
Conditions of appearance of the topological defects of optical indicatrix orientation in the glasses with residual stresses: Movement of the defects under application of external mechanical stress to CaB_4O_7 glasses: Errata

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Abstract. We address the technical errors found in our recent article [Vasylykiv Yu., Kryvyy T., Skab I. and Vlokh R., 2016. Ukr. J. Phys. Opt. **17**: 65–74].

Keywords: topological defects, optical indicatrix, residual stresses, glasses

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UDC: 535.551+620.171.5+515.143

We have found a number of technical errors appearing in our recent article, Ref. [1]. The topological defects (TDs) in Fig. 2a and Fig. 2d should be marked as follows:

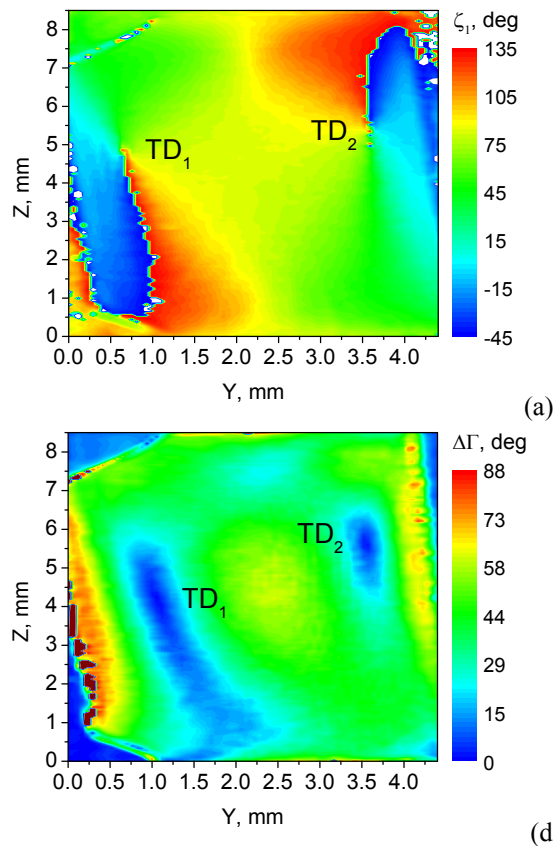


Fig 2. Spatial maps of the optical indicatrix orientation angle (a) and the phase difference (d) appearing under application of different mechanical stresses along the Z axis and light propagation along the X axis. The stresses applied to CaB_4O_7 glass are equal to 0 (a) and $-3.22 \times 10^6 \text{ N/m}^2$ (d).

The dependences of displacement of the TDs on the compressive stress in Fig. 6 should be marked as follows:

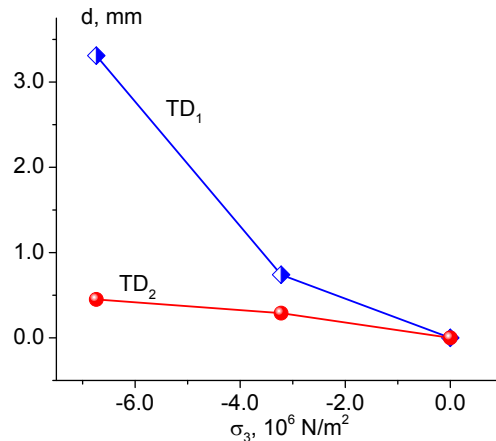


Fig. 6. Dependence of displacement of the TDs on the compressive stress, as obtained for CaB₄O₇ glass sample.

Finally, the measurement units at the ordinate axes of these dependences are millimetres (mm).

References

1. Vasylykiv Yu., Kryvyi T., Skab I. and Vlokh R. 2016. Conditions of appearance of the topological defects of optical indicatrix orientation in the glasses with residual stresses: Movement of the defects under application of external mechanical stress to CaB₄O₇ glasses. Ukr. J. Phys. Opt. **17**: 65–74.

Vasylykiv Yu., Kryvyi T., Skab I. and Vlokh R. 2016. Conditions of appearance of the topological defects of optical indicatrix orientation in the glasses with residual stresses: Movement of the defects under application of external mechanical stress to CaB₄O₇ glasses: Errata. Ukr.J.Phys.Opt. **17**: 167–168

Анотація. Виправлено технічні помилки, виявлені в нашій недавній роботі [Vasylykiv Yu., Kryvyi T., Skab I. and Vlokh R., 2016. Ukr. J. Phys. Opt. **17**: 65–74].