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Soda-lime-silica Glass; Ionic Conducting Glass-ceramics; Surface Nucleation on Glasses; Surface Crystallization of Lithium Diborate Glass; Cordierite Crystal on the Surface of a Cordierite Glass; Surface Nucleation on Cordierite Glass; Nucleation on Scratches, Cracks, and Bubbles; Crystals on Bubble Surfaces in a Diopside Glass; Surface Crystallization on a Calcium Phosphate Glass; Surface Crystallization on Ca-rich Diopside Glass; Surface Crystallization on Ca-rich Diopside Glass

Wollastonite Needles in a Commercial Window (Soda-lime-silica) Glass  
Needle-like Crystals on CaO-Li<sub>2</sub>O-SiO<sub>2</sub> Glass; "Onion-rings" 1Na<sub>2</sub>O.  
2CaO.3SiO<sub>2</sub> Crystals on the Surface an Isochemical Glass; Laser-induced Surface Crystallization of Sm<sub>2</sub>O<sub>3</sub>-Bi<sub>2</sub>O<sub>3</sub>-B<sub>2</sub>O<sub>3</sub> Glass; Viscous Sintering with Concurrent Crystallization; Sintering with Concurrent Surface Crystallization of Diopside Glass Spheres; Sintering with Concurrent Crystallization of Two Diopside Glass Spheres; Sintering and Surface Crystallization of Spherical Soda-lime-silica Glass Particles; Eutectic Crystallization

Crystallization Propagating from the Surface of a CaO-Li<sub>2</sub>O-SiO<sub>2</sub> Glass  
Eutectic Crystallization on a CaO-Li<sub>2</sub>O-SiO<sub>2</sub> Glass; Eutectic Crystallization of CaO-Li<sub>2</sub>O-SiO<sub>2</sub> Glass; Hummingbird-like Crystals on the Surface of a Eutectic CaO-Li<sub>2</sub>O-SiO<sub>2</sub> Glass; Orchid-like Crystallization in a Eutectic CaO-Li<sub>2</sub>O-SiO<sub>2</sub> Glass; Star-fruit-like Crystals in a Eutectic Glass; Cracks and Bubbles in Glass-ceramics; Self-cracking of Crystals in Isochemical Glass; Spontaneous Crack Propagation in a Bioactive Glass-ceramic; Toughening of a Glass-ceramic by Crack Detection

Toughening of a Dental Glass-ceramic by Crack Detection

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#### Sommario/riassunto

A ""must-have"" for materials engineers, chemists, physicists, and geologists, this is one of the first ""coffee-table"" books in the field of glass science. Containing over fifty beautiful micrographs, the book reflects 35 years of original research by a highly regarded authority in the field. It contains 50 slides culled from tens of thousands of images on glass crystal nucleation, growth, and crystallization. The images represent glass crystallization mechanisms, including internal, surface, homogeneous, heterogeneous, and eutectic, crystal nucleation and growth.

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