

# PlasmAR® - Antireflective Microstructure

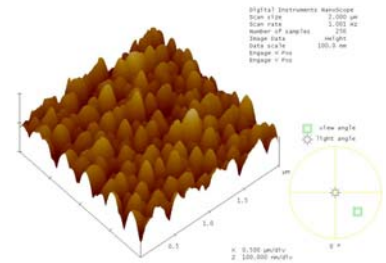
## PlasmAR® - The new AR Microstructure

In recent years we have gained substantial experience in the field of replicating nanostructures onto the plano surfaces of our microstructured optical components – specifically our Motheye Antireflective Microstructure. We have now taken this technology to create our PlasmAR process, which adds antireflective nanostructures to microstructured surfaces.

Our new PlasmAR technology results from a controlled treatment of a polymer surface with ion plasma. We can then take this treated polymer surface, create a manufacturing tool and produce high volume components (patent PCT/DE 20047000817).

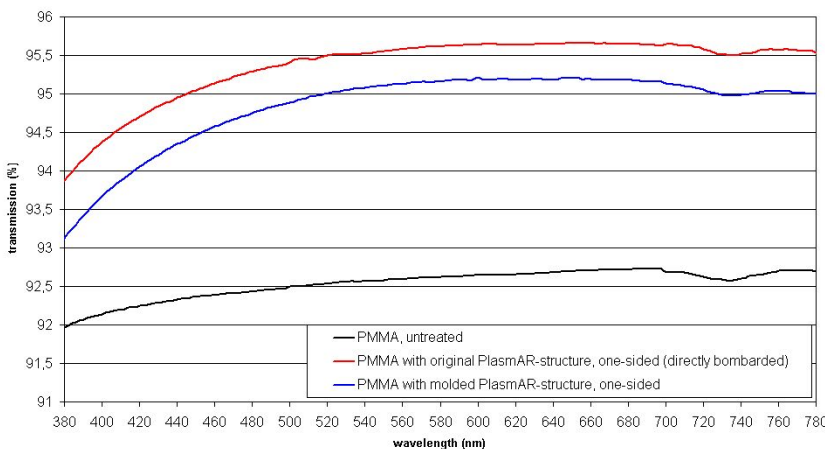
Our technology is based upon an idea from the Fraunhofer Institute IOF in Jena, Germany (patent #DE 10241708 A1). Based upon this idea, we have developed a process which allows for replication of this structure in nanometer dimensions.

PlasmAR functions as a graded index layer. The nanostructures are stochastically, not periodically, arranged.



AFM Image of PlasmAR® Structure

Comparing Transmission: PMMA part with directly generated and molded PlasmAR Structure



### Benefits

- Can be applied to plano, curved and microstructured surfaces
- Allows for fast and cost effective tooling
- Allows to large area coverage
- No wavelength dependent reflections
- Works independent of incident angles

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