

## Supporting Information

# High Refractive Resist for UV-nanoimprint Soft Lithography Based on Titanium-containing Elemental Polymer Oligomer

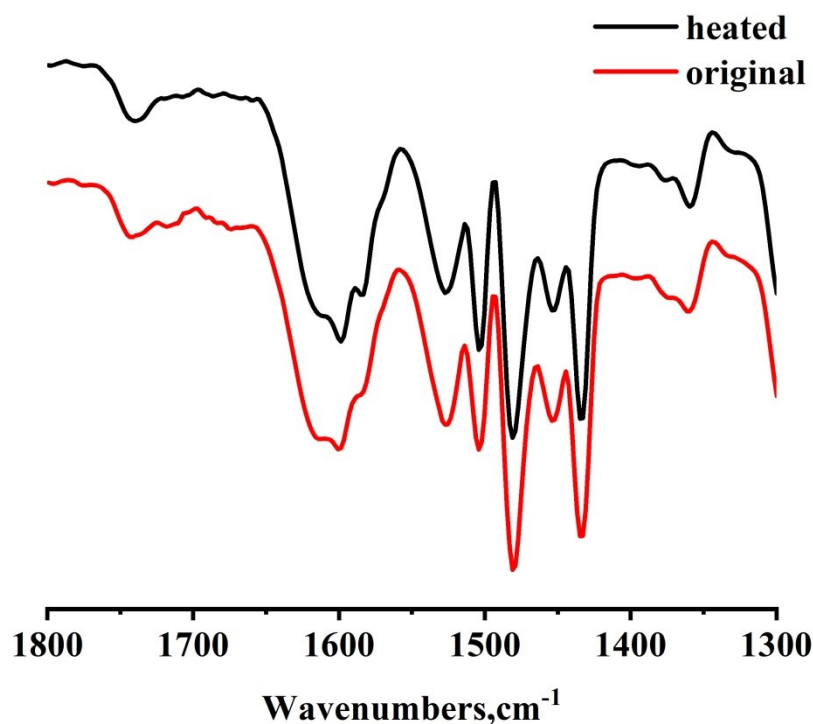
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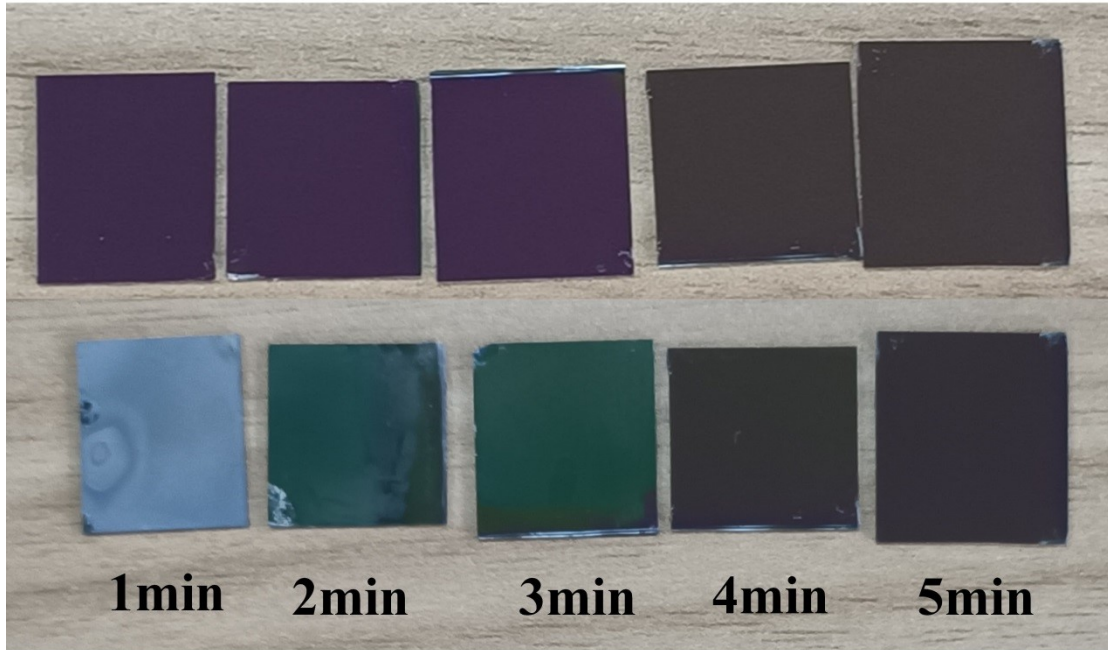
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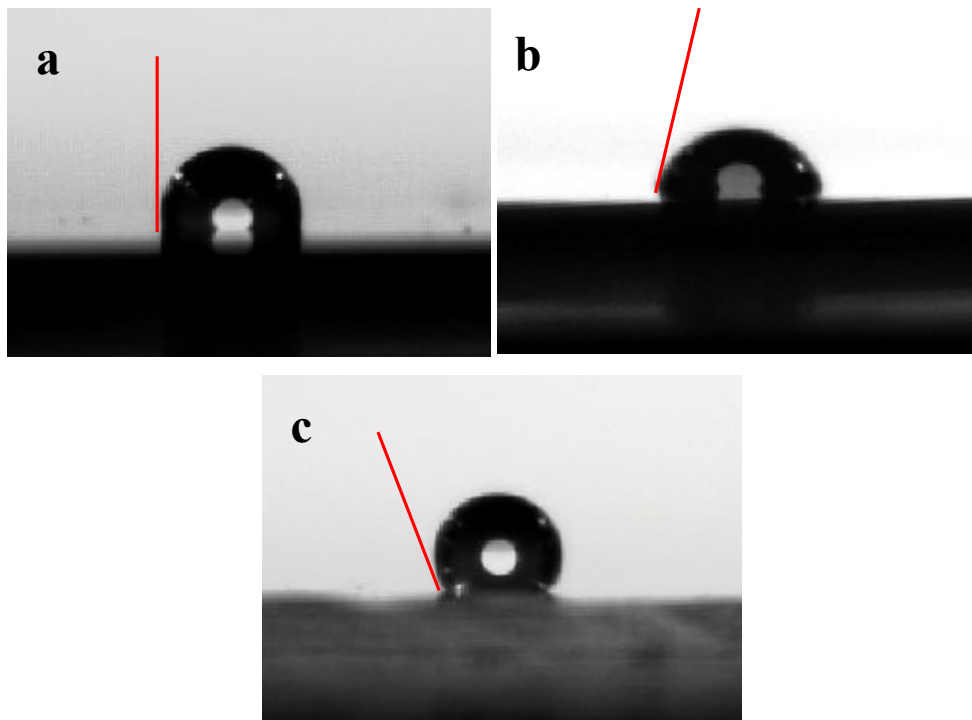
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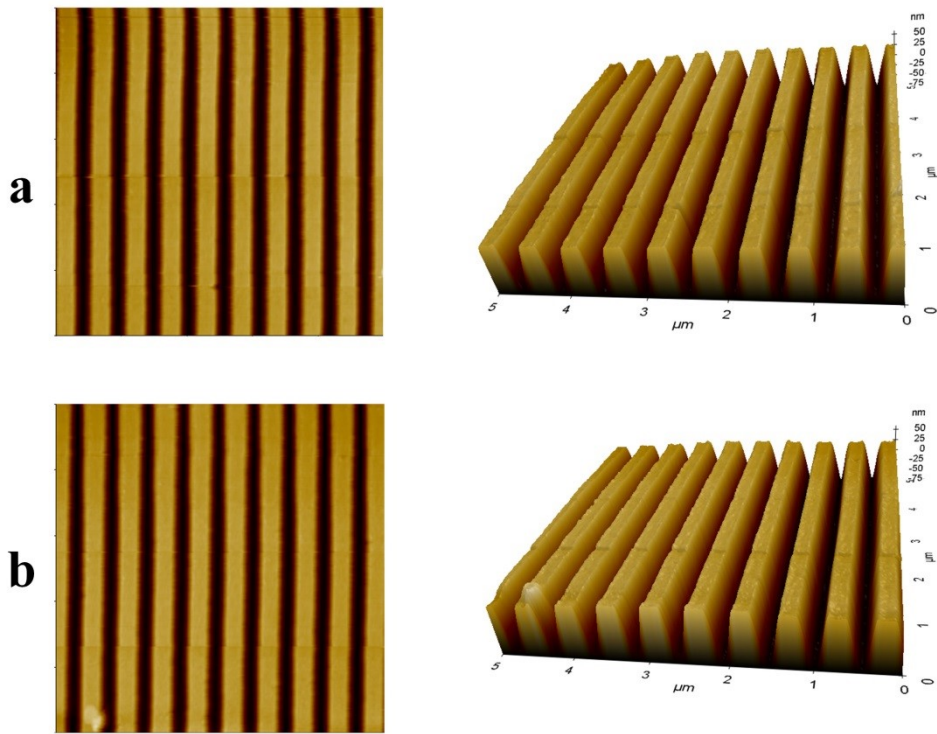
**Fig.1.** FTIR spectrum of Ti-resist films before and after heated at 80°C for 5 minutes.



**Fig.2.** Optical images of Ti-resists films UV-cured for different time before and after acetone immerse.



**Fig.3.** Water contact angles of a) CN975, b) Ti-resist and c) PDMS film.



**Fig.4.** AFM images of a) 550nm pitch Zr-resist grating on Si wafer; b) 550nm pitch grating imprinted by a PDMS mold using a) as the master.