A development of a Near-Field Optical Microcope

G. A. Martínez-Zepeda,[a] O. Ruiz-Cigarrillo,[b] K. P. Leija-Alférez,[c] and L. F. Lastras-Martínez[d]
Instituto de Investigacion en Comunicación Óptica, Universidad Autonoma de San Luis Potosí
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There exist a lot of Scanning Probe Microscopy Systems, such as Atomic Force Microscopy (AFM) that use a metallic tip and are used to get a image with nanometric resolution, but they are expensive and in some cases need special conditions for operation, in other hand, the Near-Field Scanning Optical Microscopy (NSOM) systems use a dielectric tip and the interaction between the tip and the sample is due optical processes, it makes posible their operation under ambient conditions. In this work we show the first results of the development of a Near-Field Microscope where its artisanal construction gives it some advantages from comercial ones.

[a] gabmtzz27@gmail.com
[b] oscarruiz@cactus.iico.uaslp.mx
[c] a236792@alumnos.uaslp.mx
[d] lflm@cactus.iico.uaslp.mx