

## Supplementary Material

# Investigations of the energy transfer in the phycobilisome antenna of *Arthrospira plantesis* using time-resolved spectroscopy

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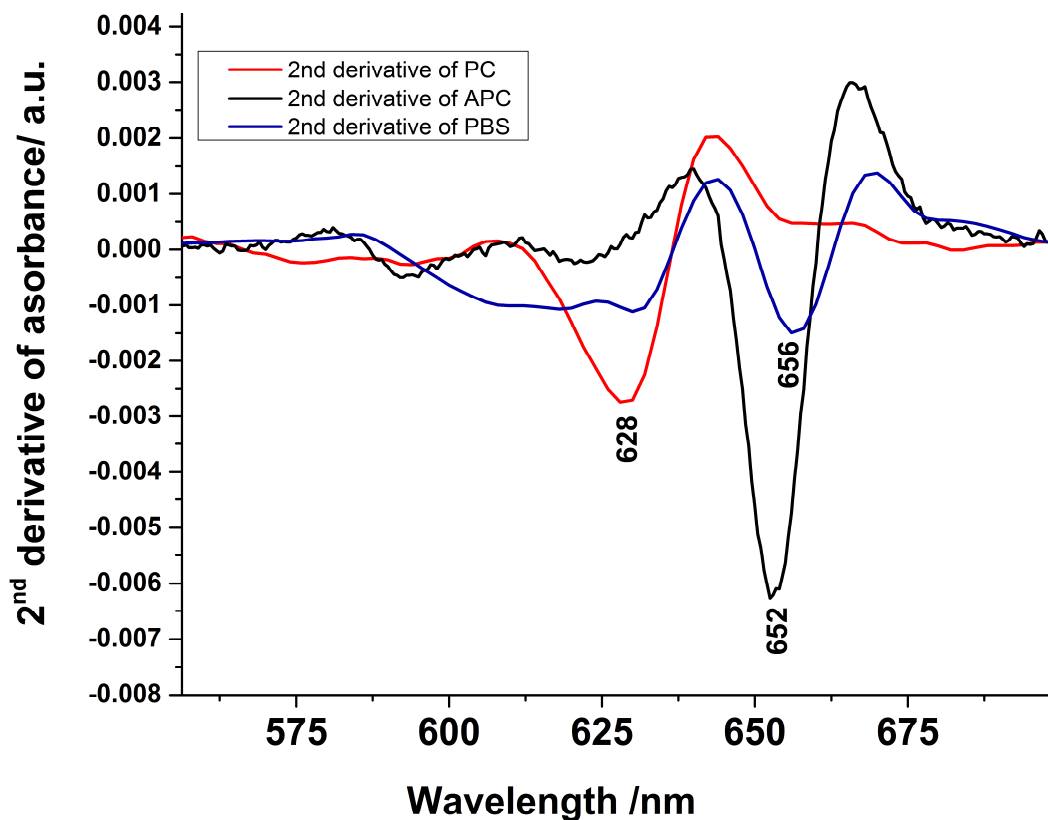
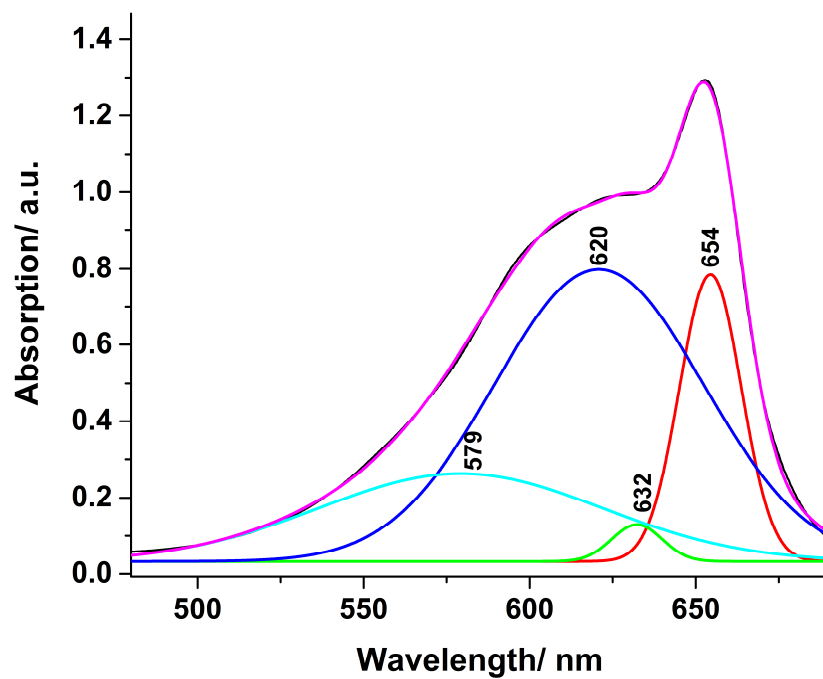


Figure S1. The 2<sup>nd</sup> derivative of the absorbance spectra characteristic to the PBS, PC, and APC.

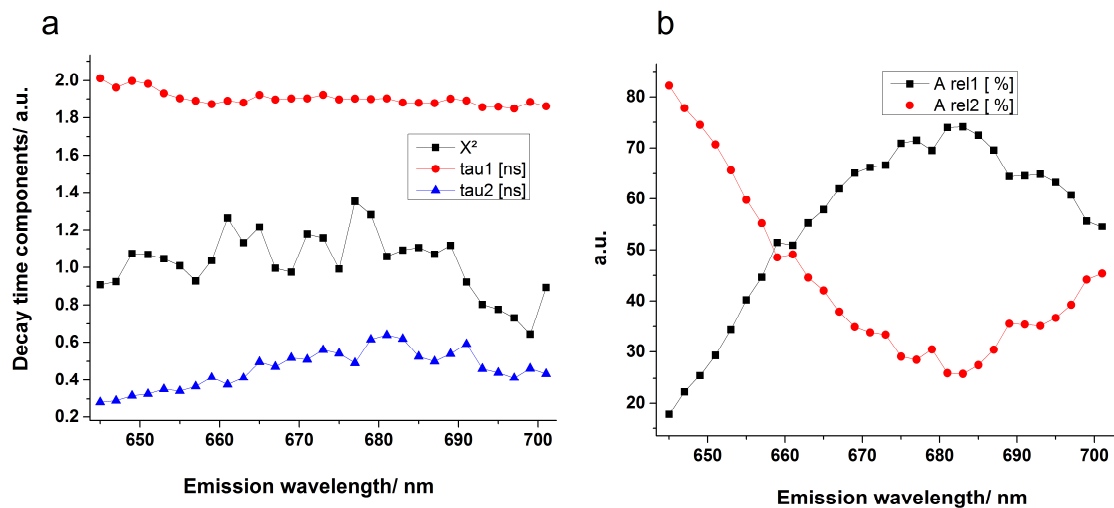


**Figure S2.** Steady-state absorption spectrum of APC and its deconvolution using a Gauss model

| Peak wavelength | FWHM   | Amplitude |
|-----------------|--------|-----------|
| 579 nm          | 100.84 | 24.87     |
| 620 nm          | 74.11  | 60.43     |
| 632 nm          | 17.86  | 1.84      |
| 654 nm          | 21.85  | 17.5      |

$$R^2=0.99957$$

$$\chi^2=6.7E-5$$



**Figure S3.** (a) The two lifetime components characteristic to the PBS obtained from the TCSPC data using a reconvolution model with a double exponential function and their variation with the probed emission wavelength; (b) The corresponding relative amplitudes and their modification with the detection wavelength.