

SUPPLEMENTARY INFORMATION

Evaluation of Back Scatter Interferometry, a method for detecting protein binding in solution

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Recorded fringe pattern

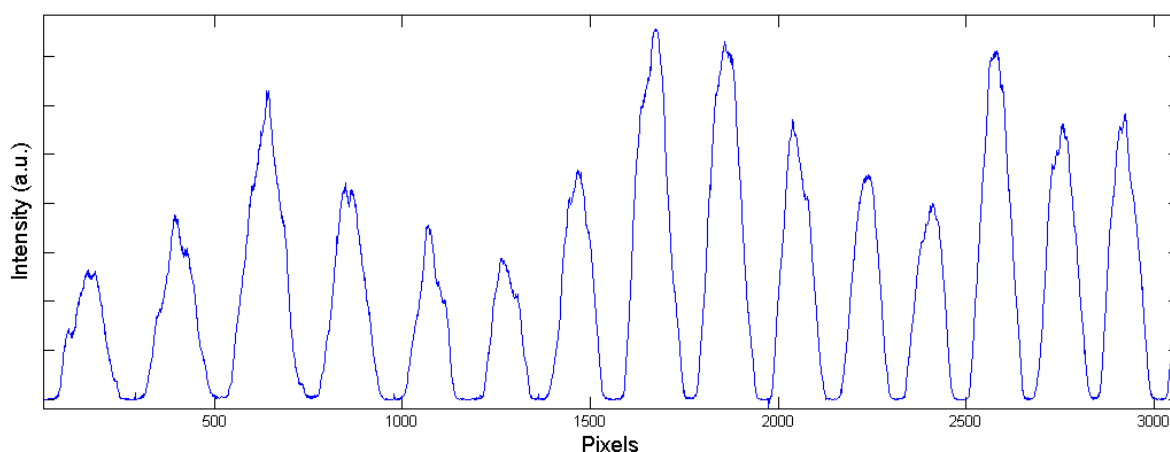


Figure 1

Figure 1 shows a typical image of the fringe pattern as recorded by the linear CCD. Y-axis is intensity in arbitrary units i.e. high intensity equals the bright spots in the interference pattern.

IgG - Protein A Binding experiments

The IgG Protein A binding experiments was also performed with 2.5 nM Protein A corresponding to that used by; *D. J. Bornhop, J. C. Latham, A. Kussrow, D. A. Markov, R. D. Jones, and H. S. Sørensen, Science, 2007, 317, 1732–6* and data from one of several experiments are shown below.

We find no evidence in our data of a measurable change in refractive index between bound and unbound IgG.

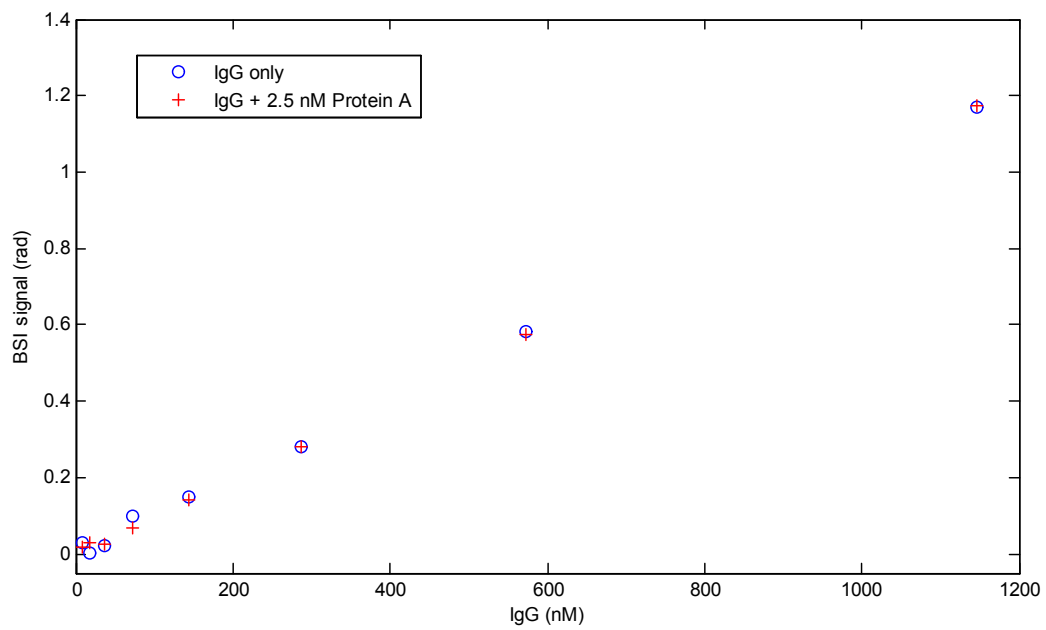


Figure 2

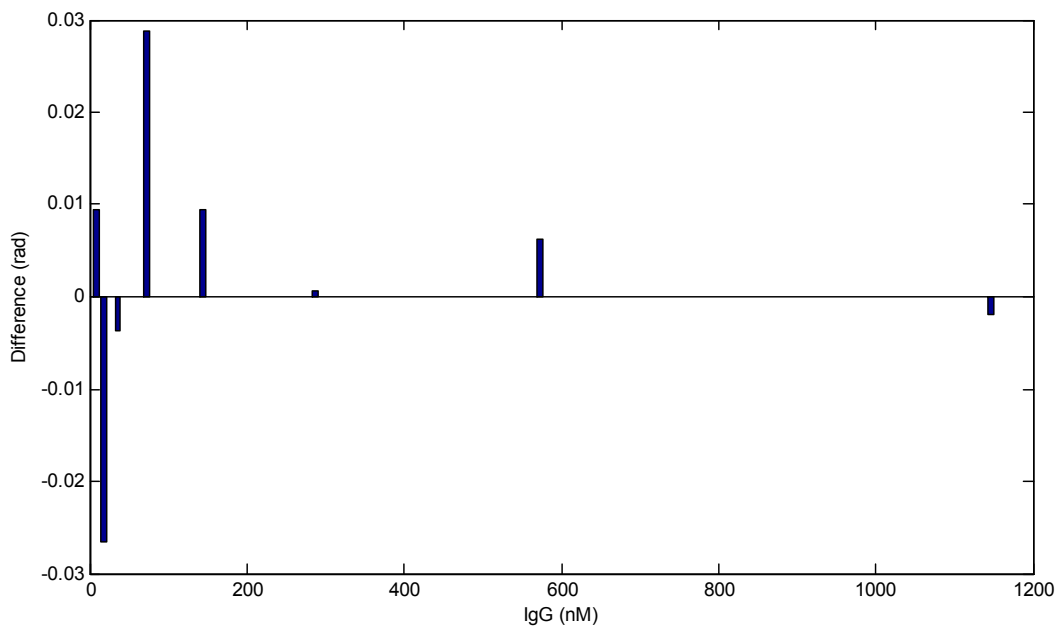


Figure 3

Figure 2 shows end-point data of 2.5 nM Protein A incubated with 17-1150 nM IgG (+) and IgG without addition of Protein A (o). Figure 3 shows the signal difference between data with/without Protein A.