

1. Record Nr.	UNINA9910816627903321
Titolo	Isotopes in vitreous materials // edited by Patrick Degryse, Julian Henderson and Greg Hodgins
Pubbl/distr/stampa	Leuven, Belgium : , : Leuven University Press, , 2009 ©2009
ISBN	94-6166-051-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (165 pages) : illustrations, maps
Collana	Studies in archaeological sciences
Altri autori (Persone)	DegrysePatrick HendersonJulian <1953-> HodginsGregory
Disciplina	930.1
Soggetti	Archaeometry - Methodology Glass - Analysis
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.
Nota di contenuto	Isotopes in Vitreous Materials; Table of Contents; List of Illustrations; List of Tables; Isotopes in vitreous materials, a state-of-the-art and perspectives; Introduction; Possibilities: relevance of the technique; Contributions in this volume; Impossibilities: limitations of the technique; Accessibility: new techniques; Perspectives; References; Isotopic composition of glass from the Levant and the south-eastern Mediterranean Region; Introduction; Raw materials; Neodymium isotopes; Oxygen isotopes; Lead isotopes; Predictive provenancing: HIMT glass Comparison and discrimination: plant ash glass; Discussion and conclusion; Acknowledgements; References; Appendix: analytical methods; Neodymium and strontium isotopes in the provenance determination of primary natron glass production; Introduction; Glass provenancing; Glass provenancing and elemental analysis; Glass provenancing and isotopes; Methodology; Sampling; Chemical analysis; Archaeological context; Sagalassos; Maastricht; Kelemantia; Bocholtz; Tienen; Results; Discussion; Conclusion; Acknowledgements; References; The provenance of Syrian plant ash glass: an isotopic approach

Introduction; Glass production at al-Raqqa; The principles of isotope analysis and how isotopes contribute; Methodology; Results; Strontium; Neodymium; Discussion; Conclusions; Acknowledgements; References; The implications of lead isotope analysis for the source of pigments in Late Bronze Age Egyptian vitreous materials; Introduction; Results; Pigments: Egyptian blue and green frit; Glasses; Faience; Discussion; Conclusions; Acknowledgements; References; Kelp in historic glass: the application of strontium isotope analysis; Introduction
Strontium isotopic ratios in nature and their use in geology and related disciplines; Strontium isotope analysis of skeletal material; Strontium isotope analysis of glass; Where does the strontium in glass come from?; Strontium in some post-medieval glass; Samples and Methods; Results; Conclusion; References; Medieval and postmedieval Hispano-Moresque glazed ceramics: new possibilities of characterization by means of lead isotope ratio determination by Quadrupole ICP-MS; Introduction; Experimental; Materials and methods; Sample preparation; Results and discussion; Conclusions; Acknowledgements
References; PLS Regression to Determine Lead Isotope Ratios of Roman Lead Glazed Ceramics by Laser Ablation TOF-ICP-MS; Introduction; Experimental; PLS Modeling; Standards; Samples; Instrumentation; Data Reduction Procedures; Results; Calibration; Lead-Glazed Samples; Discussion; Calibration; Measurement of Lead Isotope Ratios of Roman Lead Glazes; Conclusion; Acknowledgements; References; List of Authors; The Editors

Sommario/riassunto

For all archaeological artefactual evidence, the study of the provenance, production technology and trade of raw materials must be based on archaeometry. Whereas the study of the provenance and trade of stone and ceramics is already well advanced, this is not necessarily the case for ancient glass. The nature of the raw materials used and the geographical location of their transformation into artefacts often remain unclear. Currently, these questions are addressed by the use of radiogenic isotope analysis.
