

Cavity-Enhanced Third Harmonic Generation

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Abstract: We derive the analytical expression of microcavity-enhanced factor for third harmonic generation in terms of detunings, linewidths, and the Purcell factors of the relevant microcavity modes. It is suitable for microcavities with any dimensions and arbitrary geometric shapes.

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Key words: microcavities, third harmonic generation, quantum optics, multi-wave mixing

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