

Supplemental Materials

Performance and Accuracy of the Shifted Laser Surface Texturing Method

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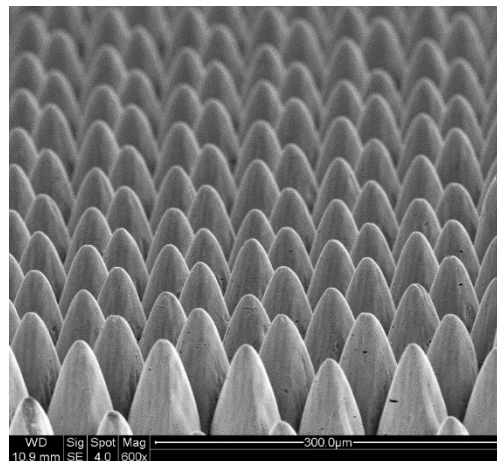


Figure S1. SEM image of circular columns produced on tungsten surface by shifted burst method. Laser beam scanning speed was 8 m/s, pulse energy 10 μJ , wavelength 532 nm, pulse duration 10 ps, spot size 23 μm , internal laser frequency (intra-burst) 1 MHz. External trigger frequency of the bursts was 112.6 kHz, gate opening time interval $5.1 \div 8.9 \mu\text{s}$, distance between raster lines 63 μm , shifting vector length of sLST 10 μm .

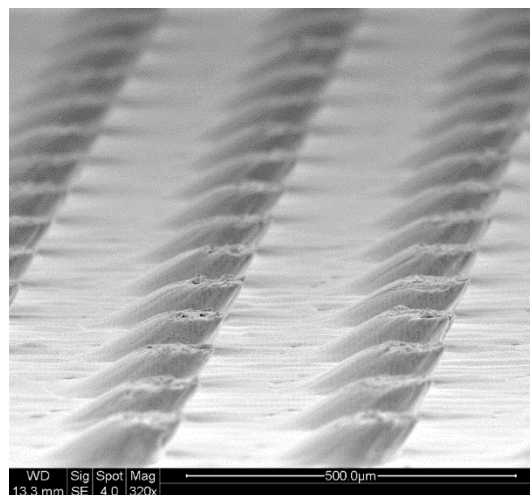


Figure S2. SEM image of inclined circular columns produced on tungsten surface by shifted burst method. Laser beam scanning speed was 8 m/s, pulse energy 10 μJ , wavelength 532 nm, pulse duration 10 ps, spot size 23 μm , internal laser frequency (intra-burst) 1 MHz. External trigger frequency of the bursts was 68.4 kHz, gate opening time interval $8.1 \div 14.6 \mu\text{s}$, distance between raster lines 110 μm , shifting vector length of sLST 10 μm . The surface texturing was applied on sample surface with inclination of 45 degrees.

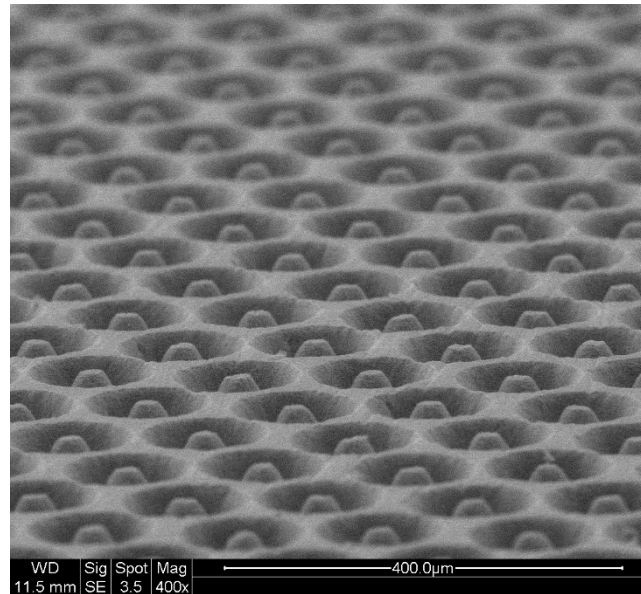


Figure S3. SEM image of donut holes produced by shifted path method on Al_2O_3 surface. The shifting trajectory was in the form of concentric circles (radiuses $21 \mu\text{m}$ and $56 \mu\text{m}$). Laser beam scanning speed was 3 m/s , pulse energy $40 \mu\text{J}$, wavelength 532 nm , pulse duration 10 ps , spot size $23 \mu\text{m}$, internal laser frequency 303 kHz . External trigger frequency in the shifted path method was 20 kHz , gate opening time interval $6.4 \mu\text{s}$, distance between raster lines $120 \mu\text{m}$, shifting vector length of sLST $5 \mu\text{m}$.



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