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Up-conversion luminescence of LaF₃:Pr³⁺ crystal

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Abstract

© Published under licence by IOP Publishing Ltd. LaF₃:Pr³⁺ crystal is proposed as a promising media for an infrared quantum counter in the mid-infrared spectrum range. In this paper it has been shown that this crystal can work as an infrared quantum counter in the range of spectra of about 3 μm at the temperatures 170 K and 210 K with the efficiency of about 5%.

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