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Nota di contenuto	13th International Ceramics Congress - Part B; Preface; Table of Contents; Chapter 1: Novel Routes for Ceramics Synthesis and Processing; Effect of Calcining Temperature of Si3N4 Poly-Hollow Microspheres on the Properties of the Porous Si3N4 Ceramics Prepared by Aqueous Gelcasting; Two-Step Synthesis of Ultrafine and Nanosized Powders of Tungsten Oxide and Carbide; SiOC Composite Structures for Intermediate Service Temperatures with Increased Friction Properties; Microwave Energy Application for Materials' Processing and Environmental Technology Microwave Absorbency Change of Nitride Powders under Vacuum HeatingNew Developments of FAST/SPS Tool Materials; Microwave Technique: An Innovated Method for Sintering -Eucryptite Ceramic Materials; Graphene Covered Alumina Nanofibers as Toughening Agent in Alumina Ceramics; Reactive Sintering of TaB2 Using Spark Plasma Sintering Method; Lithography-Based Ceramic Manufacturing: A Novel

Technique for Additive Manufacturing of High-Performance Ceramics; 3D Printing of Calcia-Based Ceramic Core Composites; Strong-Gravity Experiments on Perovskite-Type Oxides
Laser Synthesis Features of Composite Ceramics Y3Al5O12-Y2Ti2O7-Al2O3-Al2TiO5Chapter 2: SHS Ceramics; Combustion of Gasless System under One-Sided Loading; New Results on Structural Macrokinetics Obtained on Multilayer Nanofoils; Carbonaceous Refractory Materials on SHS-Technology; Synthesis and Luminescence Properties of a Red Nitride Phosphor (CaAlSiN3:Eu2+) for White Light LED Applications; Coupling SHS and SPS Processes; Chapter 3: Ceramics Joining; A Critical Review on Modeling of Fracture Behavior of Ceramic Joints; On the Role of TiC in the Carbon Steel-Titanium Joining Transmission Electron Microscopy of Interfaces in Diffusion-Bonded Silicon Carbide CeramicsCompact, Ceramic Heat Exchangers and Microchannel Devices: Joining and Integration; Brazing of Metals, Alloys and Ceramics Using Rapidly Quenched Ribbon-Type Filler Metal STEMET; Characterization of Furnace Sintered Mullite and Oxide Ceramic Matrix Composites (O-CMC) by Using Glass Solders; Influencing Factors on the Reactive Wetting of Cu-Sn-Ti- and Ag-Cu-Ti-Alloys on Silicon Carbide - Microstructural Observations, Effects and Multivariate Modelling; Keywords Index; Authors Index

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 25 papers are grouped as follows: Chapter 1: Novel Routes for Ceramics Synthesis and Processing, Chapter 2: SHS Ceramics, Chapter 3: Ceramics Joining.