

Thermal tuning of phase-matching in a multimodal SOI waveguide with $\chi^{(3)}$ non linearity

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Outline

Introduction

Nonlinear Optics

- Four-Wave Mixing

- Conservation of energy and momentum

 - Multimodal Waveguides

- Peak tuning

 - Thermo-Optic Coefficient

Computational model

- Mode simulation

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- Results

Conclusion

ciao