

**Supporting Information for:**

**Synthesis of Spiropyran with Methacrylate at the  
Benzopyran Moiety and Control of the Water Repellency  
and Cell Adhesion of its Polymer Film**

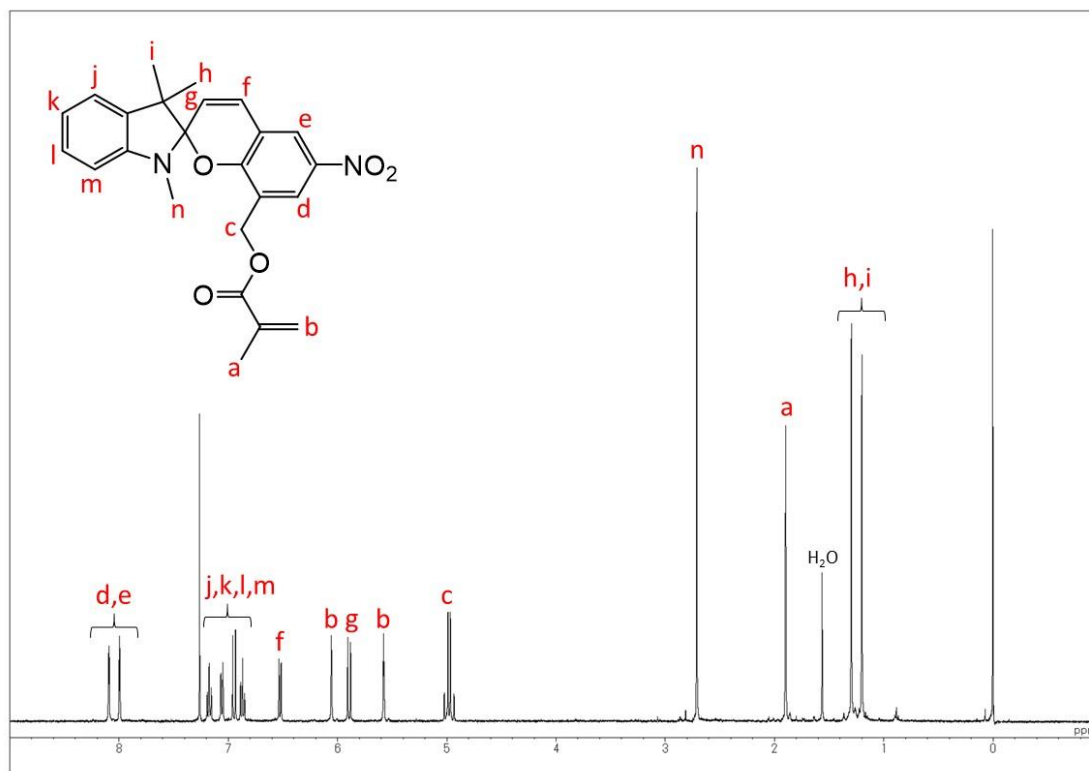
*Nobuo Murase\**, *Tsuyoshi Ando*, *Hiroharu Ajiro\**

Division of Materials Science, Graduate School of Science and Technology, Nara Institute of Science and  
Technology, 8916-5 Takayama-cho, Ikoma, Nara 630-0192, Japan

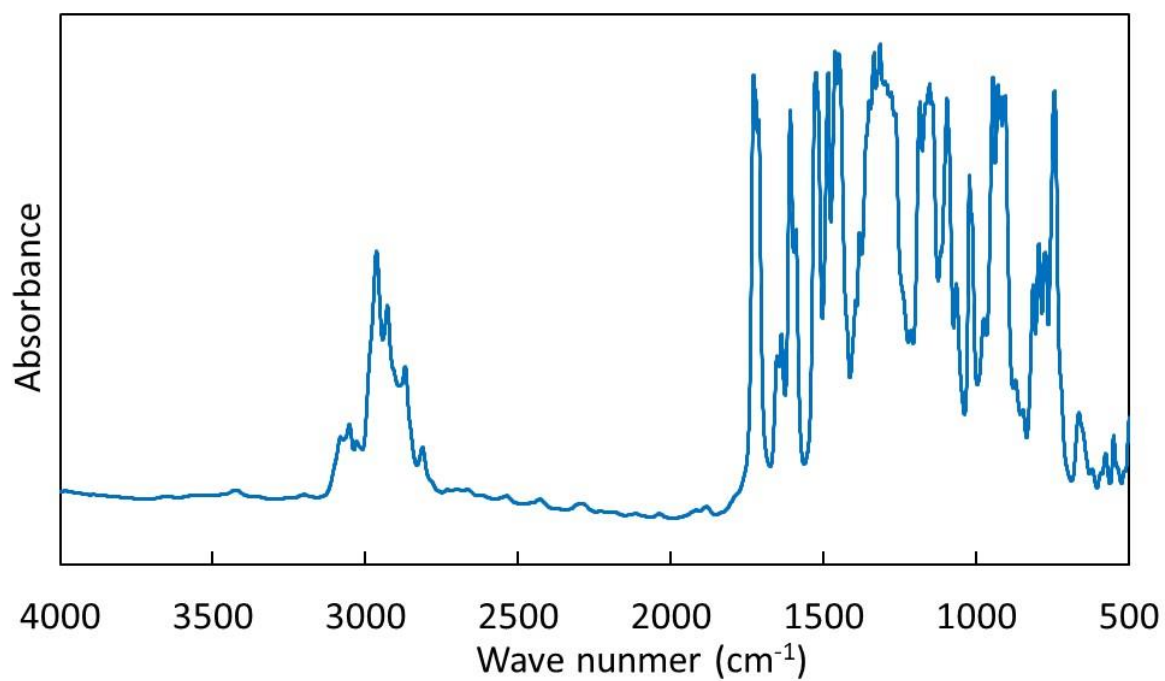
Corresponding Author:

\*E-mail. [nmurase@ms.naist.jp](mailto:nmurase@ms.naist.jp) (Nobuo Murase), [ajiroy@ms.naist.jp](mailto:ajiroy@ms.naist.jp) (Hiroharu Ajiro)

The supporting information are composed of 6 figures in 6 pages



**Figure S1.** <sup>1</sup>H NMR spectrum of synthesized SpMA.



**Figure S2.** IR spectrum of synthesized SpMA.

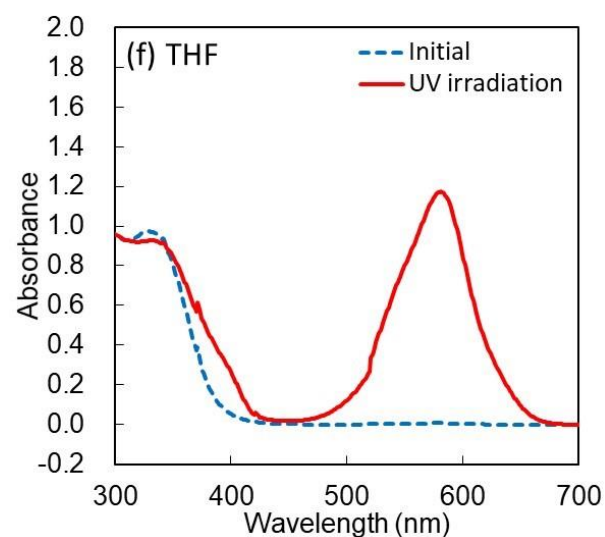
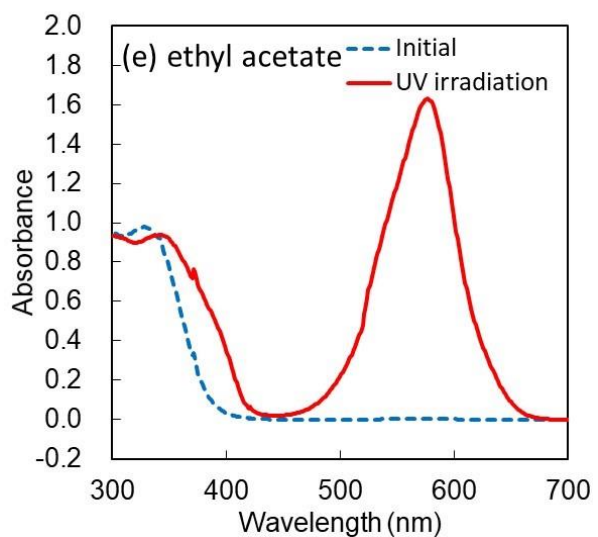
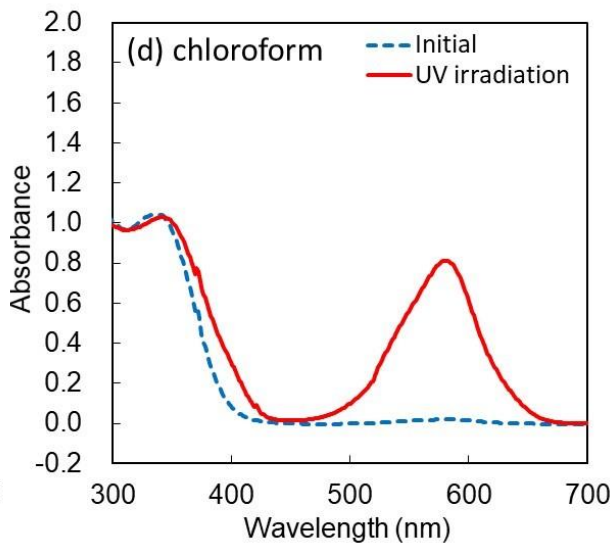
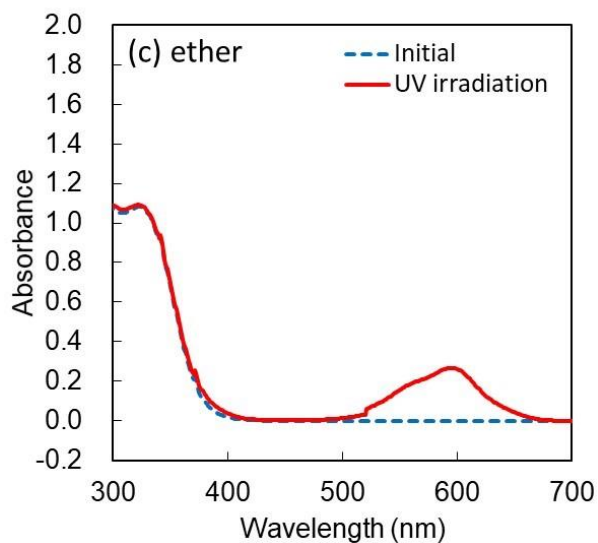
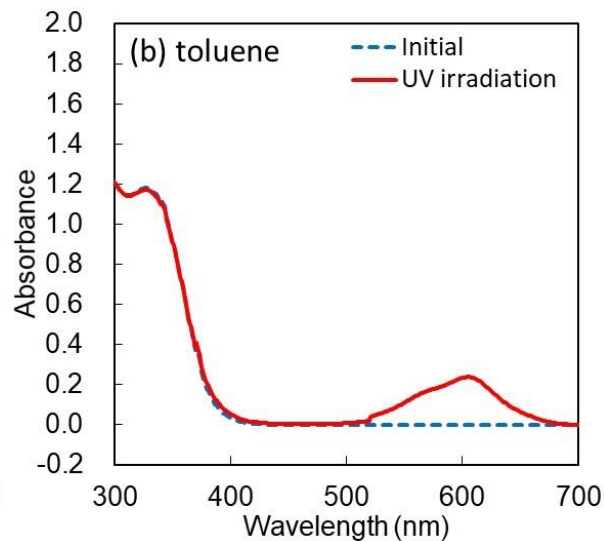
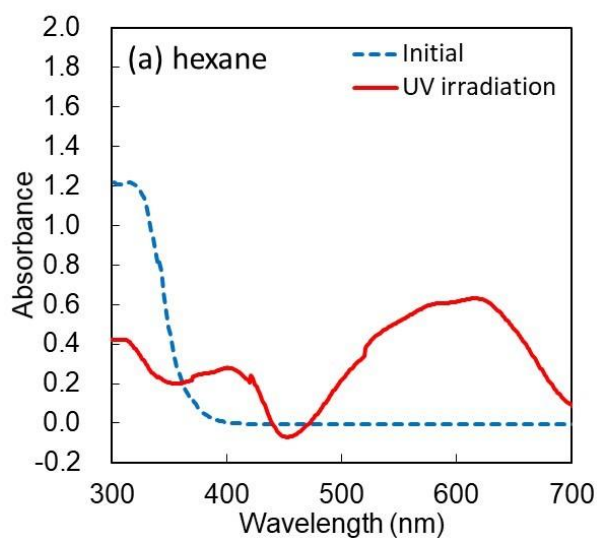
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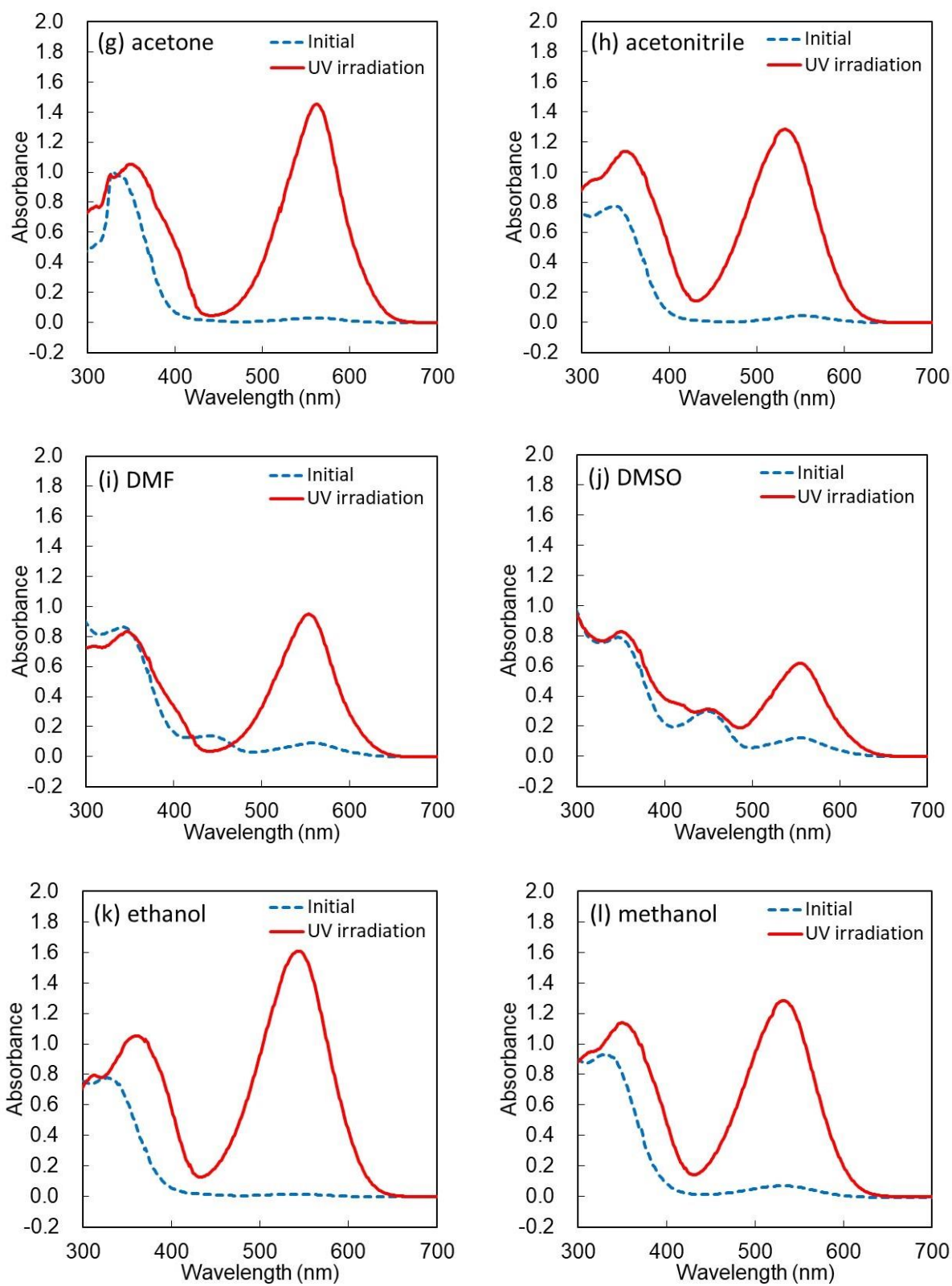


<UV irradiation (2 min)>

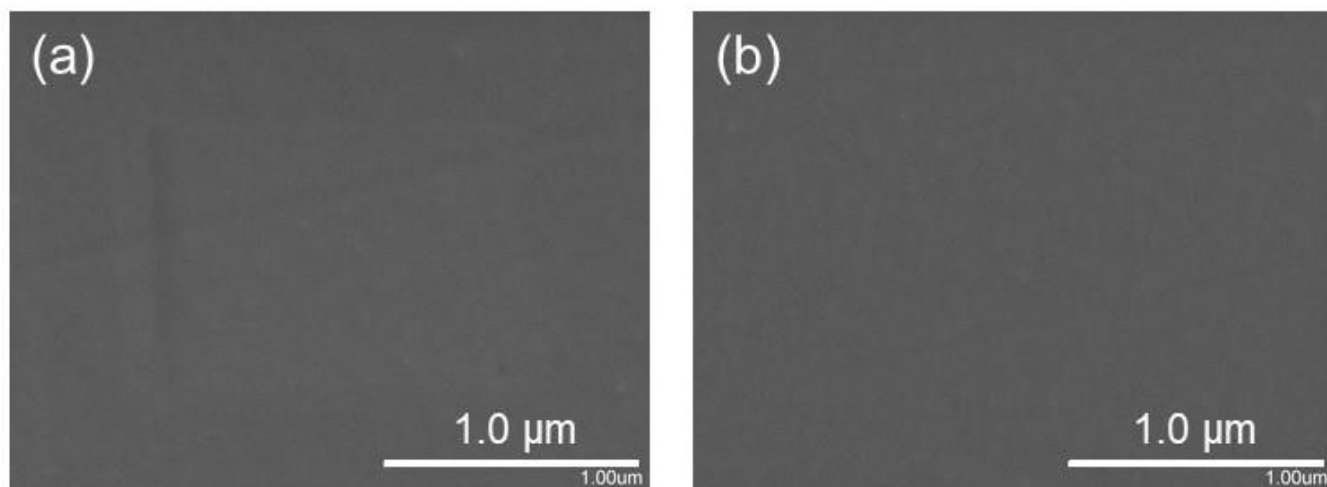


**Figure S3.** Photo-isomerization images of synthesized SpMA in various solvents.

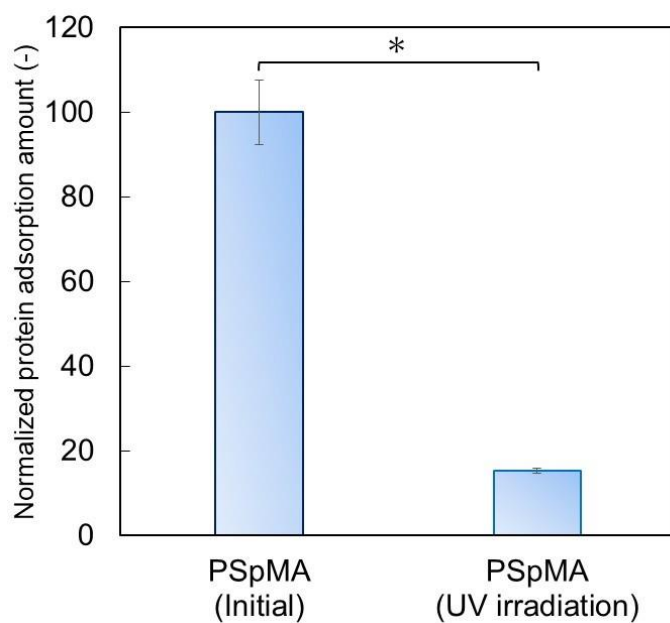




**Figure S4.** UV spectra of photo-isomerization of synthesized SpMA in various solvents.



**Figure S5.** SEM images of PSpMA spin-coated on a PET substrate in initial state (a) and UV irradiation (b) ( $\times 50$  k).



**Figure S6.** Protein adsorption test of BSA toward PSpMA spin-coated on a PET substrate (PSpMA (initial)=100) ( $*p < 0.05$ ).