

Abstract Submitted
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Optical Vortexed Transmission through a Nanoslit on the Pyramid¹ SEONG SOO CHOI², SunMoon University, M.J. PARK, Korea Military Academy, N.K. PARK³, D.S. KIM⁴, Seoul National University, NATIONAL RESEARCH LAB TEAM, CENTER FOR PLASMONICS FOR NEXT GENERATION OPTICAL COMMUNICATION TEAM, SCIENCE RESEARCH CENTER TEAM — The nanoslit apertures with its gap ranging from 1 nm to ~ 50 nm have been fabricated using microfabrication process such as wet etching, thermal oxidation, circular aperture opening by HF, then followed by Al metal deposition. The light transmission through the single nanoslit apertures has been measured to be dependent upon the gap between two metal edges and independent of length of the slit. With decreasing the gap from 80 nm to 1 nm, the optical transmission rate has been increased upto three order of magnitude. This can be attributed to optical vortexed transmission

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