

1. Record Nr.	UNISA996212907403316
Titolo	Melt chemistry, relaxation, and solidification kinetics of glasses [[electronic resource] ] : proceedings of the 106th Annual Meeting of the American Ceramic Society : Indianapolis, Indiana, USA (2004) // editors, Hong Li ... [et al.]
Pubbl/distr/stampa	Westerville, Ohio, : American Ceramic Society, c2005
ISBN	1-280-67566-7 9786613652591 1-118-40806-3 1-118-40807-1
Descrizione fisica	1 online resource (260 p.)
Collana	Ceramic transactions ; ; v. 170
Altri autori (Persone)	LiHong
Disciplina	666.1042 666/.1042
Soggetti	Glass Glass manufacture High temperature chemistry Solidification Relaxation phenomena
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 indexes.
Nota di contenuto	Melt Chemistry, Relaxation, and Solidification Kinetics of Glasses; Contents; Preface; Melt chemistry, Structure, and Properties; High- Temperataure Raman Spectroscopy of Alkali Silicate Glass Melts*; Control of Liquid Properties and Structure via Melt Chemistry*; Calorimetric Studies of the Structural Heterogeneity of Silicate Liquids*; Anisotropic Alkali Silicate Glasses by Frozen-In Strain*; Amorphous Materials Engineering: Designing Structure in Liquid and Glassy Metal- Halide Networks*; Structure of Glass-Forming Melts-Lanthanide in Borosilicates Modified Associate Species Approach to Phase Equilibria Prediction for Oxide Glass Systems Relaxation Phenomena; Structural Influences on the Dynamic Light Scattering from Glassforming Liquids; Harmonization of Viscosimetric and Thermodynamic Data for Industrial Multi-

Component Glasses and Glass Melts\*; Mechanical Spectroscopy of Natural and Synthetic Silicate Glasses and Melts; Improved Composition-Property Relations in Silicate Glasses, Part I: Viscosity; Nucleation and Crystallization; Coupled Processes in Nucleation\*; Sintering Kinetics of Crystallizing Glass Particles. A Review\* Design of Energy and Environmentally Friendly Fiberglass Compositions Derived from the Quaternary SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>-CaO-MgO Phase Diagram - Part I: Structures, Properties, and Crystallization Potential of Eutectic and Selected Multi-Oxide E-Glass Compositions\*Some Aspects of Glass and Glass Ceramics Formation of Stoichiometric Compositions in the RO-Al<sub>2</sub>O<sub>3</sub>-B<sub>2</sub>O<sub>3</sub> Systems; Crystallization of a Li<sub>2</sub>O-2SiO<sub>2</sub> Glass Under High Hydrostatic Pressures; Effect of Isomorphic Substitutions on Crystallization of Mica and Amphibole Phases in Glasses of the System SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>-B<sub>2</sub>O<sub>3</sub>-CaO-MgO-Li<sub>2</sub>O-(K,Na)<sub>2</sub>O-F Properties of Glass-Ceramics Synthesized from Hydrometallurgical Zinc WasteAuthor Index; Keyword Index

---

Sommario/riassunto

This volume will summarize the most recent development in experimentation, computation, and theory on chemistry of glass forming melt, including melt structure modeling and melt structure and characterizations. This volume provides a timely update on the advances in glass basic science research and development.

---