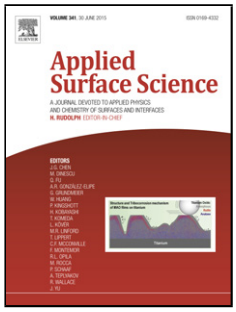

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Mimicking lizard-like surface structures upon ultrashort laser pulse irradiation of inorganic materials

U. Hermens[a], S.V. Kirner[b], C. Emonts[c], P. Comanns[c], E. Skoulas[d], A. Mimidis[d],

H. Mescheder[a], K. Winands[a], J. Krüger[b], E. Stratakis[d,*], J. Bonse[b,*]

[a] *Fraunhofer Institute for Production Technology IPT, Steinbachstr. 17, D-52074 Aachen, Germany*

[b] *Bundesanstalt für Materialforschung und –prüfung (BAM), Unter den Eichen 87, D-12205 Berlin, Germany*

[c] *Institute of Biology II, RWTH Aachen University, Worringerweg 3, D-52074 Aachen, Germany*

[d] *Institute of Electronic Structure and Laser, Foundation for Research and Technology - Hellas, Heraklion, GR-71110 Crete, Greece*

[*)] authors to whom correspondence should be addressed;
Electronic mail: joern.bonse@bam.de; stratak@iesl.forth.gr

Graphical abstract

Research Highlights

- Two laser processing strategies were evaluated to process hierarchical nano- and microstructures on carbon alloyed steel surfaces
- Self-assembled ripples, grooves and spikes were generated by fs-laser irradiation
- Capillary channels with micro-dimple patterns were fabricated by ps-laser irradiation
- Lizard-like fluid transport properties can be realized by laser processing