

## Growth and optical properties of the newly developed Pr:LGSB bifunctional crystal

*Tuesday, 30 August 2022 12:00 (2 hours)*

Incongruent melting Pr-doped  $\text{La}_{0.678}\text{Gd}_{0.572}\text{Sc}_{2.75}(\text{BO}_3)_4$  (Pr:LGSB) crystals were grown by the Czochralski method, for the first time to our knowledge. The spectroscopic and nonlinear optical properties of the 2.5 at.% Pr:LGSB crystal shown that it can be a promising self-frequency doubling crystal in the UV range at  $\sim 301.5$  nm.

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