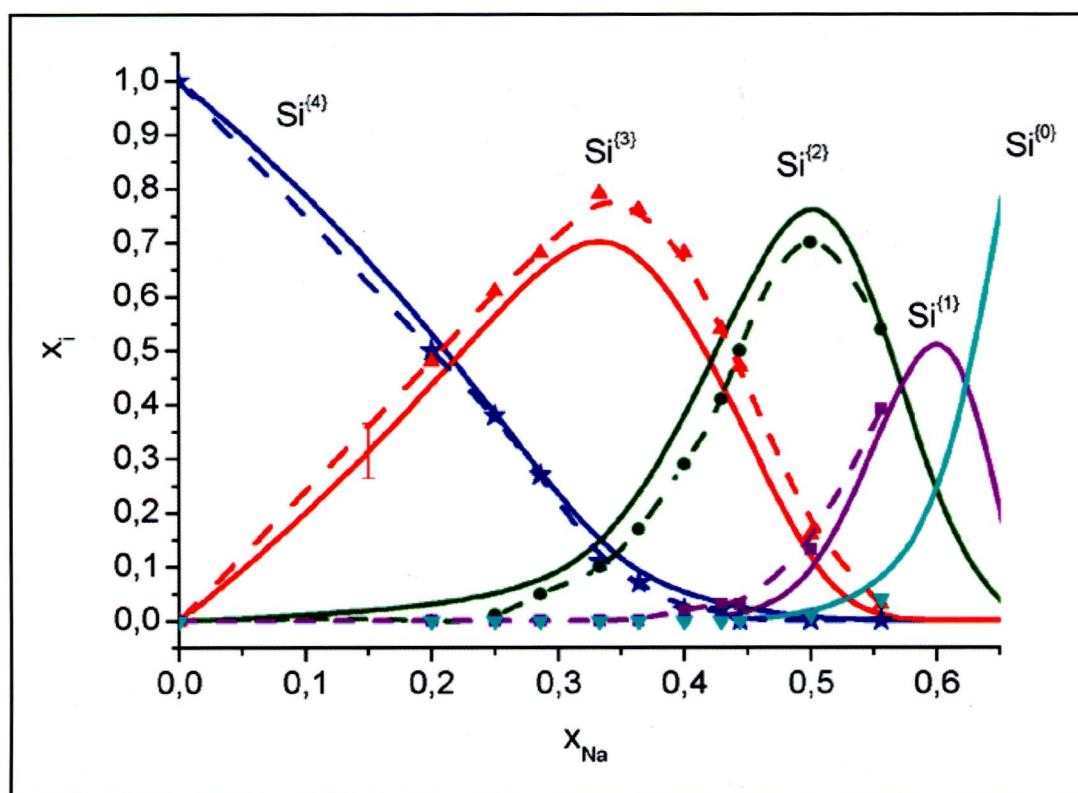


77  
p 59/2g

August 2013 Volume 54 Number 4

# Physics and Chemistry of Glasses

*European Journal of Glass Science and Technology Part B*





The European Journal of Glass Science and Technology is a publishing partnership between the Deutsche Glastechnische Gesellschaft and the Society of Glass Technology. Manuscript submissions can be made through Editorial Manager, see the inside back cover for more details.

**Senior Editor**

Professor R. J. Hand

**Regional Editors**

Professor J. M. Parker

Professor L. Wondraczek

Professor A. Duran

Dr A. C. Hannon

Professor M. Liška

Professor S. Buddhuu

Professor Y. Yue

**Abstracts Editor**

Professor J. M. Parker

**Managing Editor**

D. Moore

**Assistant Editor**

S. Lindley

Society of Glass Technology

9 Churchill Way

Chapelton

Sheffield S35 2PY, UK

Tel +44(0)114 263 4455

Fax +44(0)8718754085

Email [info@sgt.org](mailto:info@sgt.org)

Web <http://www.sgt.org>

The Society of Glass Technology is a registered charity no. 237438.

**Advertising**

Requests for display rates, space orders or editorial can be obtained from the above address.

Physics and Chemistry of Glasses:

European Journal of Glass Science and

Technology, Part B

ISSN 1753-3562 (Print)

ISSN 1750-6689 (Online)

The journal is published six times a year at the beginning of alternate months from February.

Electronic journals: peer reviewed papers can be viewed by subscribers through Ingenta Select <http://www.ingentaconnect.com>

The editorial contents are the copyright © of the Society.

Claims for free replacement of missing journals will not be considered unless they are received within six months of the publication date.

Volume 54 Number 4

August 2013

# Physics and Chemistry of Glasses

## European Journal of Glass Science and Technology B

### CONTENTS

- 147 Superstructural unit species in vitreous and crystalline alkali, alkaline earth and related borates  
Adrian C. Wright & Natalia M. Vedishcheva
- 157 The effect of divalent cation modifiers on the physicochemical properties of borosilicate glasses with high Cs contents  
D. Banerjee, V. Sudarsan, P. K. Wattal & D. Das
- 164 Preparation and spectroscopic properties of transparent oxyfluoride tellurite glass-ceramics with different  $\text{Nd}^{3+}$  contents  
Zhao-xia Hou, Zhao-lu Xue, Hang-xin Li, Shao-hong Wang, Mei-han Wang, Xiao-dan Hu & Feng Li
- 169 Photocatalytic activity and hydrophilicity of  $\text{SiO}_2$ - $\text{TiO}_2$  thin films  
JiaoJiao Wang, Haipeng Ou, Donglin Gu, Christian Rüssel & Wen Liang
- 177 Thermal properties and crystallization behaviour in  $\text{ZnO}$ - $\text{SnO}$ - $\text{P}_2\text{O}_5$  glasses  
Akira Saitoh, Shoji Anan, & Hiromichi Takebe
- 182 Dissolution behaviour of  $\text{SnO}$ - $\text{P}_2\text{O}_5$  and  $\text{SnO}$ - $\text{P}_2\text{O}_5$ - $\text{B}_2\text{O}_3$  glasses in water  
Hiromichi Takebe, Takuya Kobatake & Akira Saitoh
- 187 Fabrication of a nanoporous  $\text{Na}_2\text{O}$ - $\text{B}_2\text{O}_3$ - $\text{SiO}_2$  glass plate with controlled pore size  
Yu Mao, Jian Jun Han, Zhu Jun Zhou, Xiu Jian Zhao & Moo-Chin Wang
- A39 **Abstracts**