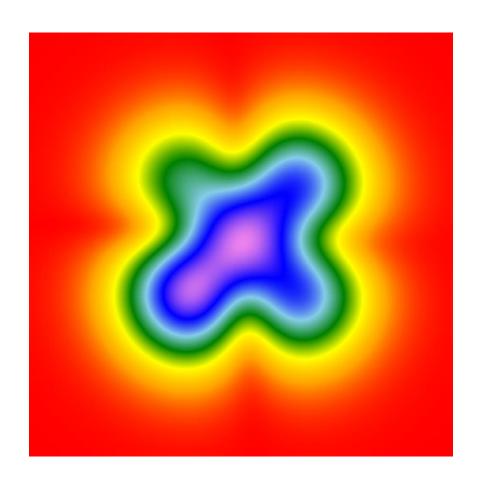


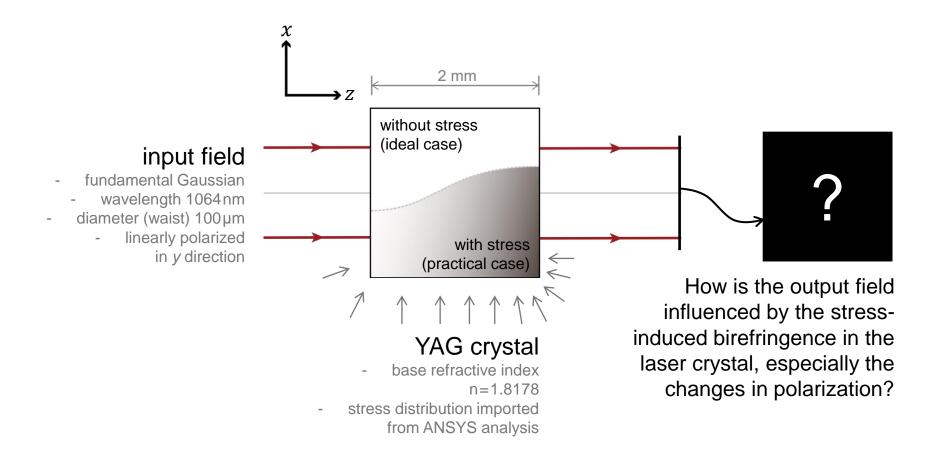
Stress-induced Birefringence in Laser Crystals

Abstract

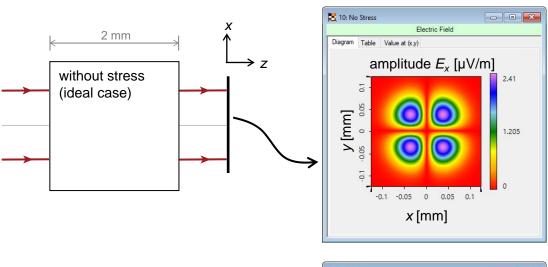


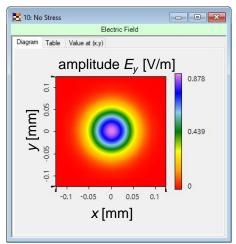
The packaging and mounting of a laser crystal into system may cause stresses. The mechanical stress will induce birefringence in the crystal, which may slightly alter the polarization of the laser beam. For a practical laser system, it is important to know how the induce-birefringence may affect the performance of the laser. Taking a YAG crystal as an example, and using a linearly polarized input field, it is investigated how the output field changes with respect to the strength of the applied stresses.

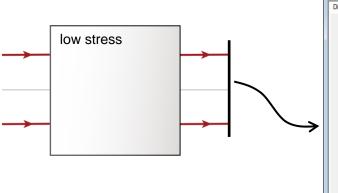
Modeling Task

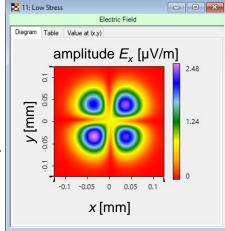


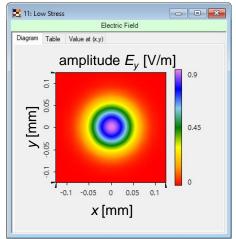
Results



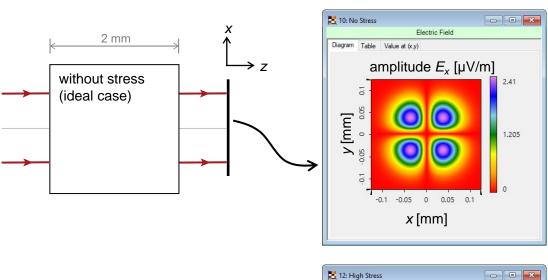


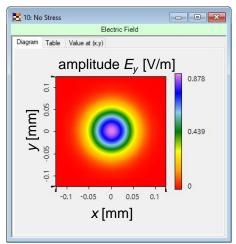


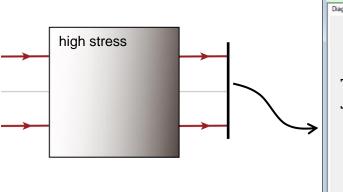


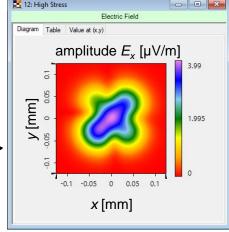


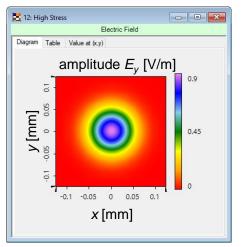
Results











Document Information

title	Stress-induced Birefringence in Laser Crystals
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VL version used for simulations	7.4.0.45
category	Application Use Case