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*Publication date:*  
2010

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*

Zheng, Q., Mauro, J. C., Smedskjær, M. M., Potuzak, M., Keding, R., & Yue, Y. (2010). *Glass forming ability of soda lime borate Liquids*. Abstract from 3rd International Congress on Ceramics, Osaka, Japan.

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## **Glass-Forming Ability of Soda Lime Borate Liquids**

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We investigate the glass-forming ability (GFA) of a series of iron-containing soda lime borate compositions [ $x\text{Na}_2\text{O}-10\text{CaO}-(89-x)\text{B}_2\text{O}_3-1\text{Fe}_2\text{O}_3$  ( $x=5, 10, 15, 20, 25, 30$  and  $35$  mol%)] by examining their crystallization behavior and fragility. GFA is characterized in terms of Hruby parameter  $K_H$  and our newly established criterion. In general, the GFA decreases with increasing content of  $\text{Na}_2\text{O}$ . Interestingly, we observe that after the first upscan to  $1000^\circ\text{C}$  at  $20\text{ K/min}$  and a subsequent downscan at the same rate, two glasses containing  $20$  and  $25\text{ Na}_2\text{O mol\%}$  do not exhibit any crystallization exotherms during the second upscan at  $20\text{ K/min}$  to  $1000^\circ\text{C}$ . Even when the upscan rate is lowered to  $5\text{ K/min}$ , the same phenomenon is observed. This means that the stability of these glasses against crystallization is dramatically enhanced for these two compositions. This particular behavior is explained in terms of the temperature dependence of the boron speciation. In contrast, the glasses with other compositions do not show the enhancement of the glass stability.