Supplementary information

Figures S1-S5.

A dual compartment cuvette system for correcting scattering in whole-cell absorbance spectroscopy of photosynthetic microorganisms

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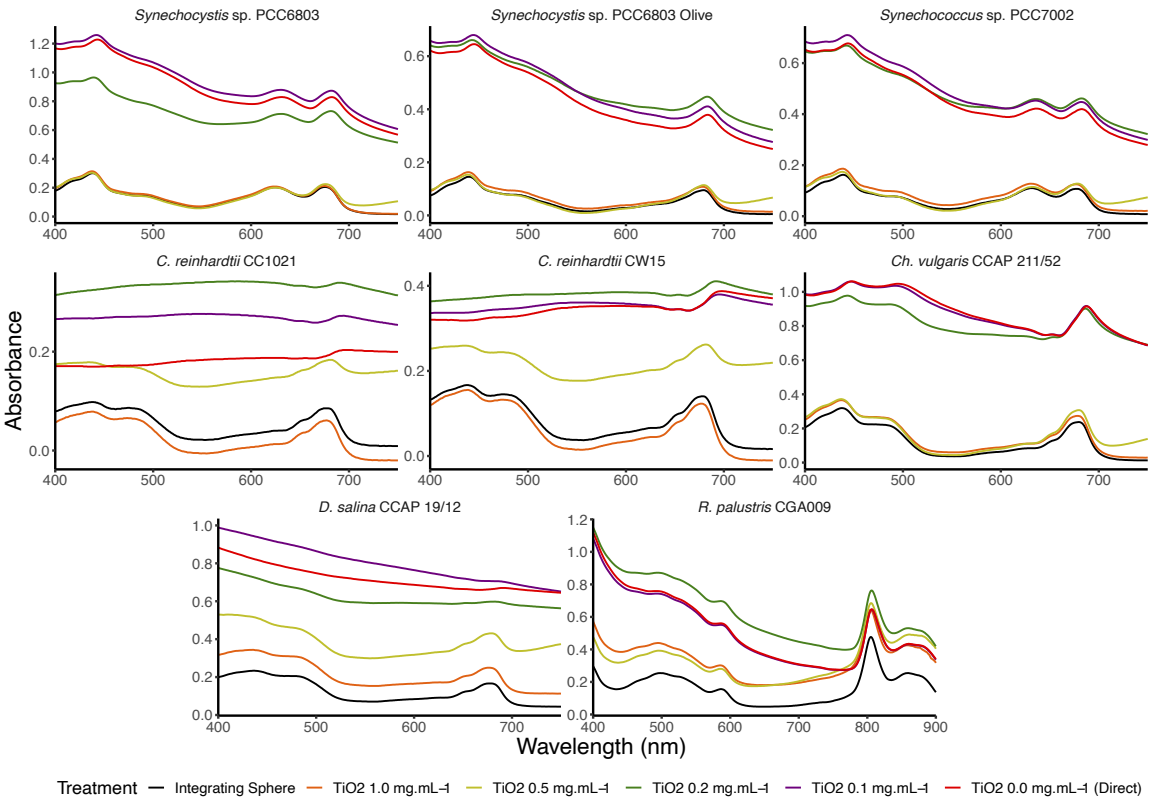

Fig. S1 Comparison of whole-cell absorbance spectra with the dual compartment cuvette (slit width 5 nm). Samples were analysed using the integrating sphere (black) or in the dual compartment cuvette with 0 (red), 0.1 (purple), 0.2 (green), 0.5 (yellow) or 1 (orange) $mg.mL^{-1}$ TiO_2. Results are not standardised. The mean of three samples is displayed.

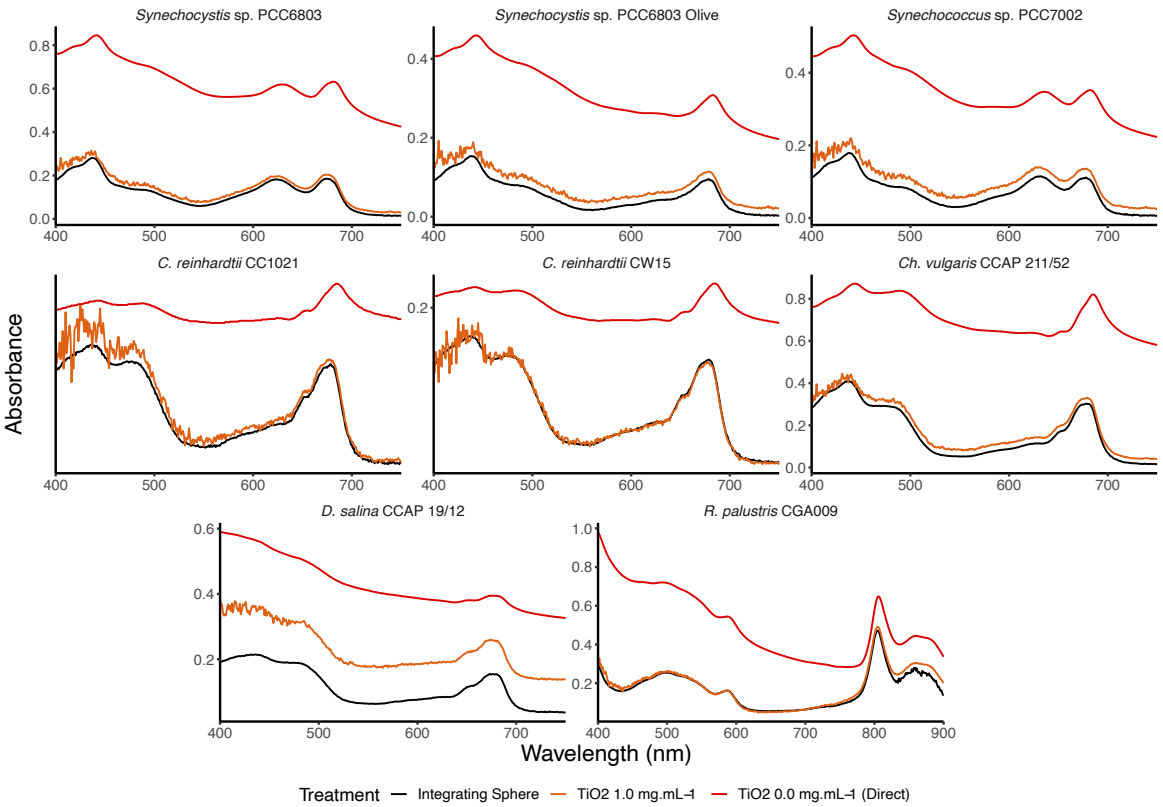

Fig. S2 Comparison of whole-cell absorbance spectra with the dual compartment cuvette (slit width 1 nm). Samples were analysed using the integrating sphere (black) or in the dual compartment cuvette with 0 (red) or 1 (orange) mg.mL^{-1} TiO_2. Results are not standardised. The mean of three samples is displayed.

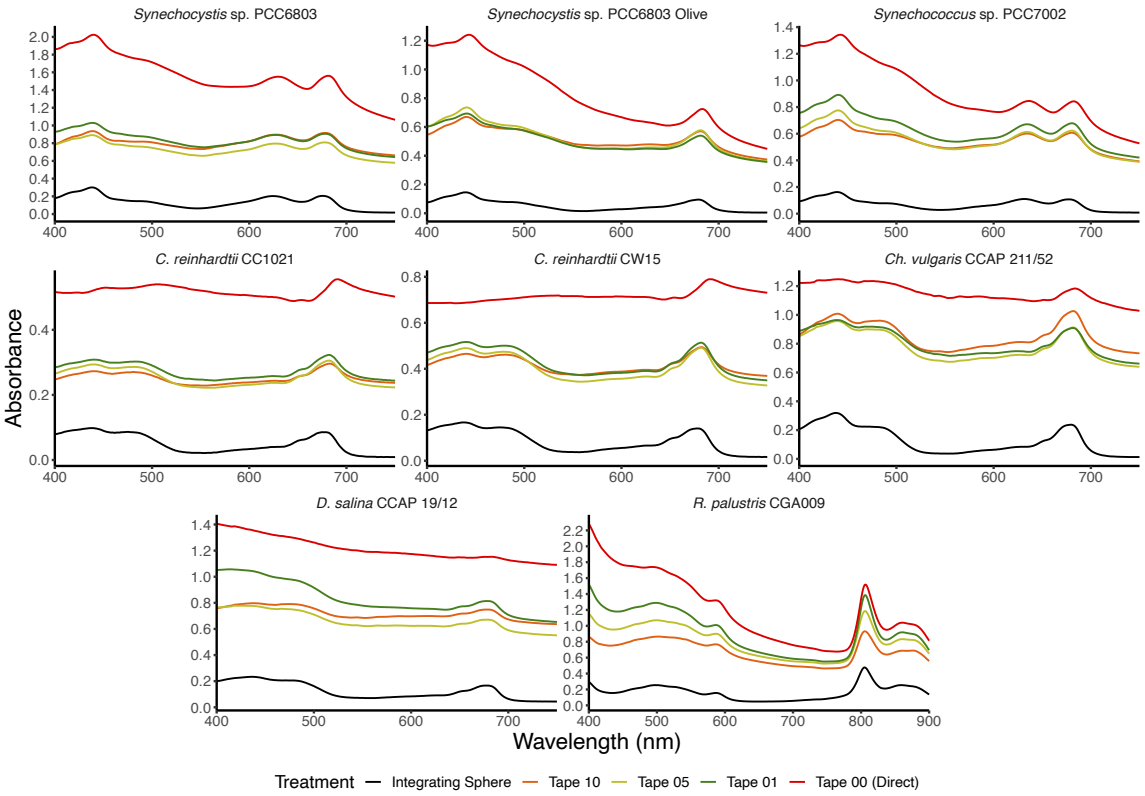

Fig. S3 Comparison of whole-cell absorbance spectra with Scotch™ Magic tape (slit width 5 nm). Samples were analysed using the integrating sphere (black) or in the single compartment cuvette coated with 0 (red), 1 (green), 5 (yellow) or 10 (orange) pieces of Scotch™ Magic tape. Results are not standardised. The mean of three samples is displayed.

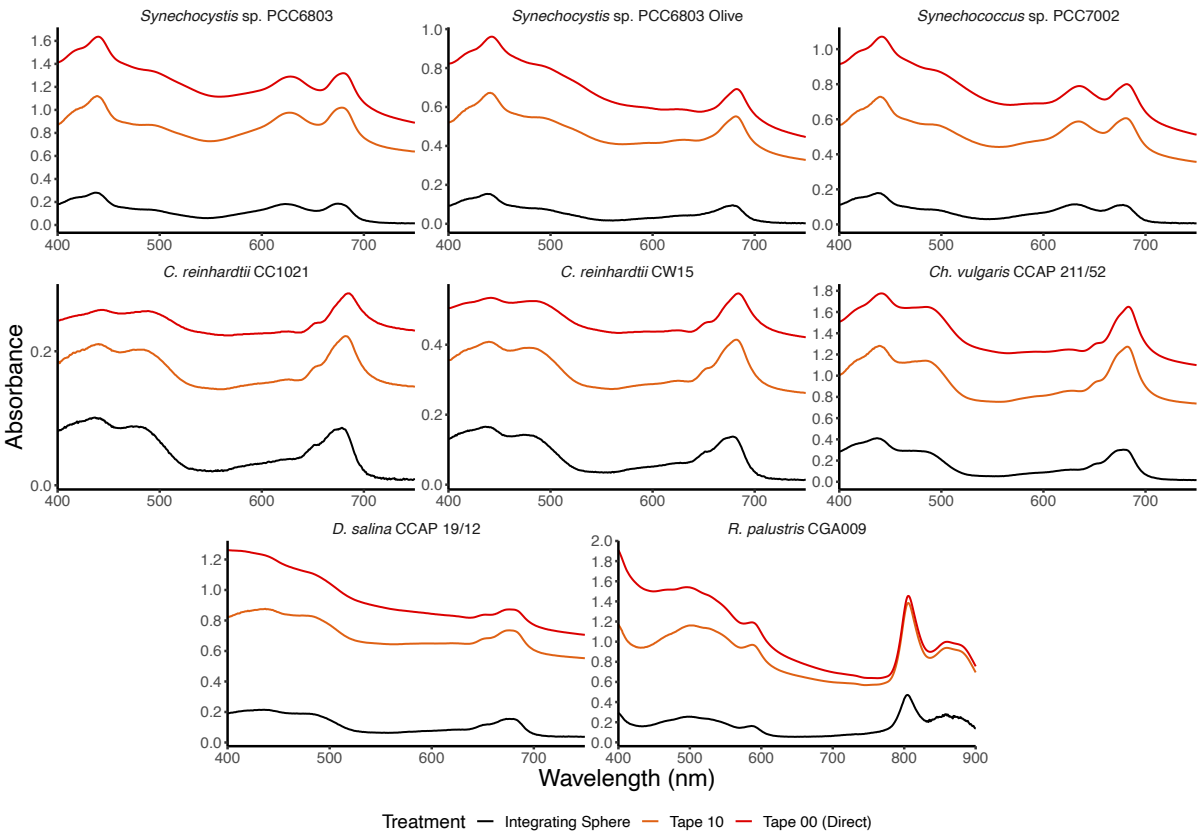

Fig. S4 Comparison of whole-cell absorbance spectra with Scotch™ Magic tape (slit width 1 nm). Samples were analysed using the integrating sphere (black) or in the single compartment cuvette coated with 0 (red) or 10 (orange) pieces of Scotch™ Magic tape. Results are not standardised. The mean of three samples is displayed.

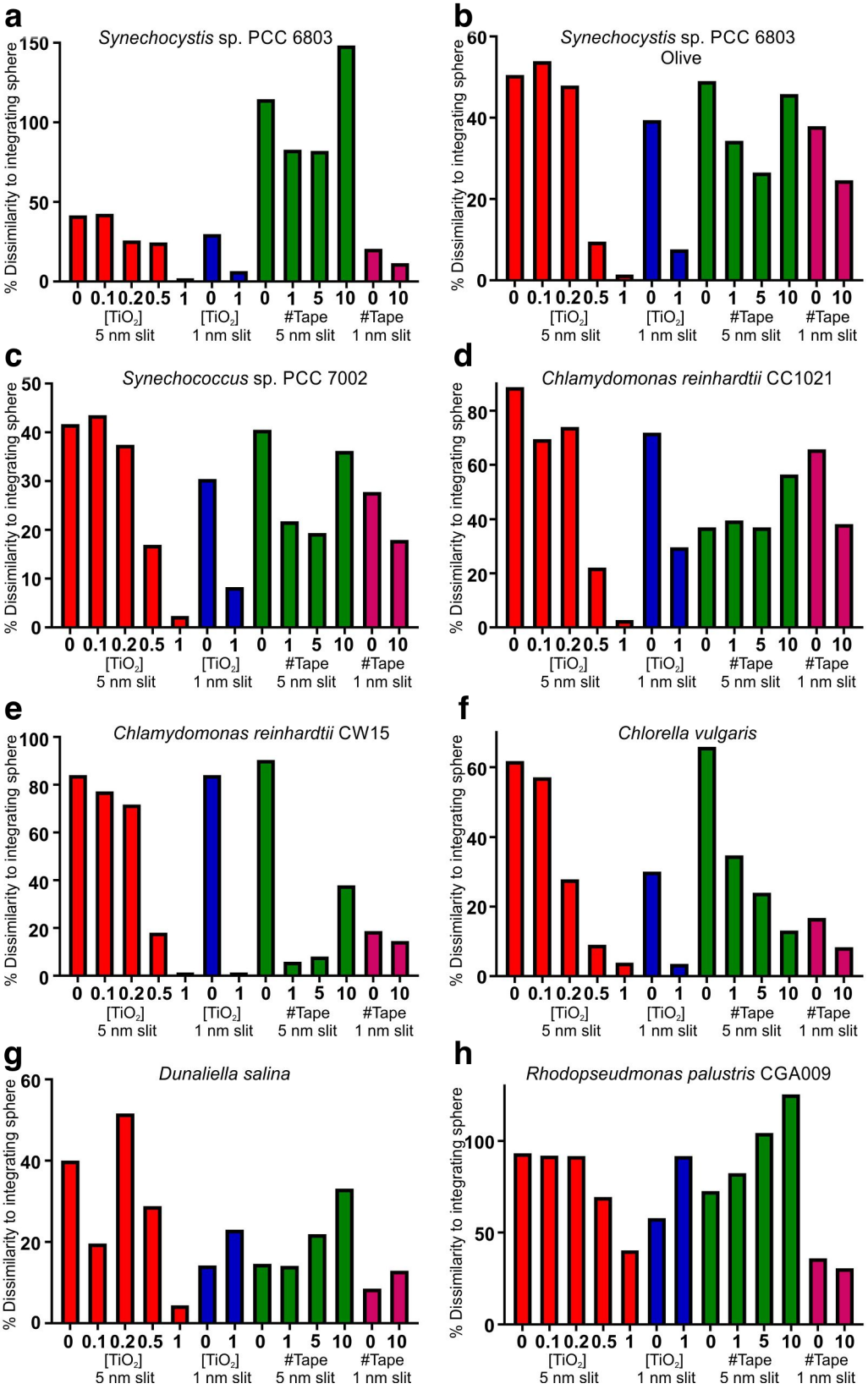

Fig. S5 Differences compared to results obtaining using the integrating sphere. Average differences between 400 - 750 nm (400 - 900 nm for *R. palustris*) results obtained using the four methods outlined in this paper compared to the optimal data acquired via the integrating sphere.