



國立嘉義大學 機械與能源工程學系

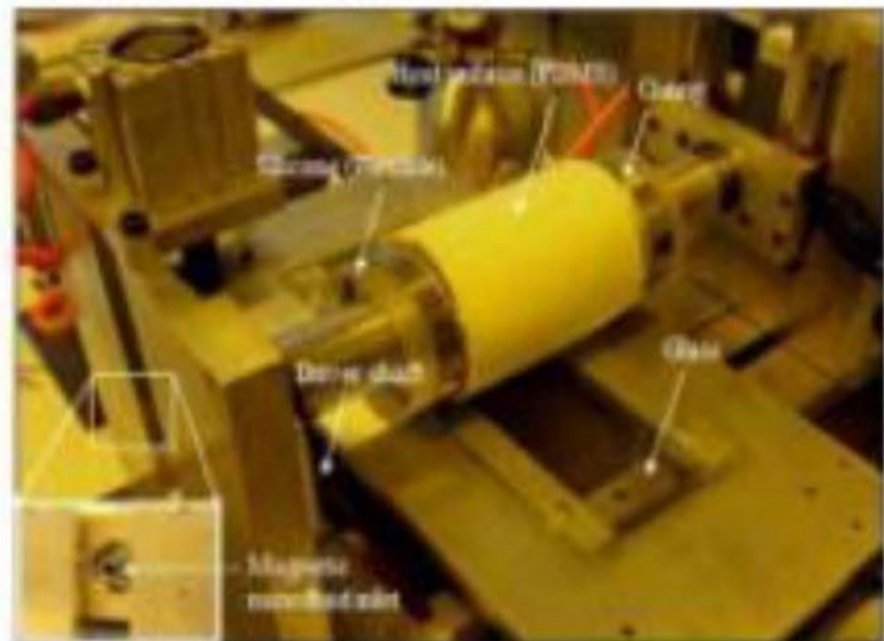
翁永進 教授 研究室

精密製造/微奈米壓印製程技術設計開發

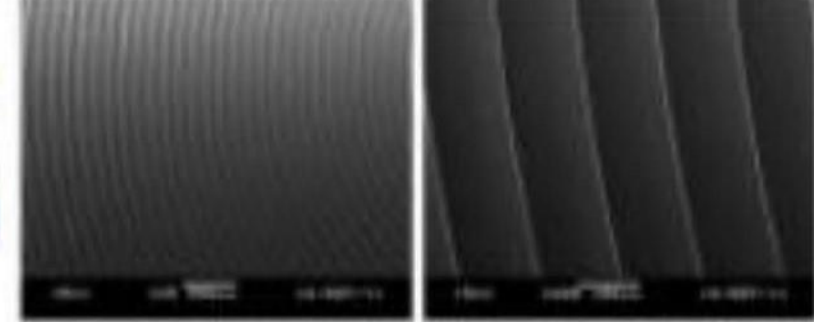
PRECISION MACHINING/ NANOIMPRINT LITHOGRAPHY

Roll to Plate FLEXIBLE NANOIMPRINT

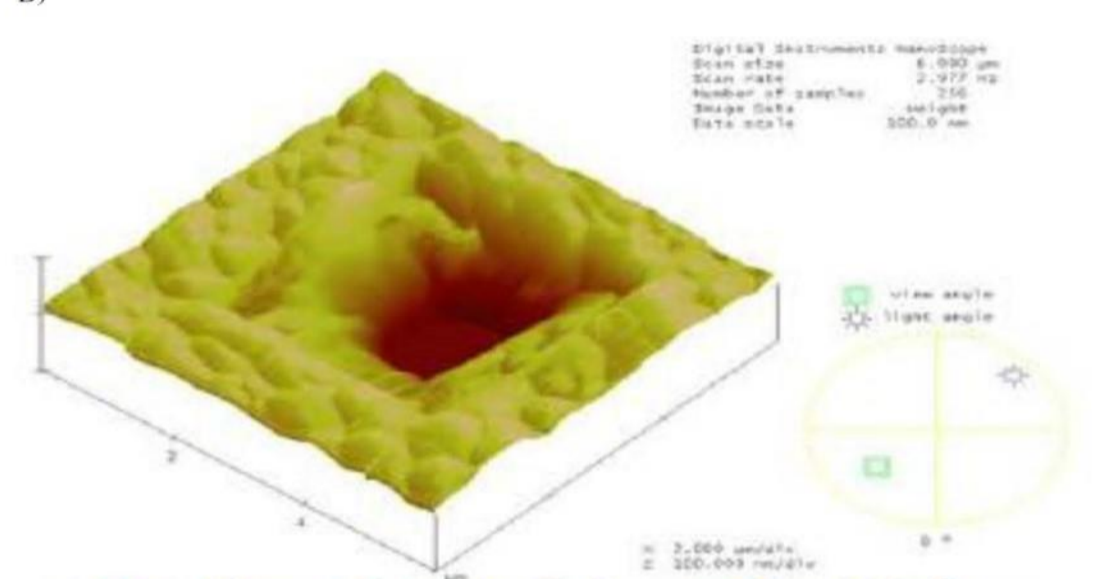
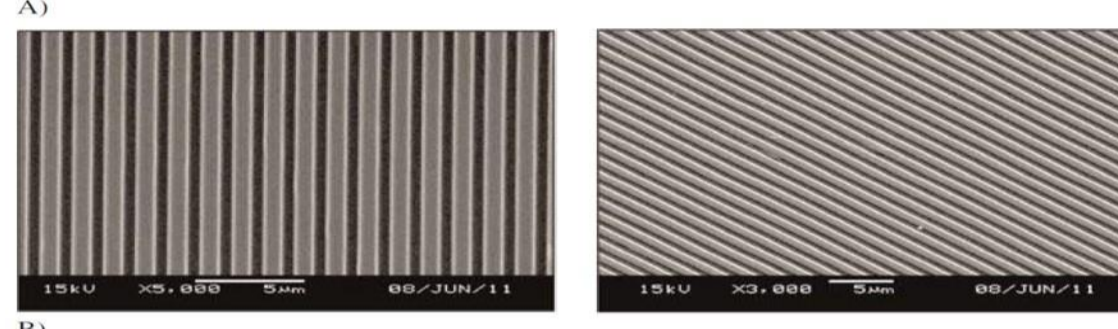
Equipments of the micro transfer imprinting system using roller with magnetic fluid bag



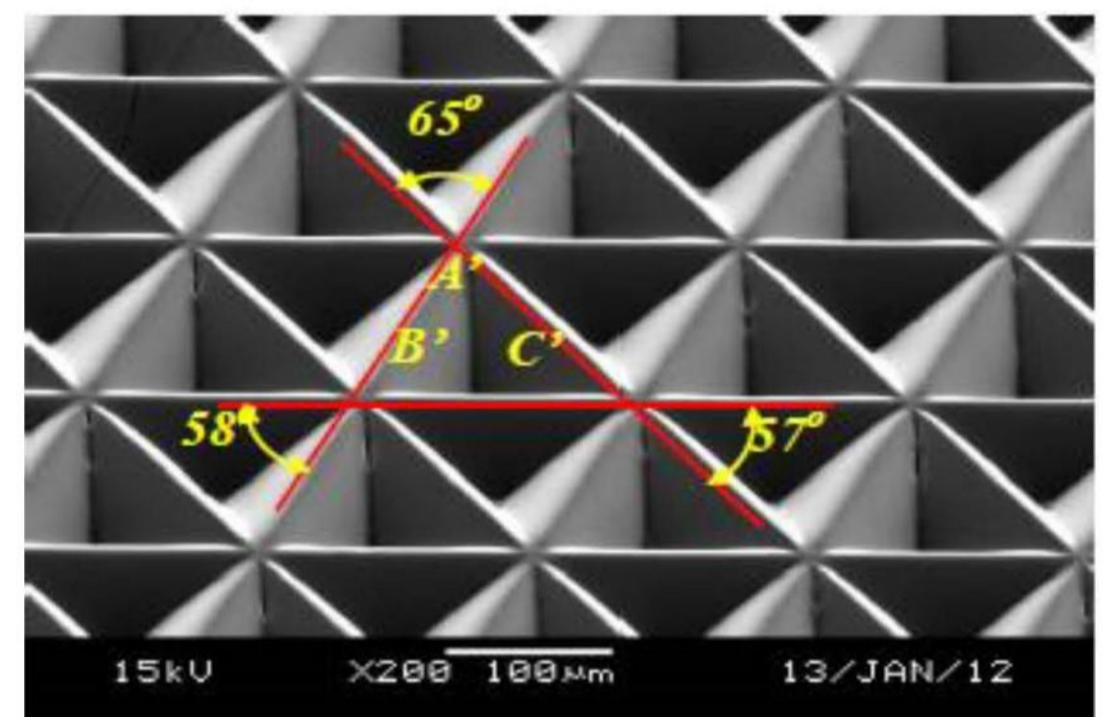
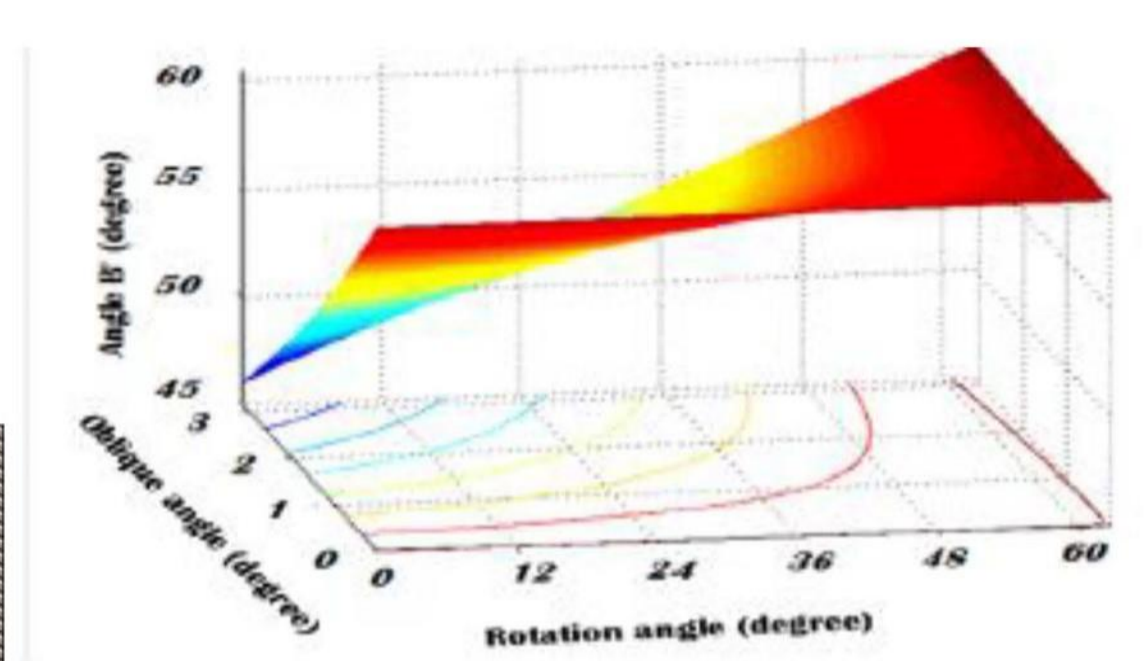
Fresnel lens Microstructure Replication



Visual Imaging



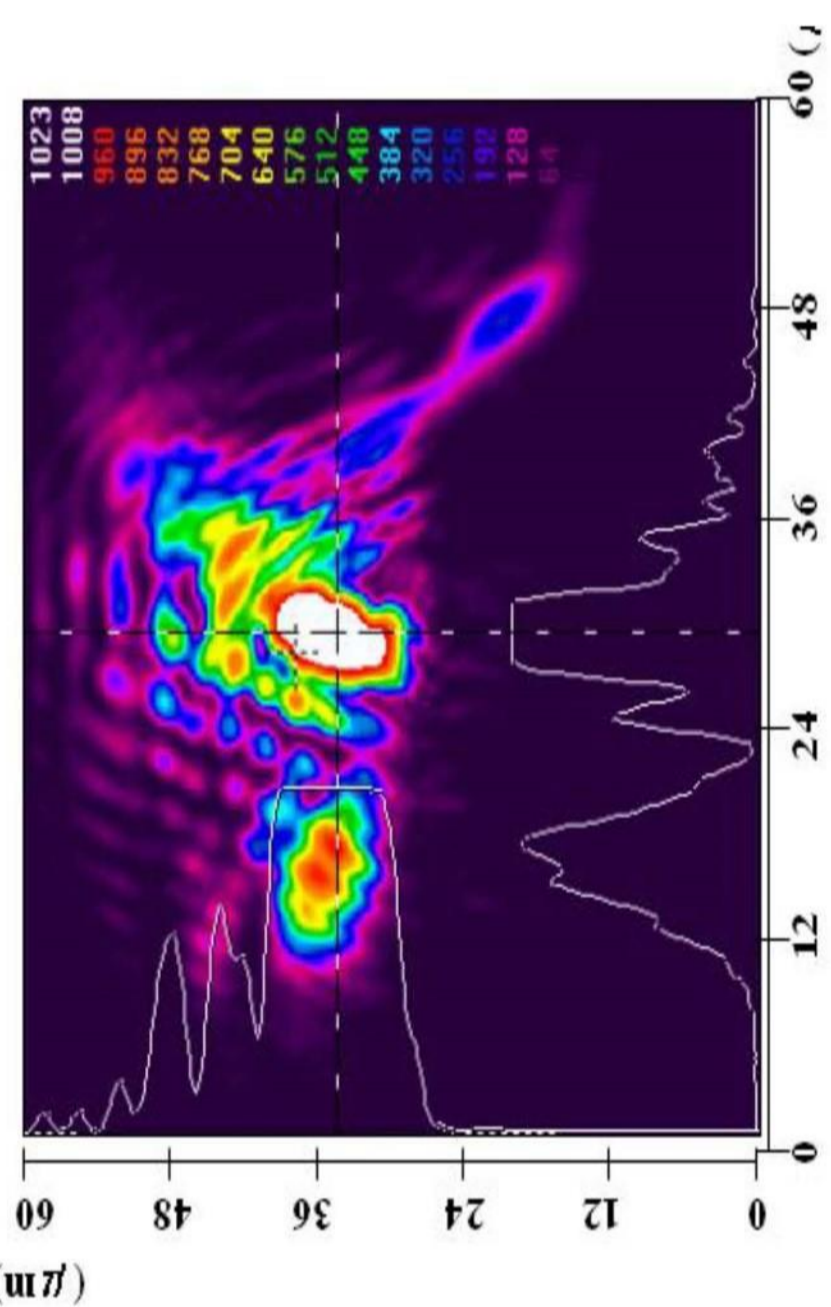
(b) Cu 3D surface morphology at the 1993th sec
Fig. 6. Cu surface morphology at the 1993th sec



先進精微成型技術/軟性微光電(光學)元件製作

ADVANCED MICRO-MOLDING TECHNOLOGY / FLEXIBLE OPTOELECTRONICS

損失與光擴散分析實驗



Discussions on Optical Characteristics

In this study, two optical systems were established, an optics inspection system for reflective lens, which is connected to a screen for imaging by CCD, and the other is an

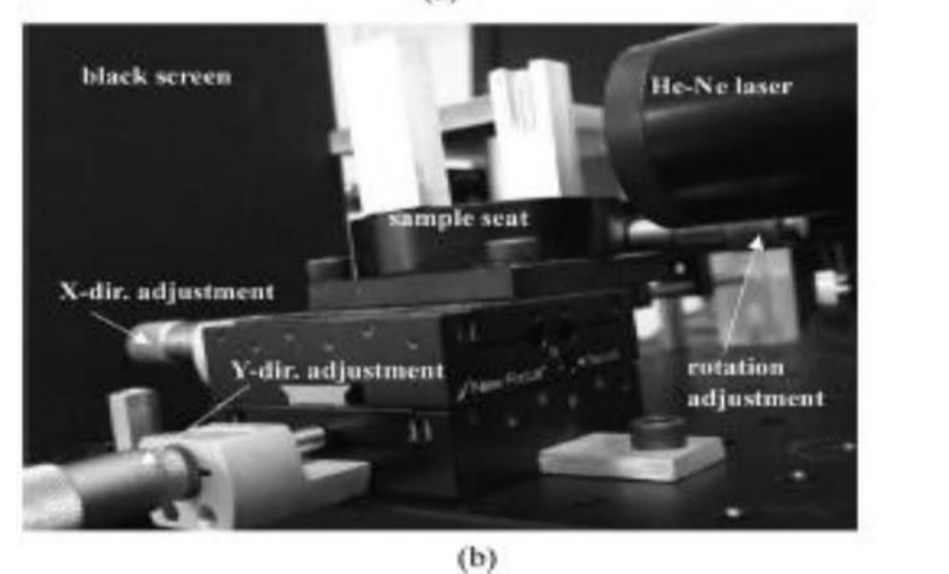
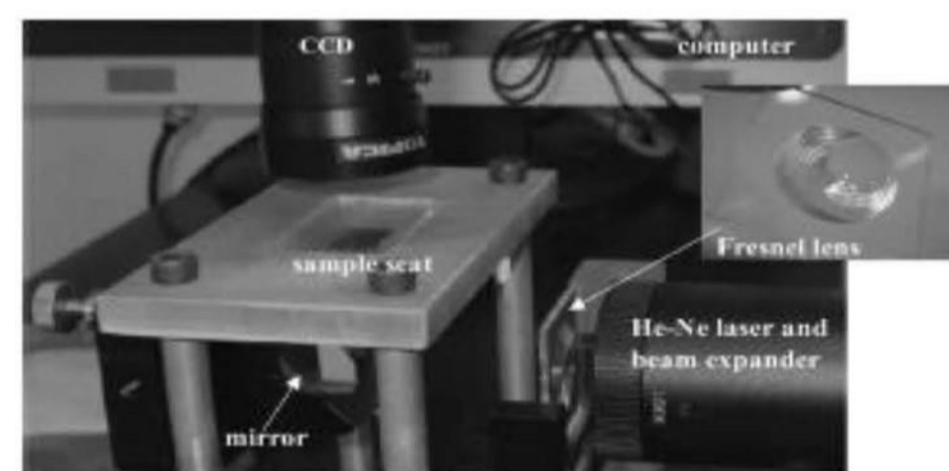


FIG. 16. (a) Optics inspection system for reflective lens; (b) optics inspection system for direct-lighting lens.

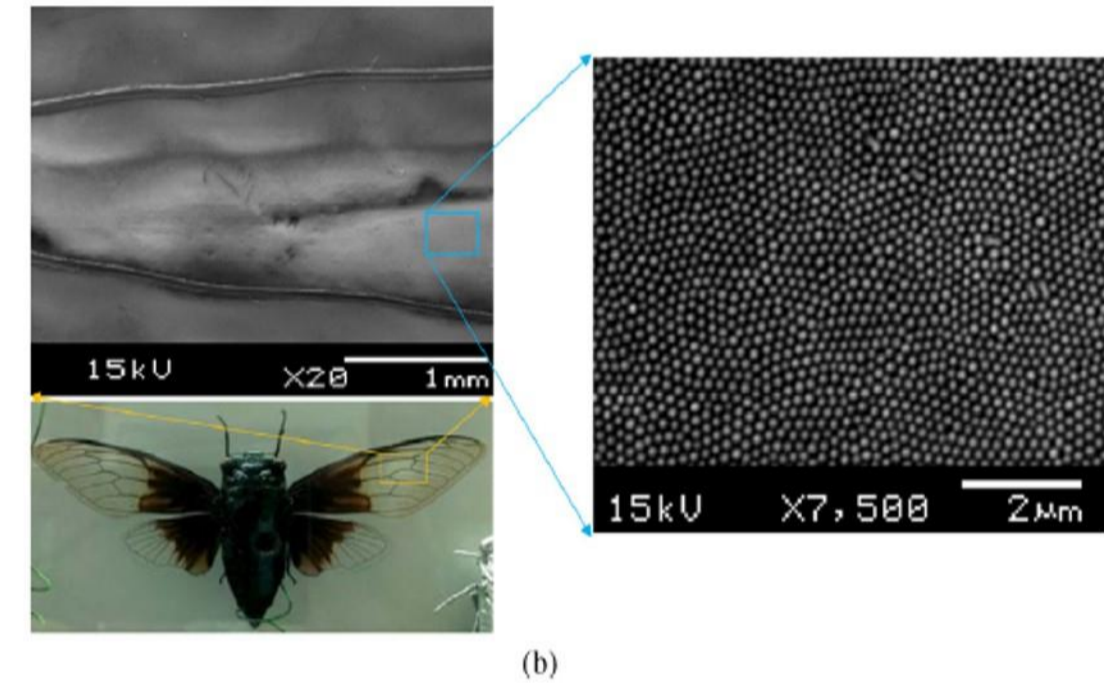
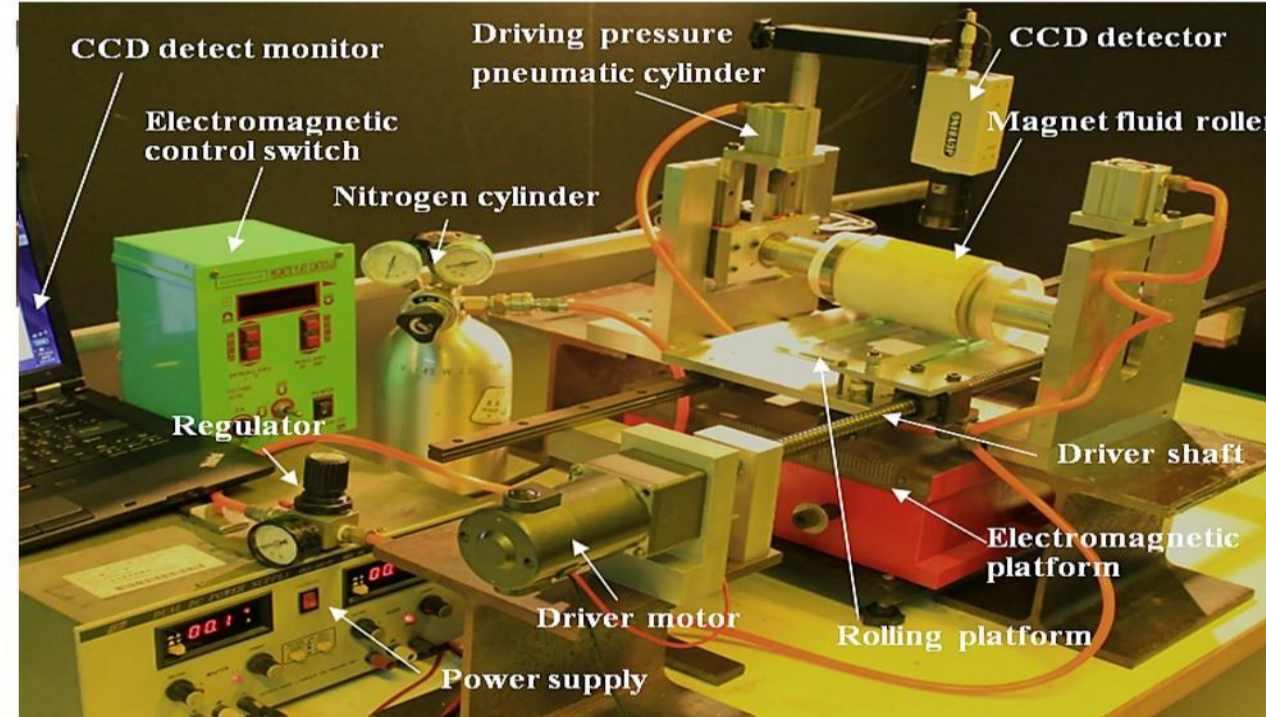
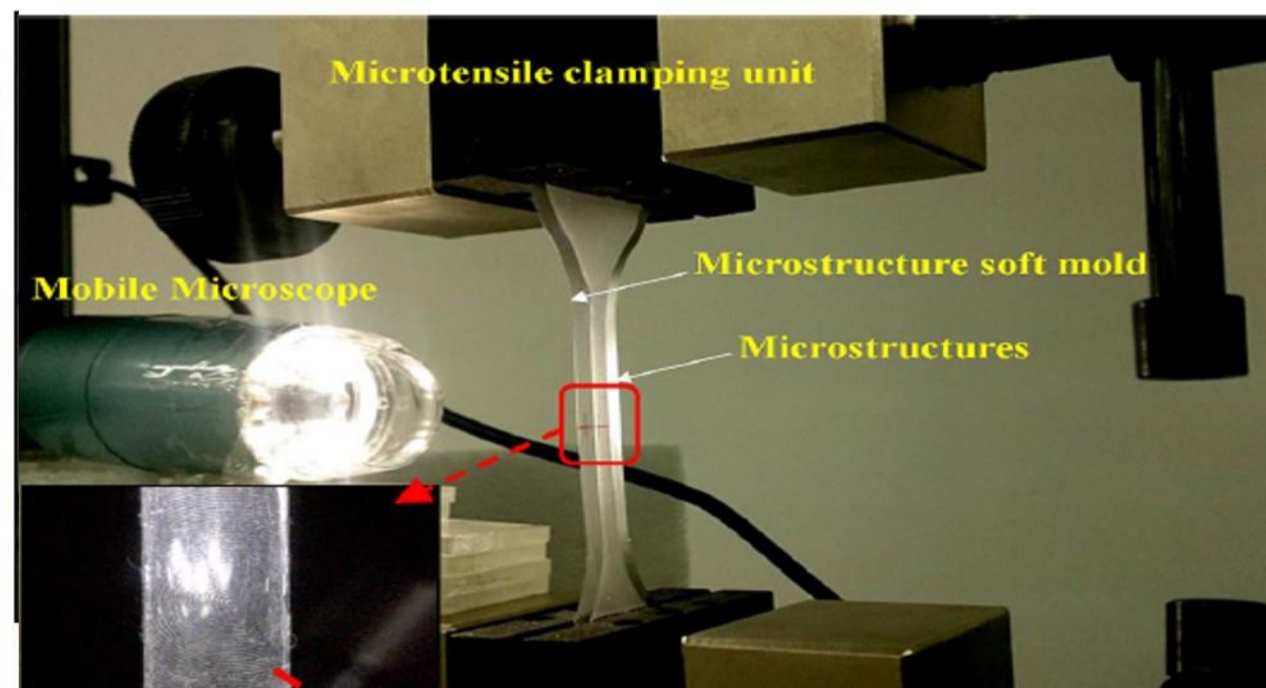


Fig. 1. Insect micro nano papillary antireflective structure SEM images. (a) Beetle's compound eye. (b) Cicada wing

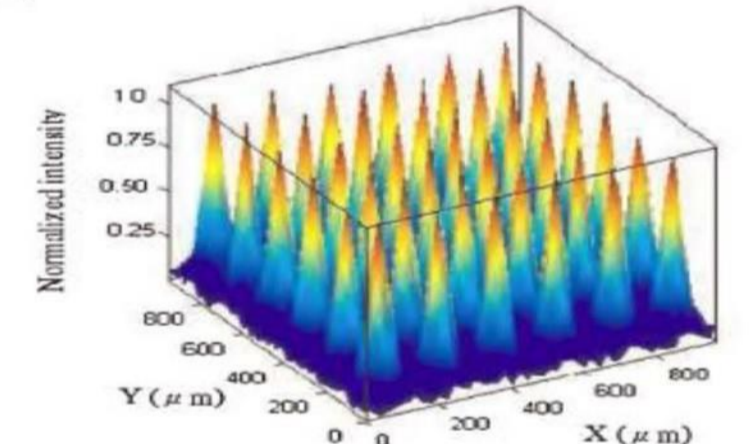
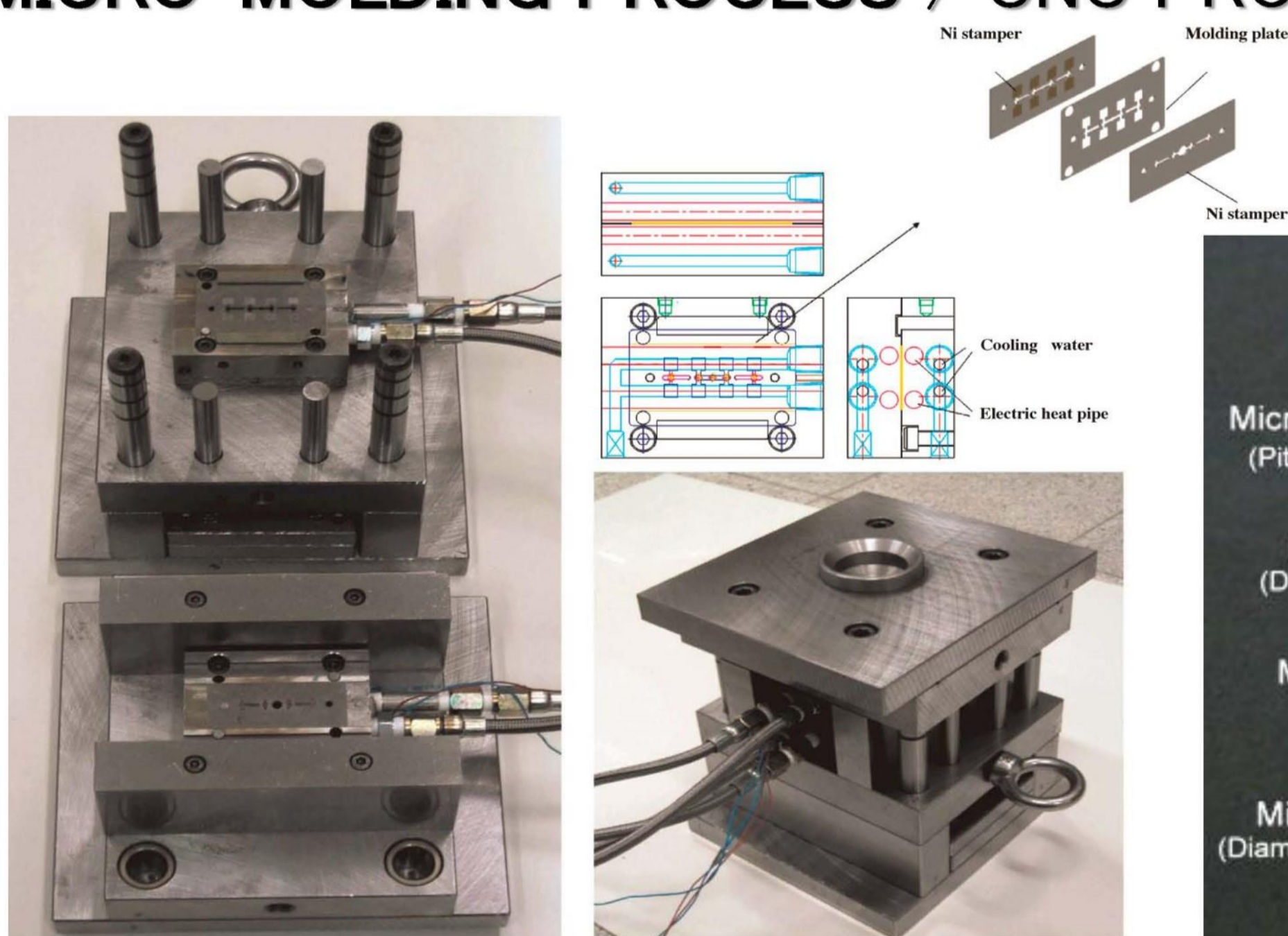


Figure 6. Optical test result of imprinted products of microlens: (a) structure of the optical test, (b) light focusing test, (c) distribution of light intensity (top view), and (d) distribution of light intensity. This figure is available in color online at wileyonlinelibrary.com/journal/pat

精微模具加工與製造技術/CNC工具機/TRIZ研究

MICRO-MOLDING PROCESS / CNC PROCESS/ TRIZ



The photo of the mold for molding ultra-thin parts with micro-features on both surfaces and three-view drawing for the micro-mold design of ultra-thin parts with micro-features on both surfaces.