

Microstructured fibers



Łukasiewicz

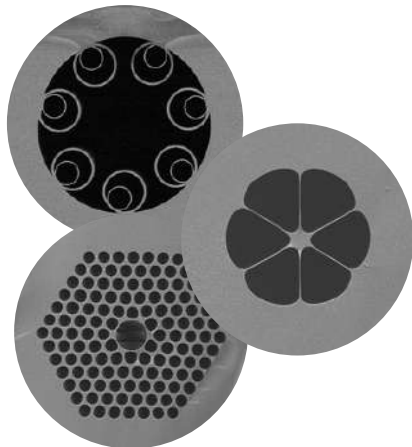
Institute of Microelectronics
and Photonics

**PHOTONIC CRYSTAL FIBERS
ANTIRESONANT HOLLOW CORE FIBERS
NANOSTRUCTURED CORE FIBERS
OTHER CUSTOM DESIGNS**



We offer

- ✓ Fiber design and customization
- ✓ Various fiber materials including fused silica, and soft glasses synthesized in-house – borosilicate, phosphate, tellurite, lead silicate, bioactive glasses and custom compositions
- ✓ Laser fibers from active doped materials



Applications



Nonlinear effects generation



Fiber lasers



Mid-infrared beam delivery



Bioactive glass assisted bone regeneration



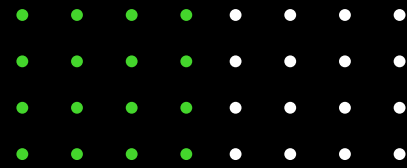
**Grow Up
Your Business
With Us**

Transparent Ceramics



We offer

- ✓ Transparent ceramics:
YAG doped or co-doped with rare-earth elements or transition metals, e.g. Nd, Yb, Ce, Tm, Er, Ho, Eu, Dy, Pr, Sm, Tb, Cr, Co
- ✓ Transparent layered ceramics,
e.g. YAG/Nd:YAG/YAG



In comparison to monocrystals with the same chemical composition, ceramic materials offer:



wider range of the doping level



lower cost and shorter time of the production



more flexibility in shape and size [easier to make high power lasers]



Applications:

- White light laser sources:
car headlights, street lamps,
factory hall lighting
- Industry processing:
laser etching, laser peening,
laser engraving
- Medical technologies:
microsurgery, Optical Coherence
Tomography (OCT) or Spectral
Optical Coherence Tomography
(SOCT), aesthetic medicine
- Scintillators



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