

ISSN: 2161-7554

Vol.1, No.1, April 2011



New Journal of Glass and Ceramics

ISSN: 2161-7554



www.scirp.org/journal/njgc

Journal Editorial Board

ISSN Print: 2161-7554 ISSN Online: 2161-7562

<http://www.scirp.org/journal/njgc/>

Editor-in-Chief

Prof. Bouzid Menaa Fluorotronics, Inc, USA

Editorial Board

Dr. Nikolai Bokov	Institute of Silicate Chemistry of Russian Academy of Sciences, Russia
Dr. Nikolaos Bouropoulos	Department of Materials Science, University of Patras, Greece
Dr. Ahmed Brara	National Center of Studies and Integrated Research on building Engineering (CNERIB), Algeria
Dr. Andrew Burns	Department of Chemistry, Kent State University Stark Campus, USA
Dr. Deepika Chaudhary	University of Rajasthan, India
Dr. Belviso Claudia	CNR-IMAA, Italy
Dr. Maryanne M. Collinson	Kansas State University, USA
Prof. Zhen-Yan Deng	Department of Physics, College of Science, Shanghai University, China
Prof. Emad Ewais	Refractory and Ceramic Materials Division (RCMD), Central Metallurgical R&D Institute (CMRDI), Egypt
Dr. Dusan Galusek	Institute of Inorganic Chemistry, Slovak
Prof. Aswini Ghosh	Department of Solid State Physics, Indian Association for the Cultivation of Science, India
Dr. Mafalda Guedes	Department of Mechanical Engineering, Escola Superior de Tecnologia de Setúbal, Campus IPS, Portugal
Prof. Wusheng Guo	Universitat Autònoma de Barcelona, Spain
Prof. Michael Lanagan	Penn State University, USA
Dr. Hong Li	Glass Business and Discovery Center, PPG Industries, Inc., USA
Prof. Ji-Guang Li	Key laboratory for Anisotropy and Texture of Materials, Northeastern University, Shenyang, China
Prof. Igor Mikhailovskij	National Science Center Kharkov Institute of Physics and Technology, Ukraine
Dr. Neley Della Santina Mohallem	Chemistry Department / ICEx / UFMG, Brazil
Prof. Faik Nuzhet Oktar	Marmara University, Turkey
Dr. Mukul Chandra Paul	Fiber Optics and Photonics Division, Central Glass & ceramic Research Institute, India
Prof. Zhijian Peng	China University of Geosciences, China
Dr. Gary R. Pickrell	Virginia Polytechnic Institute and State University, Germany
Dr. Luis Prado	Institut für Kunststoffe und Verbundwerkstoffe, Technische Universität Hamburg-Harburg, Germany
Dr. Liudvikas Pranevicius	Vytautas Magnus University, Kaunas, Lithuania
Prof. Giancarlo C. Righini	Nello Carrara Institute of Applied Physics, National Research Council, Italy
Prof. Sylwester J. Rzoska	Institute of High Pressure Physics, Polish Academy of Sciences, Poland
Prof. Oleg Shevaleevskiy	Institute of Biochemical Physics, Russian Academy of Sciences (IBCP RAS), Russia
Dr. Vandana Singh	University of Allahabad, India
Dr. Sklari Stella	Chemical Process Engineering Research Institute, Centre for Research and Technology, Greece
Prof. Boris Subotic	Laboratory for the Synthesis of New Material, Division of Materials Chemistry, Ruđer Bosković Institute, Croatia
Prof. Maria Suszynska	Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Poland
Prof. Kulwant Singh Thind	Deptt. of Physics, Guru Nanak Dev University, India
Dr. Jiagang Wu	Department of Materials Science and Engineering, Sichuan University, China
Prof. Spyros Yannopoulos	Foundation for Research and Technology Hellas, Greece
Prof. Shan-Tao Zhang	Department of Materials Science and Engineering, National Laboratory of Solid State Microstructures, China
Prof. Xinhua Zhu	National Laboratory of Solid State Microstructures (NLSSMs) School of Physics, Nanjing University, China

Editorial Assistant

Jane Zeng

Scientific Research Publishing, USA. Email: njgc@scirp.org

TABLE OF CONTENTS

Volume 1 Number 1

April 2011

The Effect of Using Nano ZrO₂ on the Properties of W-ZrC Composite Fabricated through Reaction

Sintering

M. Roosta, H. Baharvandi, H. Abdizade.....1

Effect of Aging on Chlorophyll Species Embedded in Silica Xerogels Matrix

J. R. Martínez, E. Espericueta, G. Ortega-Zarzosa.....7

Optimizing the Glass Fiber Cutting Process Using the Taguchi Methods and Grey Relational Analysis

C. L. Yang.....13

New Journal of Glass and Ceramics (NJGC)

Journal Information

SUBSCRIPTIONS

The *New Journal of Glass and Ceramics* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright©2011 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: njgc@scirp.org



New Journal of Glass and Ceramics

ISSN Print: 2161-7554 ISSN Online: 2161-7562
<http://www.scirp.org/journal/njgc>

New Journal of Glass and Ceramics (NJGC) is an international, specialized, English-language journal devoted to publication of original contributions concerning all branches of glass and ceramics, their properties and applications. It is an open-access, peer-reviewed journal describing scientific and technological advances that cover the basic sciences, engineering aspects and applied technology of glass and ceramics as bulk and films.

Editor-in-Chief

Prof. Bouzid Menaa Fluorotronics, Inc, USA

Editorial Board

Dr. Nikolai Bokov
 Dr. Nikolaos Bouropoulos
 Dr. Ahmed Brara
 Dr. Andrew Burns
 Dr. Deepika Chaudhary
 Dr. Belviso Claudia
 Dr. Maryanne M. Collinson
 Prof. Zhen-Yan Deng
 Prof. Emad Ewais

Dr. Dusan Galusek
 Prof. Aswini Ghosh
 Dr. Mafalda Guedes
 Prof. Wusheng Guo
 Prof. Michael Lanagan
 Dr. Hong Li
 Prof. Ji-Guang Li
 Prof. Igor Mikhailovskij
 Dr. Nelly Della Santina

Mohallem
 Prof. Faik Nuzhet Oktar
 Dr. Mukul Chandra Paul
 Prof. Zhijian Peng
 Dr. Gary R. Pickrell
 Dr. Luis Prado
 Dr. Liudvikas Pranevicius
 Prof. Giancarlo C. Righini
 Prof. Sylwester J. Rzoska

Prof. Oleg Shevaleevskiy
 Dr. Vandana Singh
 Dr. Sklari Stella
 Prof. Boris Subotic
 Prof. Maria Suszynska
 Prof. Kulwant Singh Thind
 Dr. Jiagang Wu
 Prof. Spyros Yannopoulos
 Prof. Shan-Tao Zhang

Subject Coverage

The journal publishes the highest quality original full articles, communications, notes, reviews, special issues and books, covering both the experimental and theoretical aspects including but not limited to the following materials, techniques and studies:

- Aerogels
- Bioceramics
- Ceramic and Glass Powders
- Ceramic Composites
- Coatings Process
- Crystallization in Glass
- Glass Fibers
- Glasse Polymers
- Low-softening Temperature Glasses
- New Inorganic Glasses
- Organic-inorganic Glasses
- Powder Preparation and Colloidal Sciences
- Sol-gel Glasses

With applications in: nanotechnology, optics, photonics, biomedical, biomaterials for implants and prosthesis, dentistry, environment, energy, thermal insulation, materials reinforcement, architectural restoration.

Contributions to fundamental and basic sciences of glass and ceramics research will be highlighted.

These concerns among others the properties and the characterization of glasses: glass structures studies, diffusion and kinetics in glasses, phase studies, thermodynamics, mechanical, thermal stability, salvation, surface properties, porosity, electrical, thermal, optical, magnetic and conductivity properties.

These concern also the theoretical aspect of the science of glass and ceramics with structure-properties relationship including modeling approaches, mechanisms. Manuscripts dealing with the technical aspect including the development of innovating tools for materials processes and productions as well as the characterization techniques of the materials are welcome.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handle electronically through the website. All papers are refereed through a peer review process. Authors are responsible for having their papers checked for style and grammar prior to submission to NJGC. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/njgc>

E-mail: njgc@scirp.org