

In conclusion, we have investigated the effects of thermal annealing on femtosecond laser modification inside fused silica. Raman and FL spectroscopy show that fs-laser induced NBOHC defects completely anneal out at 300 °C, whereas changes in Si-O ring structure only anneal out after heat treatment at 800-900 °C. At 900 °C optical waveguides written inside the glass were completely annealed but more significant damage induced in the glass remained after annealing at that temperature.

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