

Supporting Information for

Light-driven Rapid Peeling of Photochromic Diarylethene
Single Crystals

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Table S1. Crystallographic data of crystal **1a**

Formula	C ₃₇ H ₂₆ F ₆ O ₂ S ₂
Formula weight	680.70
Temperature / K	150(2)
Crystal system	Monoclinic
Space group	<i>P</i> 2 ₁ / <i>n</i>
<i>a</i> / Å	13.208(10)
<i>b</i> / Å	6.195(5)
<i>c</i> / Å	38.28(3)
α / °	90.00
β / °	96.058(9)
γ / °	90.00
Volume / Å ³	3114(4)
<i>Z</i>	4
Density / g cm ⁻³	1.452
Goodness-of-fit on <i>F</i> ²	1.084
<i>R</i> [<i>I</i> > 2σ(<i>I</i>)]	<i>R</i> ₁ = 0.0593, <i>wR</i> ₂ = 0.1533
<i>R</i> (all data)	<i>R</i> ₁ = 0.0739, <i>wR</i> ₂ = 0.1658
CCDC No.	2060232

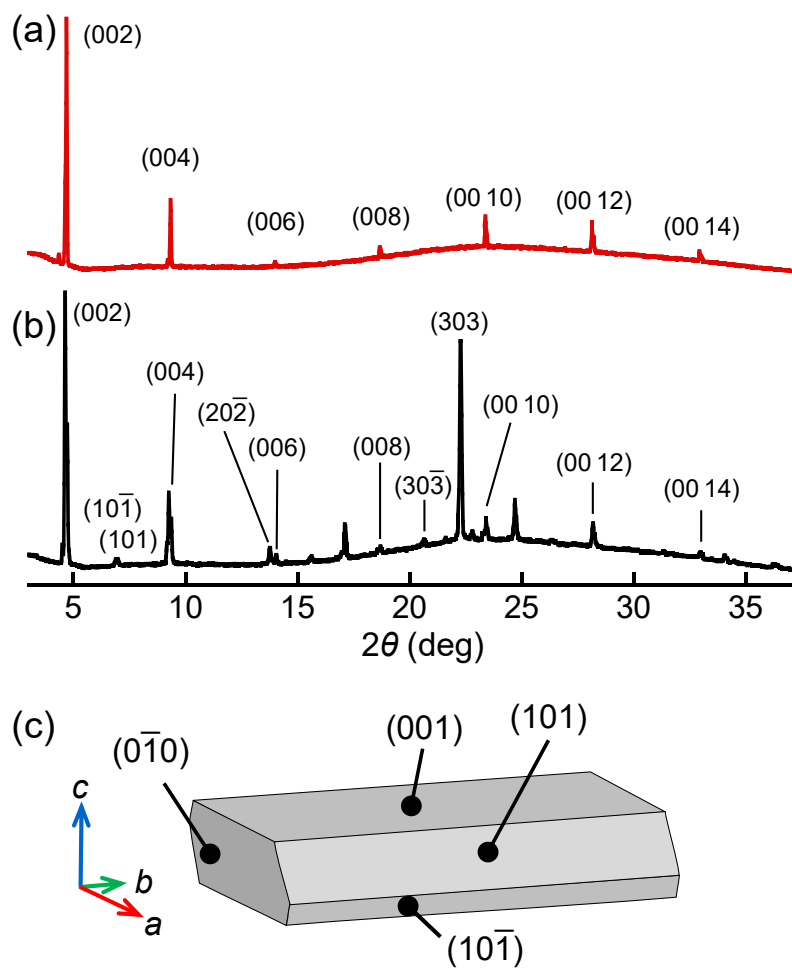


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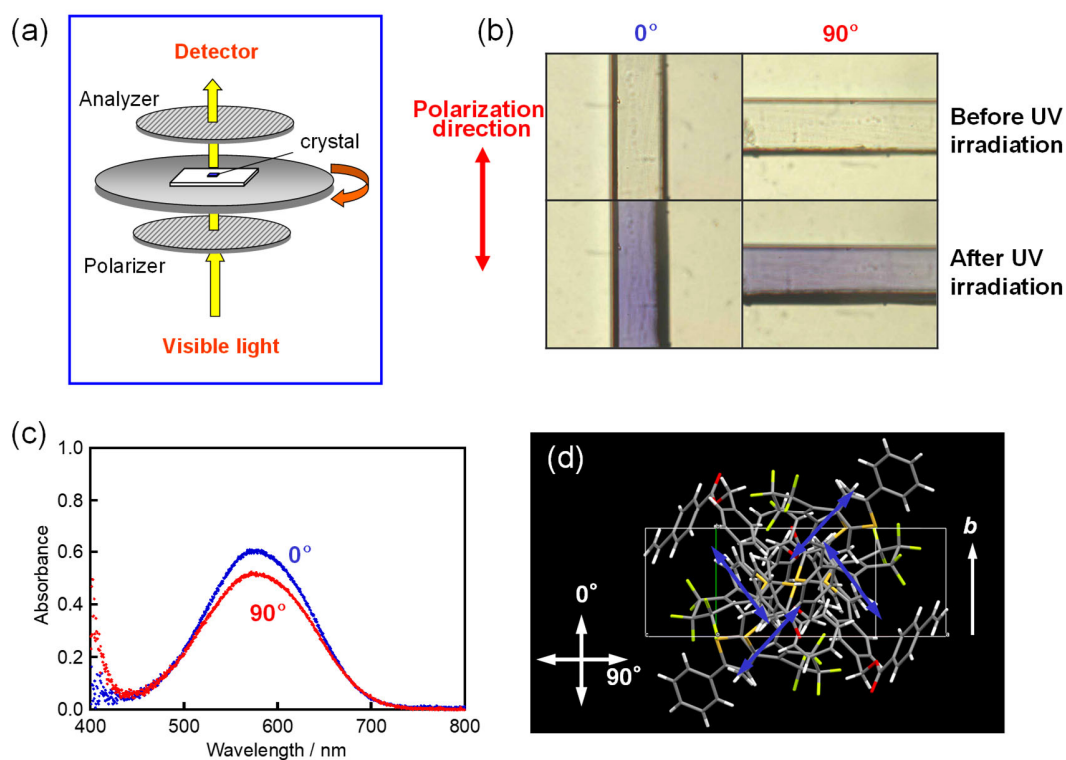


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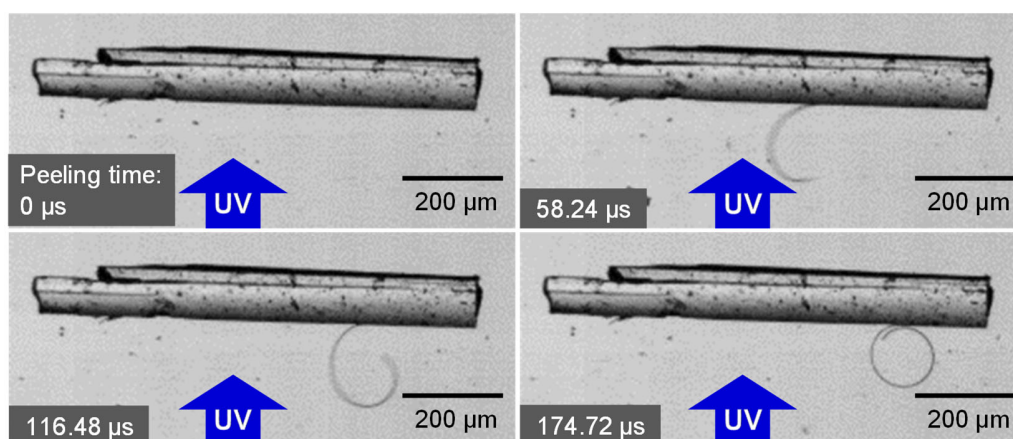


Figure S3. Photoinduced peeling of crystal **1a** upon irradiation with 365 nm light to the lateral face of the crystal. See **Video S3** in Supporting Information.

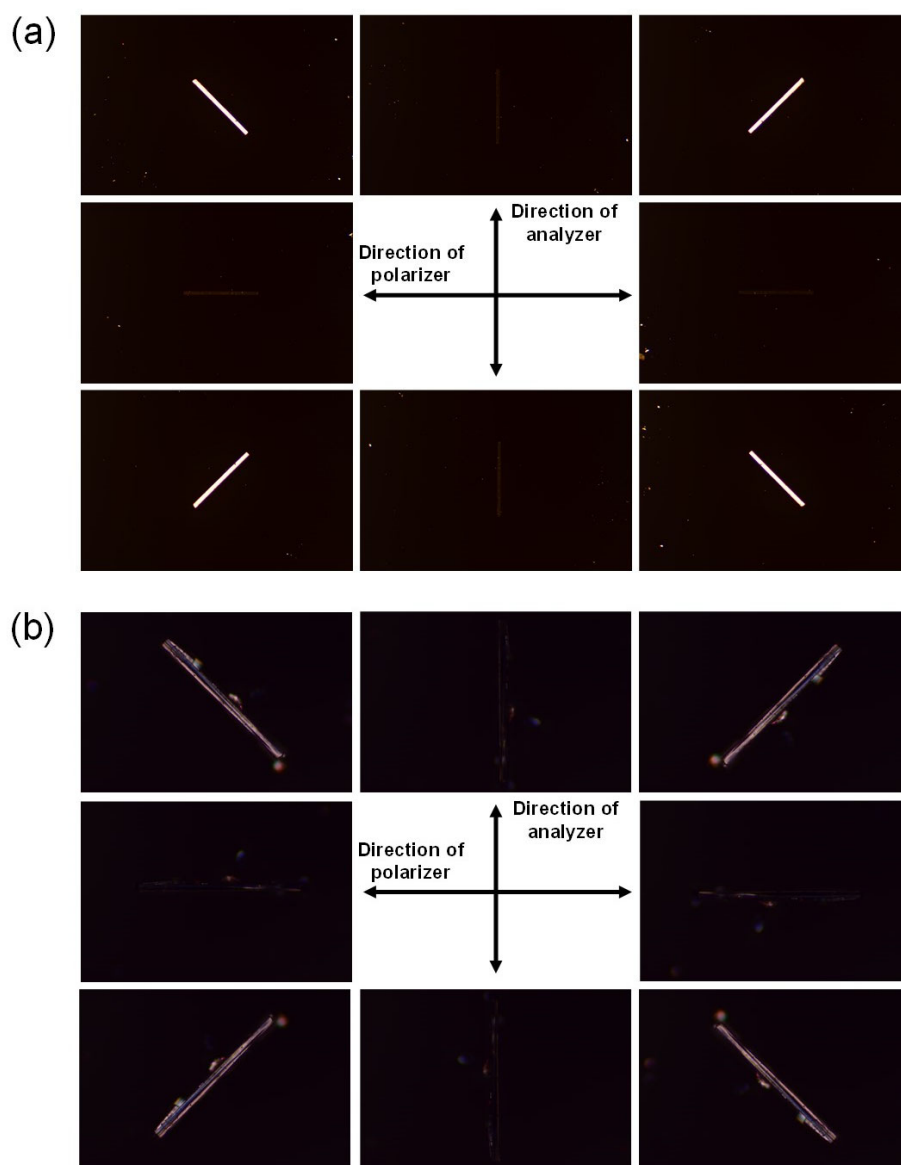


Figure S4. Optical microphotographs of (a) the peel and (b) the lateral face of the parent crystal of **1a** under crossed Nicols.

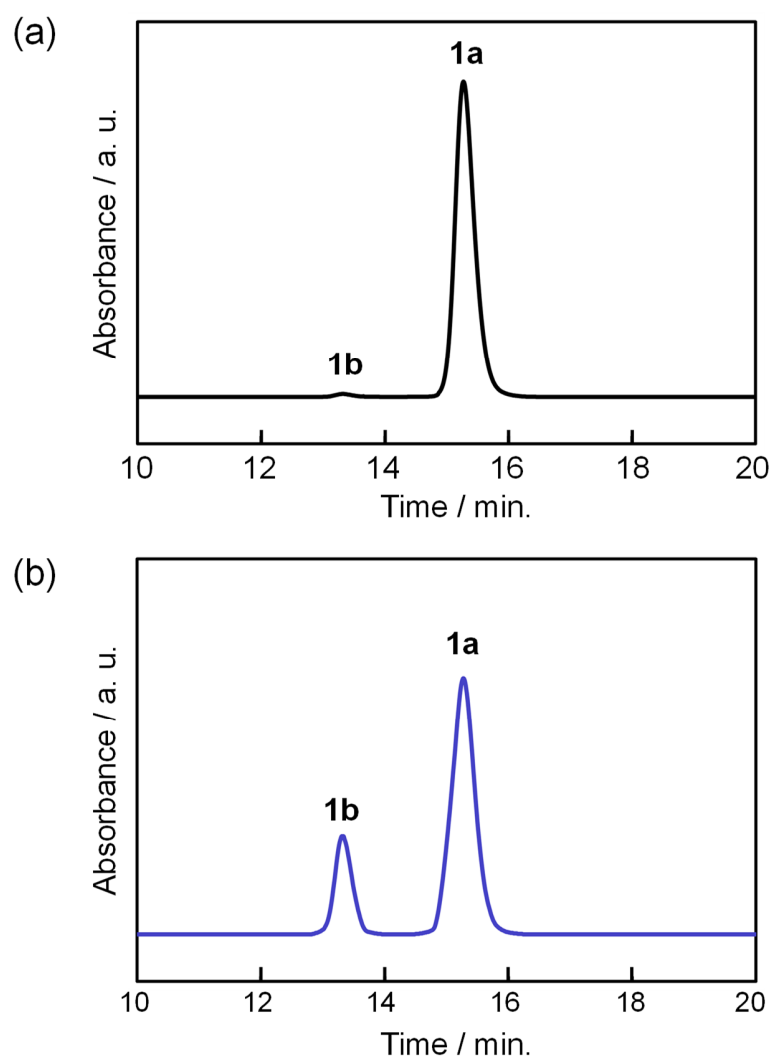


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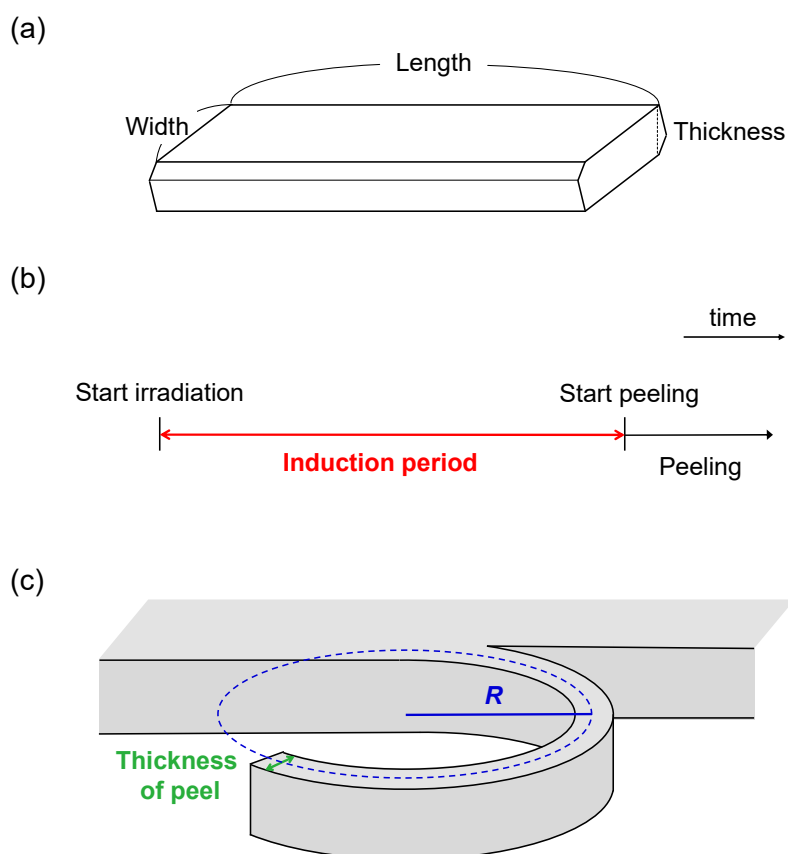


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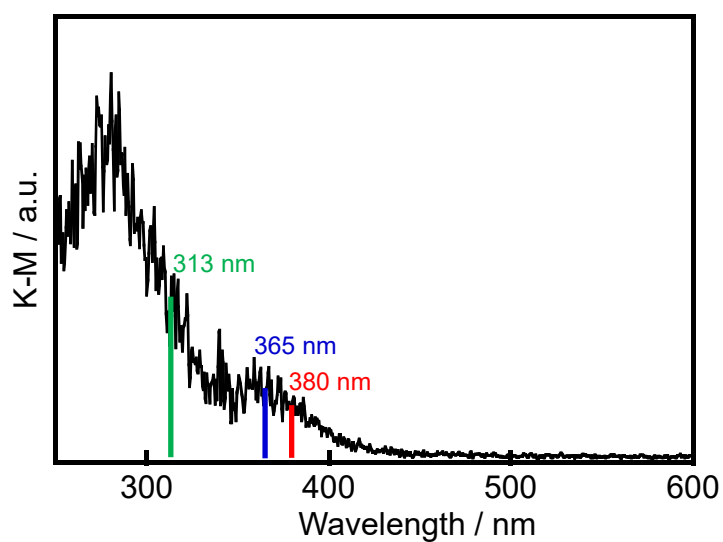


Figure S7. Diffuse reflectance spectrum of crystal **1a** with barium sulfate.

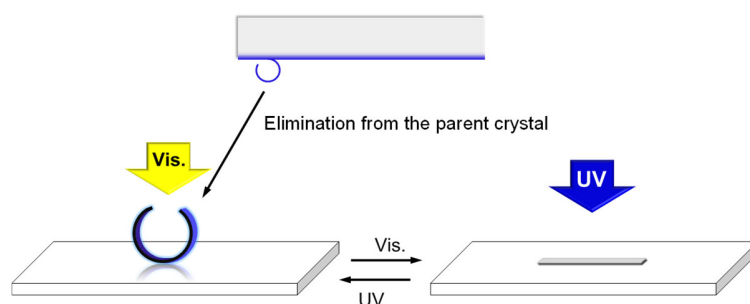


Figure S8. Schematic illustration of the preparation of the straightened peel by visible light irradiation.

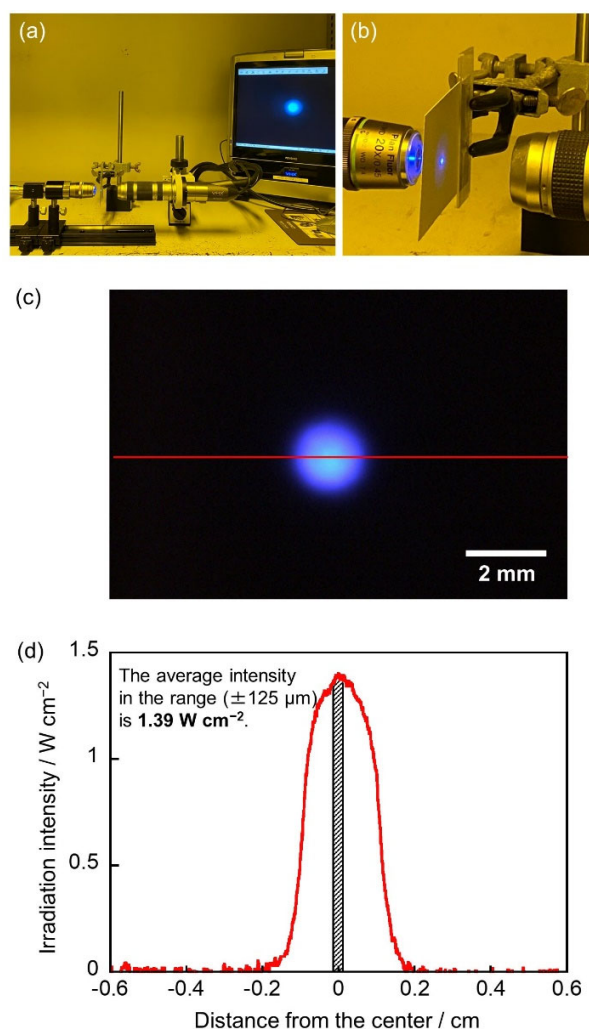


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