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Optics Communications 218 (2003) 197-198

Optics Communications

www.elsevier.com/locate/optcom

Erratum

Erratum to: "Efficiency of cascaded third harmonic generation in single quadratic crystal in focused beam" [Opt. Commun. 212/4–6 (2002) 397–403][☆]

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An error in the interpretation of Fig. 2a of ref. [1] has been noticed. This figure cannot be used to draw the conclusion about existence/not existence of optimum focussing in the process of cascaded third harmonic generation. Indeed, constant value of the parameter $S = \sqrt{\sigma_1 \sigma_2} |F_0| b$ used in calculation of the curves on Fig. 2 of ref. [1] does not mean constant power of the beam before focussing. The here presented Fig. 1a and b, calculated in non-depleted approximation (with Eq. (11)), are plotted at constant input power. The two figures clearly show existence of optimal focussing. Maximum conversion efficiency is obtained for input beam focused in the center of the crystal and when the ratio m = L/b = 2.83.



Fig. 1. THG efficiency $\eta_{3\omega}$ calculated at optimal phase matching conditions and constant input power: (a) as a function of position of focusing *l* and (b) as a function of optimal strength of focusing m = L/b for position of the focus at the center of the crystal. The input power corresponds to S = 0.6 when m = 1.

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^{*} PII of original article: S0030-4018(02)02007-2.

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Reference

[1] R. Ivanov, K. Koynov, S. Saltiel, Opt. Commun. 212 (2002) 397-403.