

## Supplementary Information

### Circularly polarized luminescence from semiconductor quantum rods templated by self-assembled cellulose nanocrystals

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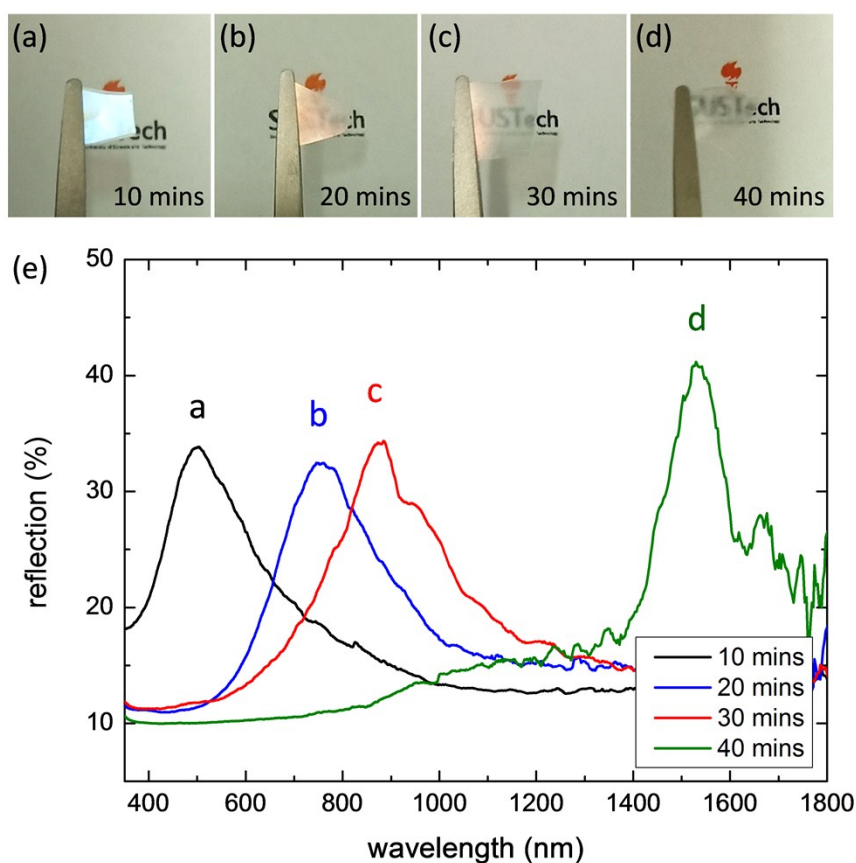


Fig. S1 The CNC solid films formed by CNC suspensions after sonication treatment of different time periods. (a-d) The films under natural light show iridescent colors from blue to infrared from left to right. The sonication times are 10 mins, 20 mins, 30 mins and 40mins respectively. (e) Reflection spectra of the CNC solid films with corresponding sonication times.

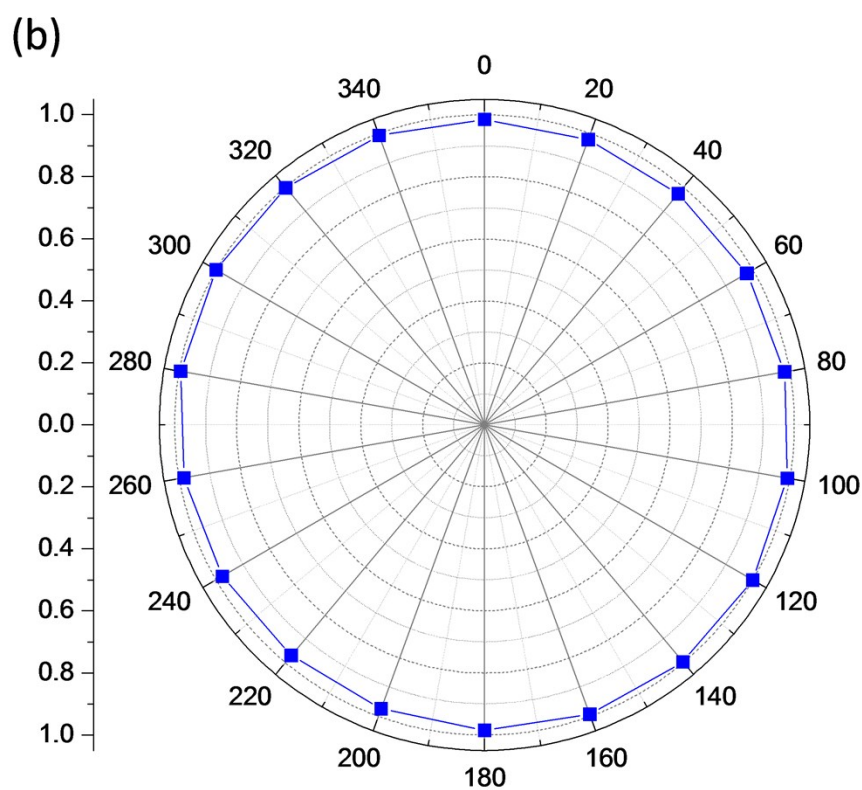
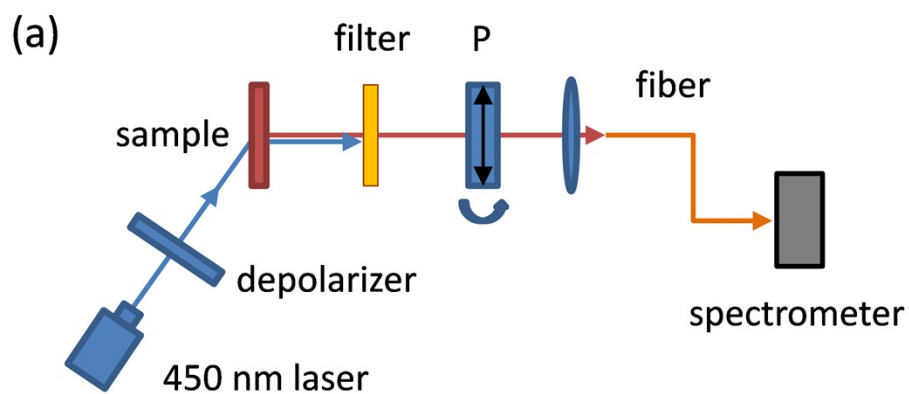


Fig. S2 Polarization measurement of photoluminescent CNC-QR composite film with 600nm center reflective wavelength. (a) Schematic optical setup for polarization measurement. The film is excited by a 450 nm unpolarised laser beam. The PL is collected through a collimating lens and a fiber and measured by a spectrometer. A 500 nm long-pass filter is applied after the sample to filter out the exciting light, and a rotating polarizer is used for polarization checking. (b) Normalized intensity vs. polarization angle of PL measurement. The measurement demonstrates that there are no linear polarization artefacts.