Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Dynamics of proteins confined in non-ionic bicontinuous microemulsions: A FCS study

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In our present work we present an approach which allows to confine proteins in structurally nearly identical bicontinuous microemulsions with systematically decreasing water domain size. It is shown that subdiffusive behavior occurs already at water domain sizes below 13 nm. However, above 13 nm normal diffusion is seen. Moreover, we compare protein diffusion in microemulsions to the transport of a much smaller fluorescent dye.

Electronic Supporting Information

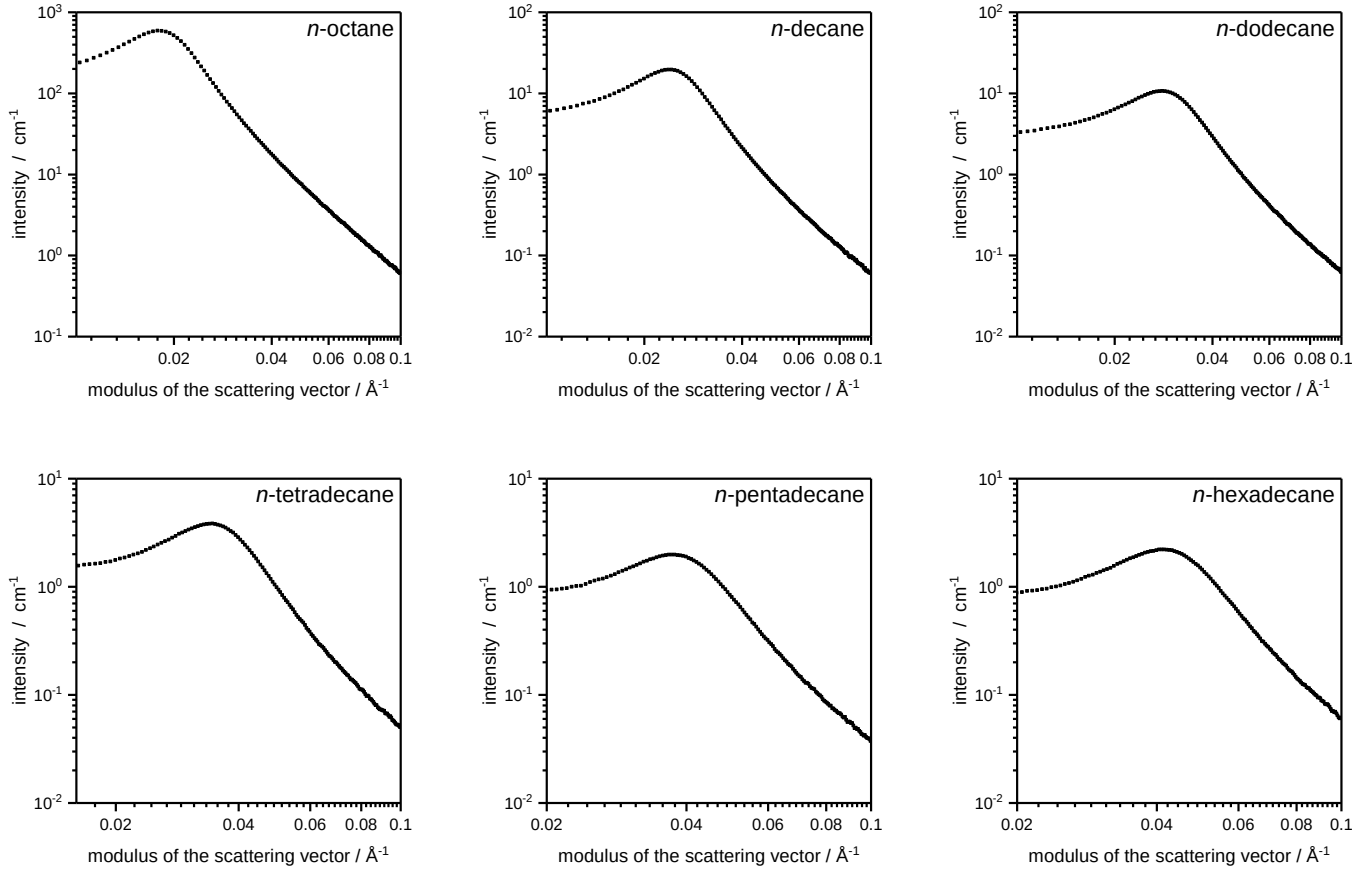

Fig. S1 Small angle X-ray scattering curves for microemulsions containing different oils.

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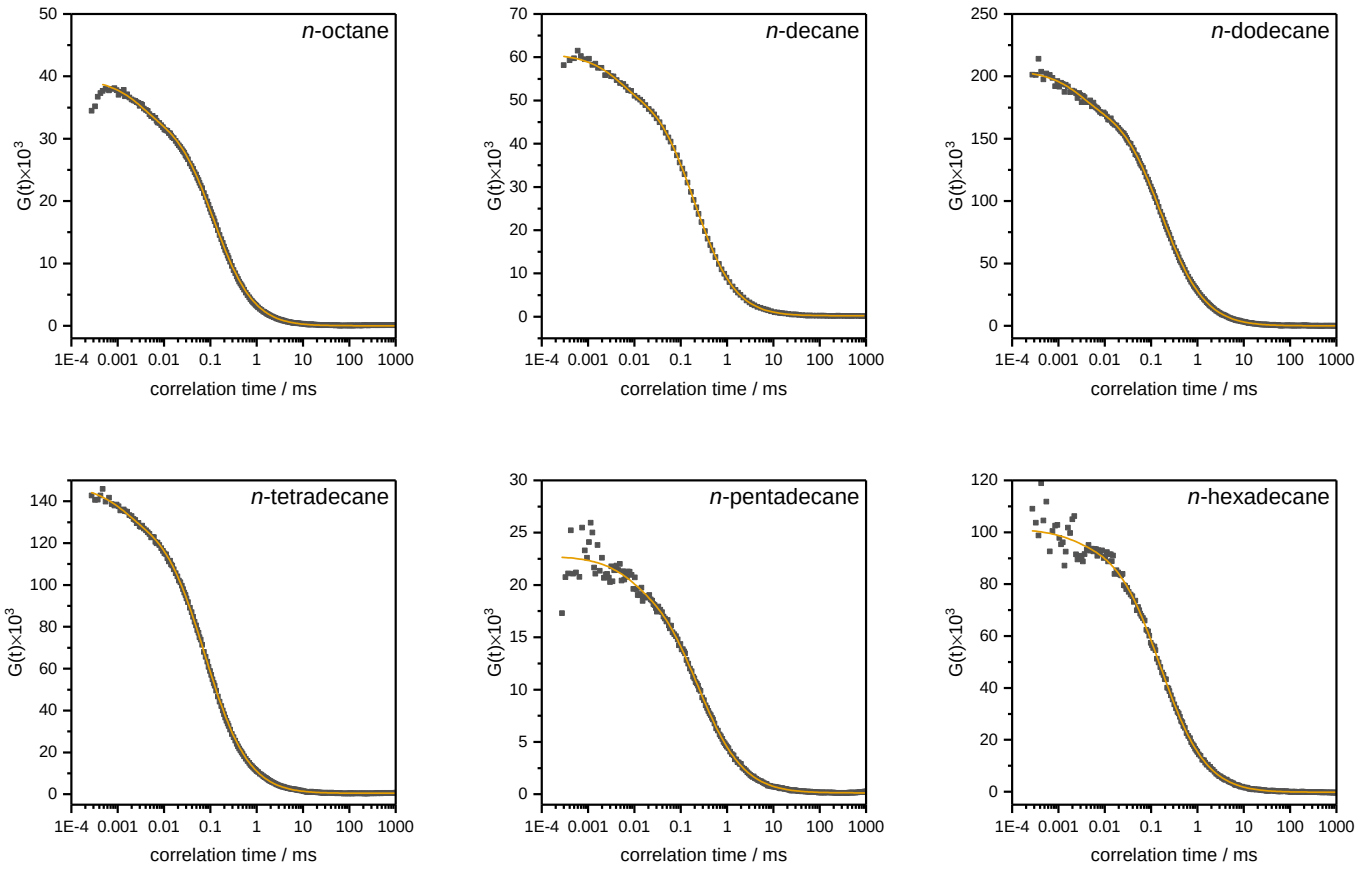

Fig. S2 Obtained FCS correlation functions for EGFP in microemulsions containing different oils. The solid lines are fits using the Weiss model.[1]

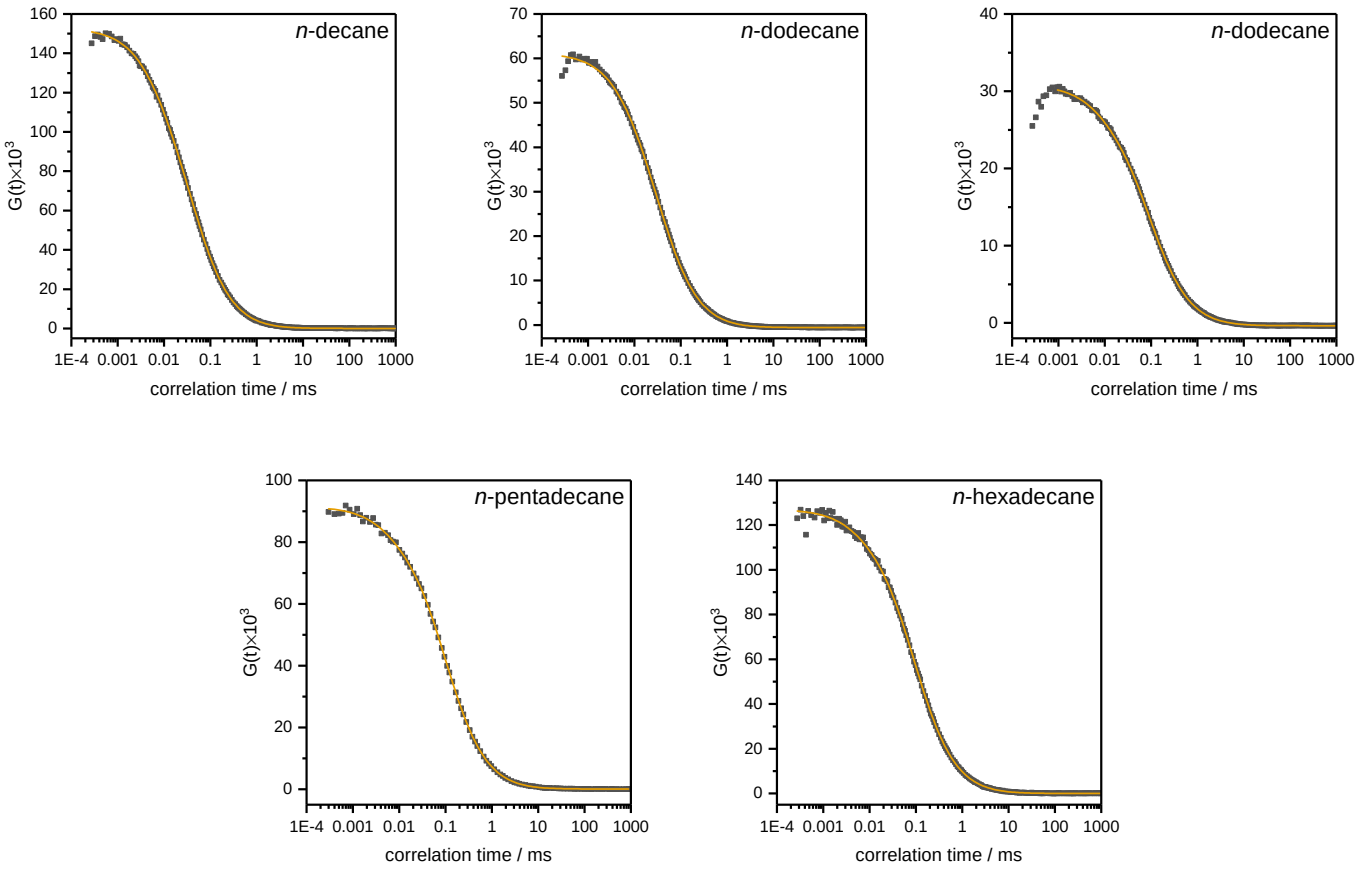

Fig. S3 Obtained FCS correlation functions for Atto488 in microemulsions containing different oils. The solid lines are fits using the Weiss model.[1]

References

1 M. Weiss, M. Elsner, F. Kartberg and T. Nilsson, *Biophys. J.*, 2004, **87**, 3518–3524.