Supplementary Information

Photomechanical motion of diarylethene molecular crystal nanowires

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Figure S1. Optical microscopy images the bundle of DAE nanowires under alternative UV and visible light irradiation.

Figure S2. Photographs of AAO template containing DAE nanowires before and after UV light irradiation.

Figure S3. Cross polarized microscopy images of single DAE nanowire before and after UV light irradiation.

Figure S4. Flowchart of making DAE nanowires by using AAO template method.



Figure S1. Optical microscopy images the bundle of DAE nanowires. (a) DAE nanowires before light irradiation; (b) DAE nanowires after UV light irradiation and (c) DAE nanowires after visible light irradiation. Scale bar: $30 \mu m$



Figure S2. Photographs of (a) AAO template containing DAE nanowires before UV light irradiation and (b) AAO template containing DAE nanowires after UV light irradiation, diameter of the template is 13 mm.



Figure S3. Cross polarized microscopy images of (a) a single DAE nanowire before UV light irradiation and (b) a single DAE nanowire after UV light irradiation. Scale bar: $20 \ \mu m$



Figure S4. Flowchart of making DAE nanowires by using AAO template method.