclear monolayer formation; Deposition kinetics on quasi-perfect crystal faces; 5.3 Real Crystal Faces; Dislocations; Spiral growth mechanism; Theory of spiral growth; Growth morphology
Steady state and transient current densities

Sommario/riassunto

Electrochemical processes and methods are basic to many important scientific disciplines, materials science and nanotechnology being only two keywords. For the first time in more than twenty years this volume presents a critical survey of the foundations, methodology and applications of electrochemical phase formation and growth processes. Written by a team of three internationally renowned authors, it is an invaluable source of information for all scientists concerned with electrocrystallization of metals or the in-situ characterization of electron-conducting surfaces. Not only the numerous i