Optical Fiber Nano-antenna/Axicon

Introduction

- Fabrication of the state-of-art opticalfiber tip based Nano-antenna and Axicon
- The original nano/micro structures have no competitor worldwide and have unparalleled optics used in advanced photonics research and instrumentation
- Dimensions of the optical structure at the fiber tip can be changed to customize without adding any cost
- Low cost and minimum skill but unparallel structures with significant impact

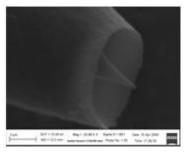
Application

Multipurpose use in instrumentation for interdisciplinary application

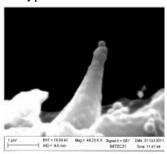
- Probing whispering gallery mode
- Optical spectroscopy
- Light-matter interaction
- Non-Gaussian beam generation
- Large depth of focus
- Optical imaging

Optical Nano-antenna

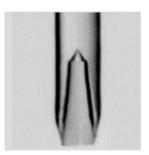
Axicon



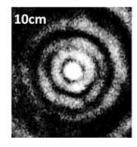
Typical Nano-antenna



Antenna tweezed silica sphere as dipole antenna



Typical Axicon



Bessel beam from Axicon