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Gold nanorods induced nanoplasmonic effect on structural changes during high intensity laser irradiation of UDMA polymer

Monday, 30 August 2021 12:05 (30 minutes)

Femtosecond laser irradiation induced structural changes and their dependence on the plasmonic effect of embedded gold nanoparticles were investigated in urethane dimethacrylate (UDMA) polymer.

The UDMA polymers with and without nanoparticles were exposed to femtosecond laser irradiation with different energy. The morphology of the surface of the treated spot and its environment were studied by white light interferometry and the structural changes were investigated by Raman spectroscopy. The presence of the plasmonic nanoparticles resulted in more remarkable changes in the bonding-structure of the polymer.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

NAPLIFE, <http://csernai.no/naplife/>

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

No

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