1. Record Nr. UNINA9910958531203321

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Titolo	Cubic zirconia and skull melting / / Yu.S. Kuzminov, E.E. Lomonova and V.V. Osiko
Pubbl/distr/stampa	Cambridge, : Cambridge International Science Publishing, 2008
ISBN	1-282-05881-9 9786612058813 1-907343-63-6 1-904602-90-8
Descrizione fisica	xiv, 346 p. : ill
Altri autori (Persone)	LomonovaE. E (Elena Evgenevna) OsikoV. V
Disciplina	548.86
Soggetti	Induction heating Crystals
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
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Sommario/riassunto

A new method of production of high-temperature dielectric crystals, including cubic zirconia, glasses and melted ceramic materials, is discussed. The method is based on direct induction melting in a cold container. The physical fundamentals of the technology and equipment are described, and the possibilities and advantages of the new technology are indicated. The properties of the produced materials are discussed. Special attention is given to cubiz zirconia crystals which cannot be produced by other methods.