

**PHASE EQUILIBRIA IN TERNARY RECIPROCAL SYSTEM
Li, Ba // BO₂, F AND GROWTH OF BULK β -BaB₂O₄ CRYSTALS:
Supplemental material**

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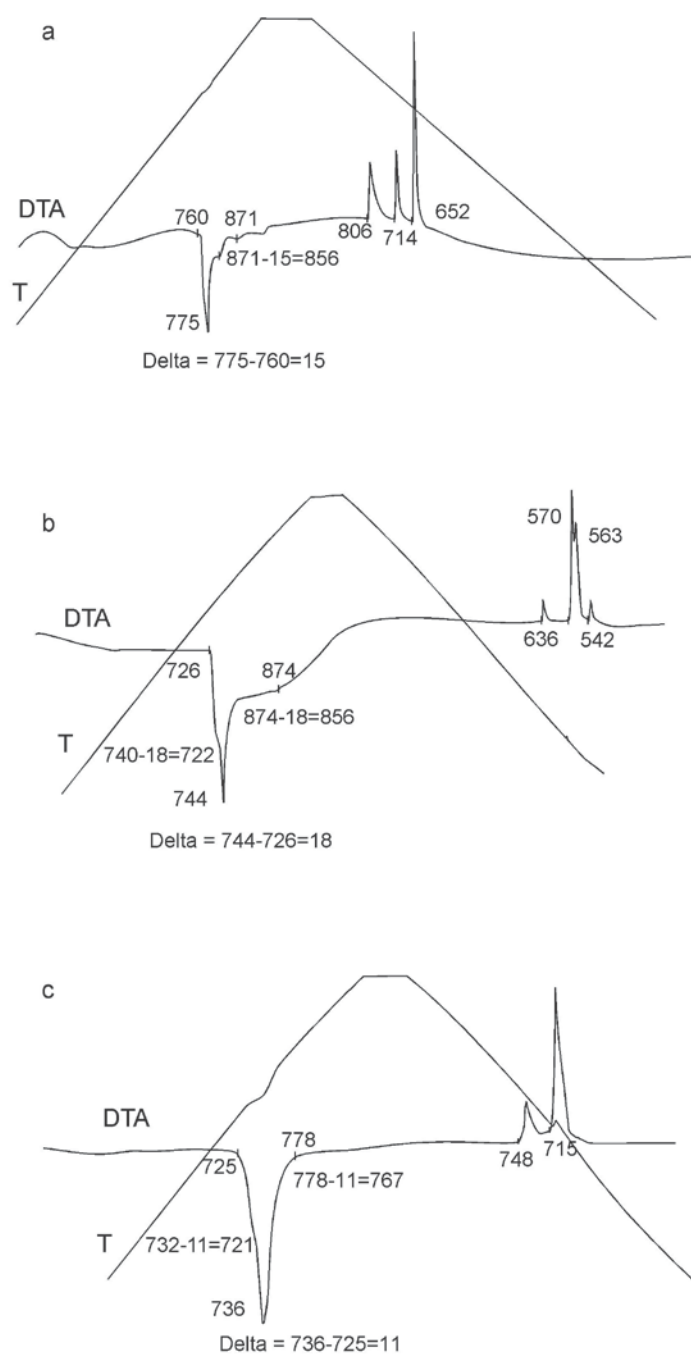


Fig. S1. The results of DTA of samples made by solid phase synthesis with the following compositions: a – 0.83 BaB₂O₄–0.17 (LiF)₂, b – 0.70 BaB₂O₄–0.30 (LiF)₂, c – 0.20 BaB₂O₄–0.80 (LiF)₂.

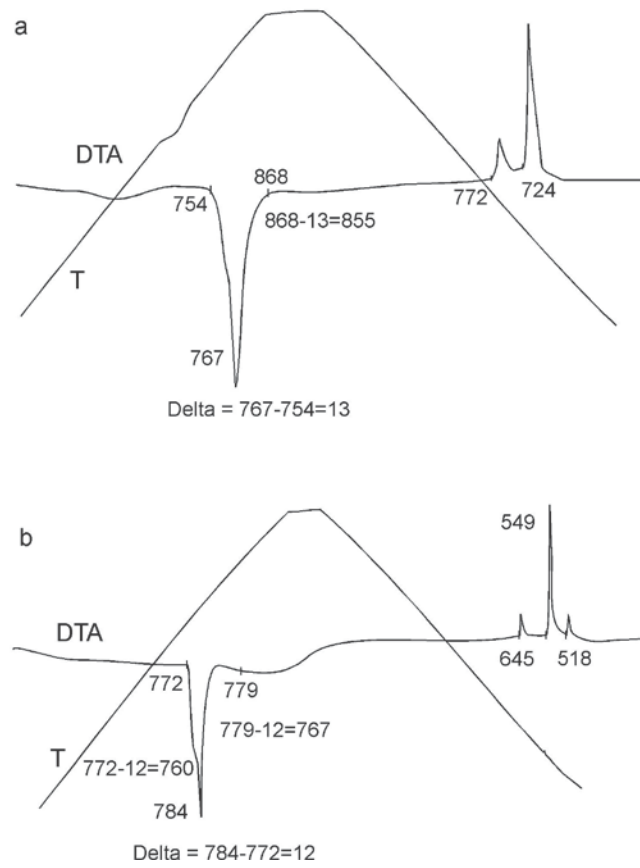


Fig. S2. The results of DTA of samples made by solid phase synthesis with the following compositions: a – 0.80 BaB₂O₄–0.20 LiBaF₃, b – 0.60 BaB₂O₄–0.40 LiBaF₃.

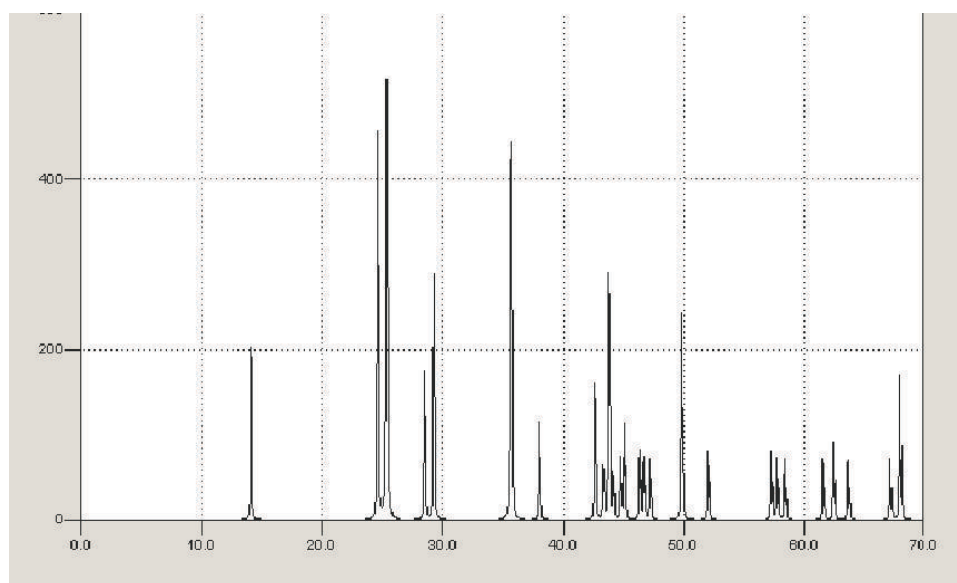


Fig. S3. X-ray diffraction pattern of a β -BaB₂O₄ crystal ($\lambda = 1.54 \text{ \AA}$ CuK $_{\alpha}$).



Fig. S4. Photographs of β -BaB₂O₄ crystals grown in the 0.7 BaB₂O₄-0.3 LiBaF₃ system in the first growth cycle (a) and in the second growth cycle (b).



Fig. S5. Photographs of β -BaB₂O₄ crystals grown in the 0.7 BaB₂O₄-0.3 (83.5 LiF-16.5 BaF₂) system in the first growth cycle (a) and in the second growth cycle (b).