

In this Letter, we investigate the resolution of two-photon polymerization (2PP) with an amplified mode-locked external cavity diode laser with adjustable pulse length and a high repetition ...

In this Letter, the authors present the construction of three ...

In this Letter, the authors present the construction of three-dimensional microstructures by two-photon polymerisation induced by ultrashort pulses of a mode-locked diode laser.

In this work we demonstrate the capabilities of our diode laser based Multi-Photon Polymerization (MPP) system, which aims at significantly reducing the required investment compared to available machines.

The aim of this study is to compare current light curing sources with a blue diode laser regarding curing depth and heat generation during the polymerization process.

Objective: The purpose of the present study was to test the usefulness of 457 nm diode-pumped solid state (DPSS) laser as a light source to cure composite resins.

The aim of this study was to evaluate the use of a hand-held diode laser with adjustable irradiance for the polymerization of a new generation of rapid-curing bulk-fill composites.

In this work, we report the first structures fabricated by 2PP using a newly developed monolithically mode-locked diode laser. The diode laser has a pulse width of 7 ps, a peak power of ...

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Two-Photon Polymerization (2PP) is an additive manufacturing technique capable of producing intricate three-dimensional structures with resolutions below 100 nm. In order to achieve this resolution, an ...

Purpose: The aim of this study was to evaluate the polymerization efficiency of a preheated resin composite used as a luting agent for indirect restorations light-cured by a blue diode ...

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