Electronic Supplementary Material (ESI) for Nanoscale.

Supplementary Information

Gallium, neon and helium focused ion beam milling of thin films demonstrated for polymeric materials: study of implantation artifacts

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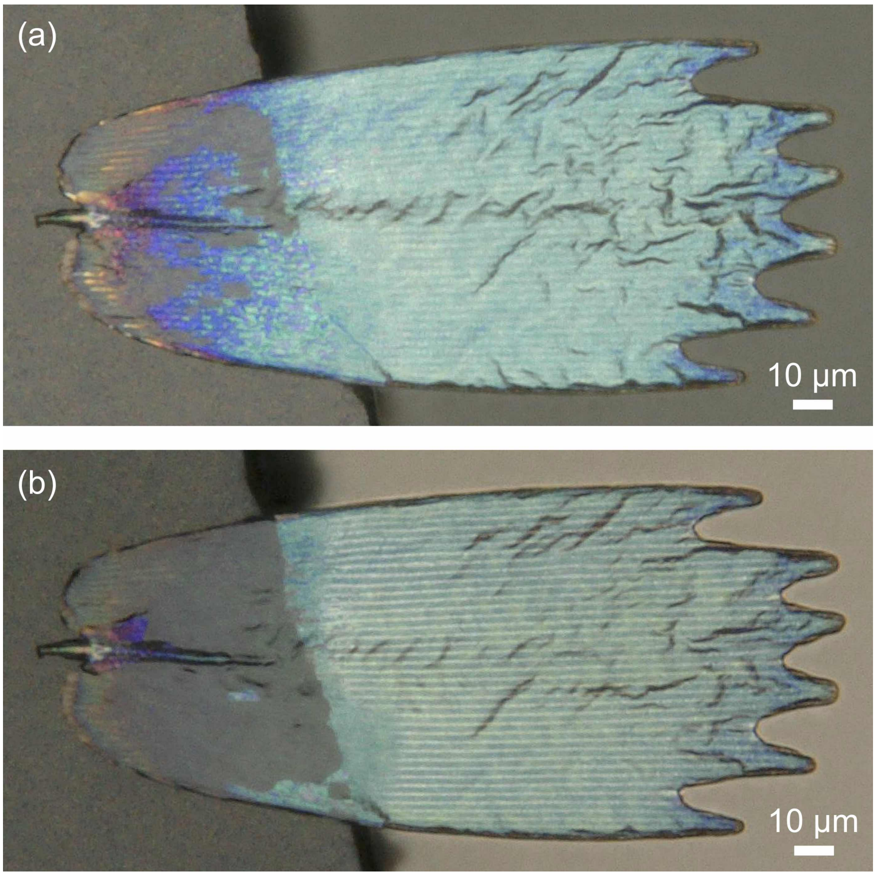

Figure S1: Optical micrographs of (a) a blue butterfly wing scale without coating, and (b) a blue butterfly wing scale coated with ~0.8 nm gold-palladium. A dulling of the blue color of the scale after coating is observed.

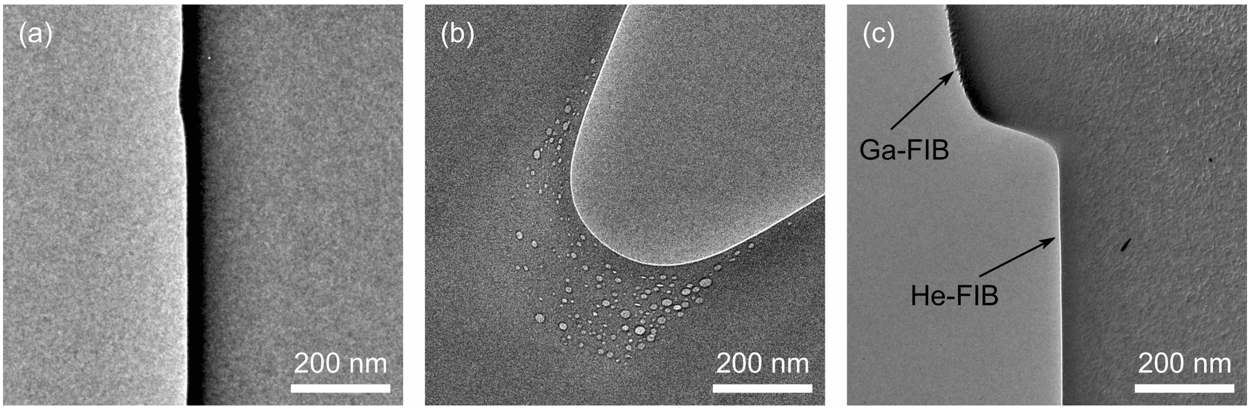

Figure S2: Bright-field TEM images of FIB mills into the synthetic polymer thin film showing milled edges obtained for (a) gallium FIB, (b), neon FIB, (c) helium FIB clean-up after gallium FIB. The dark bands in (a) and (c) are due to implanted gallium. Note that the result shown in (b) is for a neon FIB mill where a lower dose was implemented, showing the formation of neon bubbles in thinned (i.e. incompleteley milled) regions.