

TOApy program for the thermo-optical analysis of phase transitions.

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Observations of the textures and phase transitions of 4-bromobenzylidene-4'-hexyloxyaniline (6BBAA) and 4-bromobenzylidene-4'-pentyloxyaniline (5BBAA) thermotropic liquid crystals were carried out using a polarizing optical microscope under crossed polarizers with a hot stage and high-resolution camera. Using open source TOApy software the thermo-optical analysis of the phase diagram for 5BBAA and 6BBAA compounds has been obtained without any additional equipment. To obtain thermo-optical analysis plot with help of TOApy three different algorithms have been applied. In this manuscript TOApy software is presented as a tool for the detection of phase transitions difficult to observe by DSC method.

Słowa kluczowe

Thermo-optical analysis, Polarized microscope observation, phase transition, Vitrification

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