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Spectral features of spontaneous four-wave mixing in tapered nanofibers

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Abstract

© 2016, Institution of Russian Academy of Sciences. All rights reserved. Features of biphoton states generated via spontaneous four-wave mixing in tapered nanofibers are studied. The spectral amplitude of a biphoton field is calculated and the effect of interference of the biphoton field in such structures is discussed. The effect of nanofiber environment on the spectral amplitude of the biphoton field is investigated.

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Keywords

Correlated photons, IR spectroscopy, Spontaneous four-wave mixing