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Altri autori (Persone)	VarnerJames R SewardThomas P SchaefferHelmut A
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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.
