

1. Record Nr.	UNINA9910141273803321
Titolo	Advances in fusion and processing of glass III [[electronic resource]] : proceedings of the 7th International Conference on Advances in Fusion and Processing of Glass, July 27-31, 2003 in Rochester, New York // edited by James R. Varner, Thomas P. Seward III, Helmut A. Schaeffer
Pubbl/distr/stampa	Westerville, Ohio, : American Ceramic Society, c2004
ISBN	1-280-67453-9 9786613651464 1-118-40594-3 1-118-40596-X
Descrizione fisica	1 online resource (498 p.)
Collana	Ceramic transactions, , 1042-1122 ; ; v. 141
Altri autori (Persone)	VarnerJames R SewardThomas P SchaefferHelmut A
Disciplina	666.1042 666.12 666/.12
Soggetti	Glass melting Glass fusing Glass - Bonding 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	Advances in Fusion and Processing of Glass III; In Memoriam; Contents; Preface; Acknowledgements; Advances in the Glass Melting Process; Analysis of Advanced and Fast Fining Processes for Glass Melts; The Glass Melting Process-Treated as a Cyclic Process of an Imperfect Heat Exchanger; Electromagnetic Induction Heating in Molten Glass at 60 Hz with No Susceptors; Full Oxy Conversion of a Float Furnace Equipped with Separated Jets ALGLASS FC Burners: From OD Model to 3D Characterization; A Method for Making Arsenic Oxide in Cullet More Active as a Fining Agent Redox and Foaming Behavior of E-Glass MeltsComparison of Measured

and Calculated Gas Release by Fining Agents; Bubble Continuum Model; Selective Batching for Improved Commercial Glass Melting; Observation and Analysis of Dissolution Kinetics, Supported by Microscopy; Characterization of Glass Melts/Glass Melt Properties; Inert Gas Solubility in Glasses and Melts of Commercial Compositions; Water Diffusion and Solubility in Glasses and Melts of Float, Container, and Other Commercial Compositions; The Effects of Vanadium Additions on the Surface Tension of Soda Lime Silicate Melts
Modeling of Glass Making Processes for Improved Efficiency: High Temperature Glass Melt Property Database for Modeling Materials for Glassmaking; Analytical Models for High-Temperature Corrosion of Silica Refractories in Glass-Melting Furnaces; How the Properties of Glass Melts Influence the Dissolution of Refractory Materials; Evaluation of Crown Refractories Under Oxyfuel Environment; Kinetics and Mechanisms of Niobium Corrosion in Molten Glasses; Glass Tank Reinforcements; Glass Composition Dependence of Metal Corrosion by Molten Glasses
Corrosion of Superalloys in Molten Glass-Electrochemical Characterization of the Passive State
Electrochemical Study of Cobalt-Base Superalloy Corrosion by a Molten Glass: Influence of Alloy Microstructure and Chemical Composition of the Glass; Glass-Silicide Coverings; Advances in Glass Forming; Mechanical Strength Increase During the Forming Process of Glass; Optimization of the Heat Transfer During Forming of Glass; Effect of Mold to Glass Heat Transfer on Glass Container Forming; Investigations on Sticking Temperature and Wear of Mold Materials and Coatings
Basic Considerations and Technical Aspects Concerning Glass Conditioning
Polyvalent Elements and Redox Behavior; Redox-Dependent Glass Properties and Their Control Under Industrial Conditions; Using Additives for Color Control in Copper-Containing Glasses; Decolorization of Amber Glass; Redox Couples in Glass-A Series of New Data; Electrochemical Study in Molten Glasses of the Multivalent Systems of Nickel; Effects of Composition and Forming on Structure and Properties; Effect of Water in the Melting Atmosphere on the Transformation Temperature of Commercial Glasses
Dependence Between the Color of Titanium Crystal Glasses and the Optical Basicity

Sommario/riassunto

Glass continues to be a material of great scientific and technological interest; however, the economic pressures on the glass industry, the emphasis on global markets, and the worldwide attention to energy and environmental conservation continue to increase. Forty-seven papers offer new solutions to the challenges of glass manufacturing, particularly as they pertain to melting and forming.
