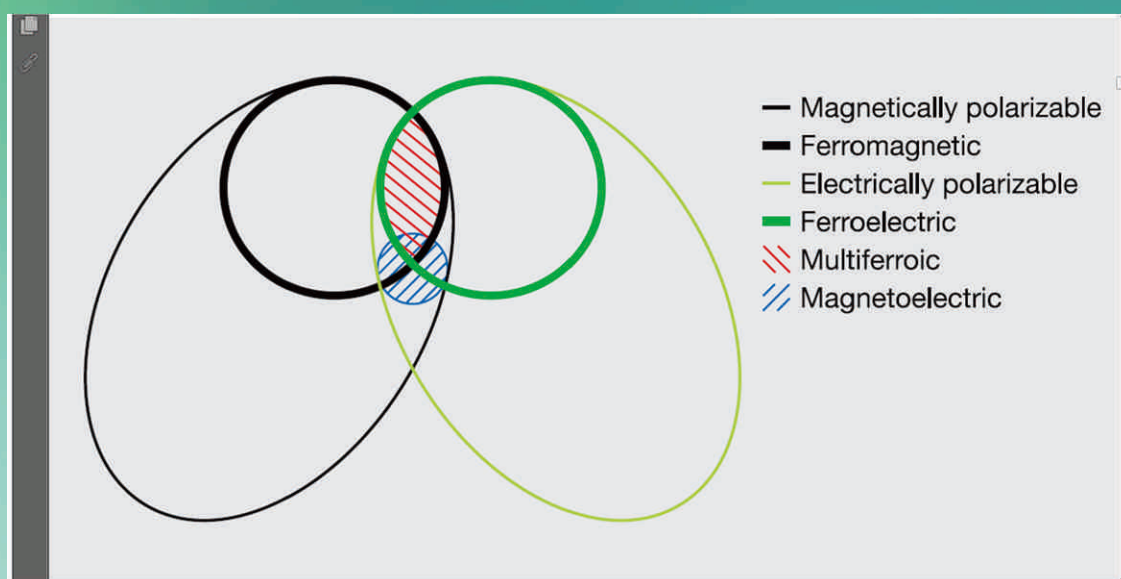


New Journal of Glass and Ceramics



ISSN: 2161-7554



Journal Editorial Board

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

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

Editor-in-Chief

Prof. Emad Ewais

Central Metallurgical R&D Institute (CMRDI), Egypt

Editorial Board

Dr. Claudia Belviso

The Institute of Methodologies for Environmental Analysis (IMAA), Italy

Dr. Nikolai Bokov

Institute of Silicate Chemistry of Russian Academy of Sciences, Russia

Dr. Nikolaos Bouropoulos

University of Patras, Greece

Dr. Andrew Burns

Kent State University Stark Campus, USA

Prof. Deepika Chaudhary

University of Rajasthan, India

Prof. Zhen-Yan Deng

Shanghai University, China

Dr. Dusan Galusek

Slovak Technical University, Slovak

Prof. Aswini Ghosh

Indian Association for the Cultivation of Science, India

Dr. Mafalda Guedes

Escola Superior de Tecnologia de Setúbal, Portugal

Dr. Wusheng Guo

Universitat Autònoma de Barcelona, Spain

Prof. Michael Lanagan

Penn State University, USA

Dr. Hong Li

PPG Industries, Inc., USA

Prof. Ji-Guang Li

Northeastern University, China

Prof. Bouzid Menaa

Fluorotronics, Inc, USA

Prof. Igor Mikhailovskij

Kharkov Institute of Physics and Technology, Ukraine

Dr. Nelcy Della Santina Mohallem

Universidade Federal de Minas Gerais, Brazil

Dr. Faik Nuzhet Oktar

Marmara University, Turkey

Dr. Dinesh Pathak

University of Pardubice, Czech Republic

Dr. Mukul Chandra Paul

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

Technische Universität Hamburg-Harburg, Germany

Dr. Liudvikas Pranevicius

Vytautas Magnus University, Lithuania

Prof. Giancarlo C. Righini

National Research Council, Italy

Prof. Sylwester J. Rzoska

Polish Academy of Sciences, Poland

Dr. Sklari Stella

Centre for Research and Technology, Greece

Prof. Boris Subotic

Ruđer Bosković Institute, Croatia

Prof. Maria Suszynska

Polish Academy of Sciences, Poland

Prof. Kulwant Singh Thind

Guru Nanak Dev University, India

Prof. Spyros Yannopoulos

Foundation for Research and Technology Hellas, Greece

Prof. Xinhua Zhu

Nanjing University, China

Table of Contents

Volume 4 Number 2

April 2014

Structural, Magnetic and Dielectric Properties of Fe-Co Co-Doped $\text{Ba}_{0.9}\text{Sr}_{0.1}\text{TiO}_3$ Prepared by Sol Gel Technique

I. K. Battisha, I. S. A. Farag, M. Kamal, M. A. Ahmed, E. Girgis, H. A. El Meleegi, F. G. El Desouky.....19

The Behavior of Zeta Potential of Silica Suspensions

J. A. A. Júnior, J. B. Baldo.....29

Analysis of Activation Energies & Experimental Evidence for Energetic Phase Separation in $\text{Ge}_x\text{Se}_{1-x}$ Glassy System

D. Sharma, A. M. Awasthi.....38

Influence of Reaction Conditions on Sol-Gel Process Producing SiO_2 and $\text{SiO}_2\text{-P}_2\text{O}_5$ Gel and Glass

A. M. Elnahrawy, A. I. Ali.....42

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: \$79 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 AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:

Copyright © 2014 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:

Copyright © 2014 by author(s) and Scientific Research Publishing Inc.

REUSE RIGHTS FOR INDIVIDUAL PAPERS:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

DISCLAIMER OF LIABILITY

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.

Editorial Board

Dr. Claudia Belviso
Dr. Nikolai Bokov
Dr. Nikolaos Bouropoulos
Dr. Andrew Burns
Prof. Deepika Chaudhary
Prof. Zhen-Yan Deng
Dr. Dusan Galusek
Prof. Aswini Ghosh

Dr. Mafalda Guedes
Dr. Wusheng Guo
Prof. Michael Lanagan
Dr. Hong Li
Prof. Ji-Guang Li
Prof. Bouzid Menaa
Prof. Igor Mikhailovskij
Dr. Nelcy Della Santina Mohallem

Dr. Faik Nuzhet Oktar
Dr. Dinesh Pathak
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
Dr. Sklari Stella
Prof. Boris Subotic
Prof. Maria Suszynska
Prof. Kulwant Singh Thind
Prof. Spyros Yannopoulos
Prof. Xinhua Zhu

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
- Automotive Glasses
- Bioceramics
- Bioglass
- Cements and Concrete
- Ceramic and Glass Powders
- Ceramic Composites
- Coatings Process
- Crystallization in Glass
- Decorative Glasses
- Glass Fibers
- Glass Polymers
- Low-softening Temperature Glasses
- New Inorganic Glasses
- Organic-inorganic Glasses
- Powder Preparation and Colloidal Sciences
- Refractories and Industrial Glasses and Ceramics
- 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, salivation, 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 handled 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> Email: njgc@scirp.org

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science, by delivering superior scientific publications and scientific information solution provider that enable advancement in scientific research.

What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, world-wide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



Website: <http://www.scirp.org>

Subscription: sub@scirp.org

Advertisement: service@scirp.org