

## Supporting information for:

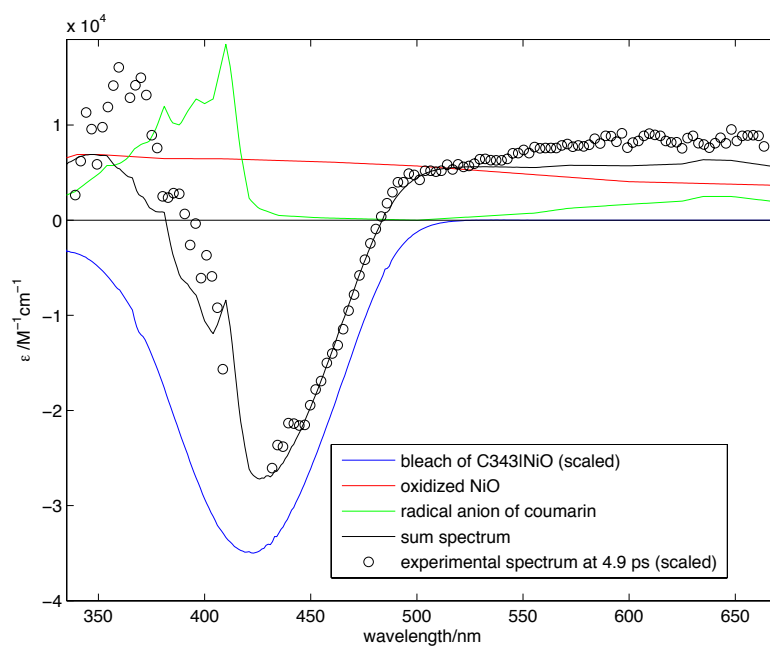
### Photoinduced Ultrafast Dynamics of Coumarin 343 Sensitized p-Type-Nanostructured NiO Films

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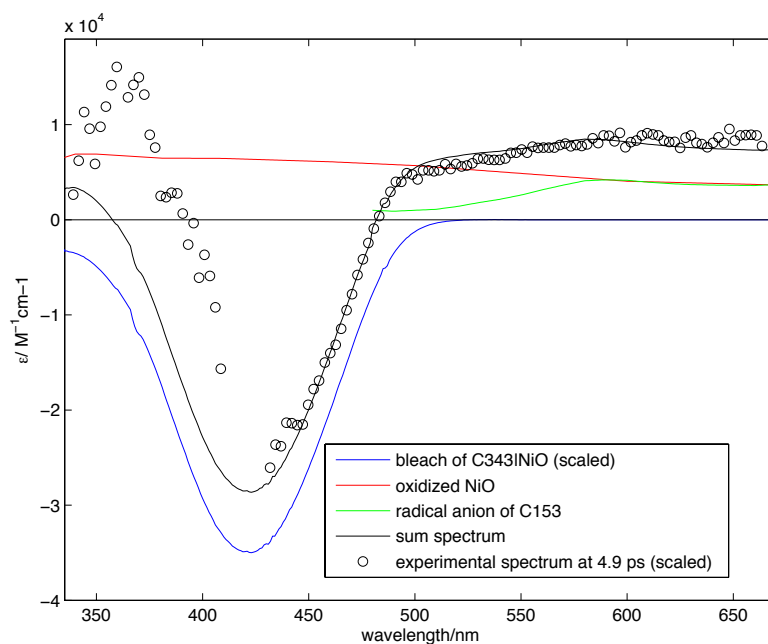
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**Figure S1:** Approximate spectral decomposition of the transient absorbance spectrum of C343|NiO at 4.9 ps as the sum of the spectra of oxidized NiO (from ref. (1)), groundstate bleach of C343 and radical anion of coumarin (from ref. (2)). The transient absorption spectrum of C343|NiO at 4.9 ps and groundstate bleach of C343|NiO (from steady-state absorption) have been scaled arbitrarily to obtain the best simulation. However, it is worth noticing that the scaled value for the maximum molar absorption coefficient of C343|NiO,  $35000 \text{ M}^{-1}\text{cm}^{-1}$ , is very similar to that measured in ethanolic solution (3),  $44000 \text{ M}^{-1}\text{cm}^{-1}$ .



**Figure S2:** Approximate spectral decomposition of the transient absorbance spectrum of C343|NiO at 4.9 ps as the sum of the spectra of oxidized NiO (from ref. (1)), groundstate bleach of C343 and radical anion of coumarin 153 (from ref. (4)).

## References

- [1] Boschloo, G.; Hagfeldt, A. *J. Phys. Chem. B* **2001**, *105*, 3039.
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- [4] Nad, S.; Pal, H. *J. Phys. Chem. B* **2002**, *106*, 6823.