Hollow-core optical fiber drawing production

The present invention relates to a hollow core optical fiber and, more particularly, to a technique for fabricating a hollow core optical fiber such that one or more hollow regions...

Abstract-- A method for modeling the fabrication of small-scale hollow glass capillaries is developed. The model is based on an asymptotic analysis of the Navier-Stokes equations, which yields a simple ...

Hollow core fibres can also be made by fibre drawing methods, starting from a preform (optionally drawn into a cane) formed with the desired cross-sectional profile of voids.

Results provided the effects of parameters on the final porosity of MPOFs. This model has been validated by comparing with the results for solid-core and hollow fibers drawing processes.

This application allows to compute the drawing parameters to realize a tubular hollow-core optical fiber.

A method of fabricating a hollow core optical fibre comprises: providing an initial preform formed from glass and having a transverse cross-sectional structure configured to form, in an optical ...

This paper presents the analysis and simulation of this complicated process. A numerical model is developed, validated, and applied to simulate the hollow optical fiber drawing process under ...

We present the first model that can recreate tubular anti-resonant hollow core fiber draws, and accurately predict the draw parameters and geometry of the fiber.

In this webinar, Azim-Onur Yazici from the Max Planck Institute for the Science of Light in Erlangen will present and discuss the current limitations and challenges, and show examples of silica ...

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