

ANTI-REFLECTION STRUCTURE FOR HIGH POWER LASERS

Metal oxide INKS

NIL process

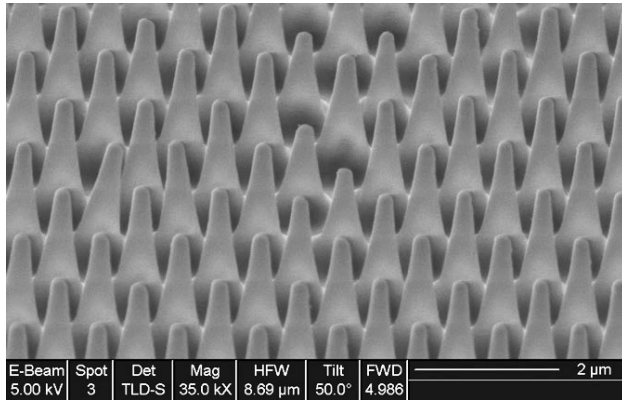


DIRECT PRINTING OF MOTH-EYE
LIDT : > 150 J/cm² - 1060 nm – 12 ns

SOLNIL printable inks can be framed in 3D structures atop glass, fused silica, sapphire, Si, Ge, etc. Broad-band and wide angle, moth-eye anti-reflection coatings can withstand high laser fluxes from femtosecond to nanosecond and CW.

CHARACTERISTICS

Reflexion	~ 0.15-0.25% /face
Transmission (θ)	> 98% up to 50°
LIDT	Close to Fused Silica
Spectral bandwidth	400 < λ < 800 nm 800 < λ < 1200 nm



E-Beam 5.00 kV Spot 3 Det TLD-S Mag 35.0 kX HFW 8.69 μ m Tilt 50.0° FWD 4.986 2 μ m

MATERIALS:

SOLNIL develops its own materials from inorganic inks. They have high transparency from near-UV to MWIR and optical constants finely adjustable:
n = 1.120-2.60

