Record Nr. UNINA9910811273103321 13th International Ceramics Congress: proceedings of the 13th **Titolo** International Ceramics Congress, part of CIMTEC 2014-13th International Ceramics Congress and 6th Forum on New Materials, June 8-13, 2014, Montecatini Terme, Italy. Part F / / edited by Pietro Vincenzini, World Academy of Ceramics and National Research Council, Italy: co-edited by Kenneth J.D. MacKenzie, Victoria University of Wellington, New Zealand, Michele Dondi, CNR-ISTEC, Italy, James P. Bennett, NETL-USDOE, USA Faenza, Italy:,: TTP,, [2014] Pubbl/distr/stampa ©2014 **ISBN** 3-03826-688-4 Descrizione fisica 1 online resource (333 p.) Advances in science and technology, , 1662-8969; ; volume 92 Collana Disciplina 620.14 Soggetti Ceramics Ceramic materials Ceramic engineering 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 index. Nota di contenuto 13th International Ceramics Congress - Part F; Preface; Table of Contents; Chapter 1: Geopolymers and Geocements; Fabrication and Characterization of Geopolymers from Japanese Volcanic Ashes; Addition of Ammonium Molybdate in Geopolymer Formulation; Alkali-Activated Fly Ash Foams - Synthesis, Chemo-Physical Properties and Microstructure Modeling; Effect of the Reactivity of the Alkaline Solution and the Metakaolin on the Geopolymer Formation; Ceramic Waste as New Precursors for Geopolymerization; Synthesis of Inorganic Polymers Using a CaO-Al2O3-FeO-SiO2 Slag Studies of Natural and Accelerated Carbonation in Metakaolin-Based GeopolymerA Taguchi Approach for the Synthesis Optimization of Metakaolin Based Geopolymers; Mechanical Performances and Corrosion Resistance of Reinforced Fly Ash Geopolymer Mortars; The

Influence of Short Fibres and Foaming Agents on the Physical and Thermal Behaviour of Geopolymer Composites; Different Treatment

Application of Illite Clay for Low Temperature Ceramics; btaining of Lightweight Geopolymer Using Ash from Thermal Power Plants; Application of Fly Ash-Based Geopolymer for Structural Member and Repair Materials

Durability of Fly Ash Geopolymer Mortars in Corrosive Environments, Compared to that of Cement MortarsChapter 2: Science and Technology for Silicate Ceramics: Chapter 2-A - Functionalized Surfaces: Antibacterial and Self-Cleaning Coatings for Silicate Ceramics: A Review: Nanocomposite Photocatalyst Based on Lavered Double Hydroxides (LDHs) Associated with TiO2; Solar Reflectance of Glazed Tiles; Chapter 2-B - Manufacturing; Development of a Semi-Wet Process for Ceramic Floor Tile Granule Production; Determination of Dry Grinding Properties of Floor Tile Wastes Effect of Alternative Materials Added to the Plaster CompositionPreparation of Exfoliated Melamine Modified Mica/Polyamide-6 Nanocomposite and its Properties; Chapter 2-C -New Products and Challenges; Towards Rational Design of Porcelain Tile Glazes; New Ceramic Pigments for the Coloration of Ceramic Glazes: Design of a Cool Color Glaze for a Solar Reflective Tile: Study of the Variables that Lead to Hue Variations on Tiles Decoration Based on Silicon Cylinder Technique Laser Engraving Method; Vitrification and Sinter-Crystallization of Iron-Rich Industrial Wastes Development of the Alternative Whitening System for Zirconium Silicate Substition in Porcelain Tile BodiesThe Effect of Lithium Alumina Silicate Phases on Elastic Modulus of Porcelain Tiles; Chapter 2-D -Characterization Studies: Characterization of Silicate Ceramics Using Ultrasonics Test Method: Microstructure of Ceramic Brick Contaminated by Magnesium Sulphate: Composition and Ceramic Characteristics of Cretaceous Clays from Morocco; Study of Processing Techniques for Nepheline Syenitic Raw Material Exploitation; Chapter 3: Ceramic Refractories

Creep Testing of Refractories at Service Related Load Levels and Application for Material Simulation

Sommario/riassunto

Collection of selected, peer reviewed papers from the 13 th International Ceramics Congress, part of CIMTEC 2014-13 th International Ceramics Congress and 6 th Forum on New Materials, June 8-13, 2014, Montecatini Terme, Italy. The 45 papers are grouped as follows: Chapter 1: Geopolymers and Geocements, Chapter 2: Science and Technology for Silicate Ceramics, Chapter 2-A - Functionalized Surfaces, Chapter 2-B - Manufacturing, Chapter 2-C - New Products and Challenges, Chapter 2-D - Characterization Studies, Chapter 3: Ceramic Refractories.