

Supporting Information

Light and pH dual-responsive spiropyran-based cellulose nanocrystals

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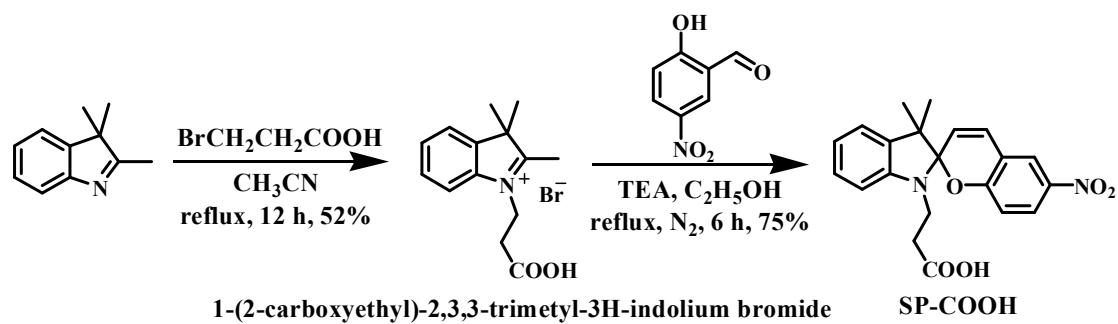
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Scheme S1. Synthesis route of SP-COOH.

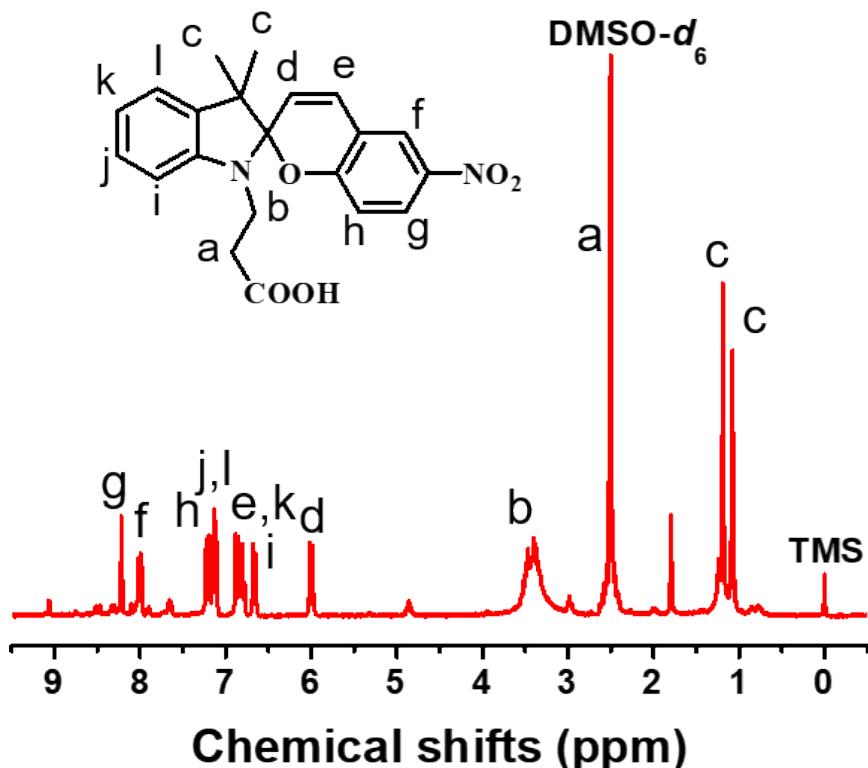


Figure S1 ^1H -NMR spectrum of SP-COOH in $\text{DMSO}-d_6$.

^1H -NMR (400 MHz, $\text{DMSO}-d_6$): (TMS, ppm) 1.07 (s, 3H), 1.19 (s, 3H), 2.49 (m, 2H), 3.40 (m, 1H), 3.46 (m, 1H), 6.02 (d, $J = 12.0$ Hz, 1H), 6.66 (d, $J = 8.0$ Hz, 1H), 6.78 (t, $J = 8.0$ Hz, 1H), 6.86 (d, $J = 12.0$ Hz, 1H), 7.13 (t, $J = 8.0$ Hz, 1H), 7.18 (s, 1H), 7.22 (s, 1H), 8.01 (dd, $J = 12.0$ Hz, 1H), 8.22 (d, $J = 4.0$ Hz, 1H).

ESI-2019-N036-1 #10-12 RT: 0.27-0.33 AV: 3 NL: 4.99E6
T: c ESI Full ms [50.00-2000.00]

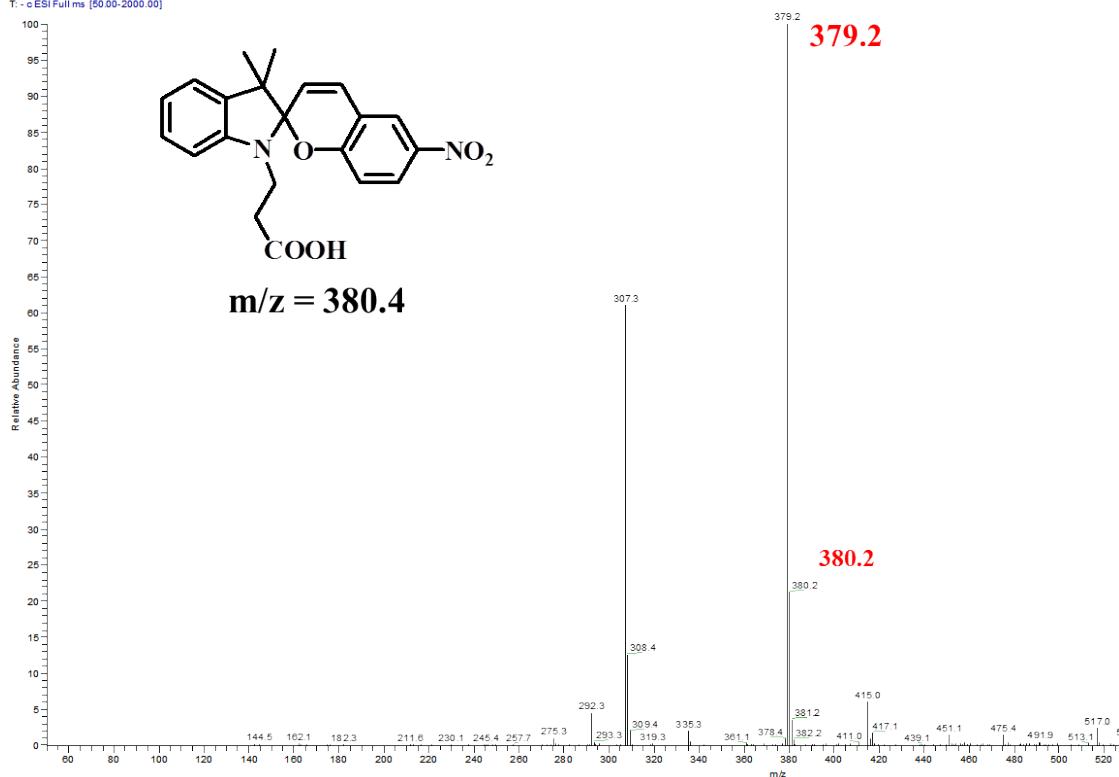


Figure S2 ESI-MS spectrum of SP-COOH.