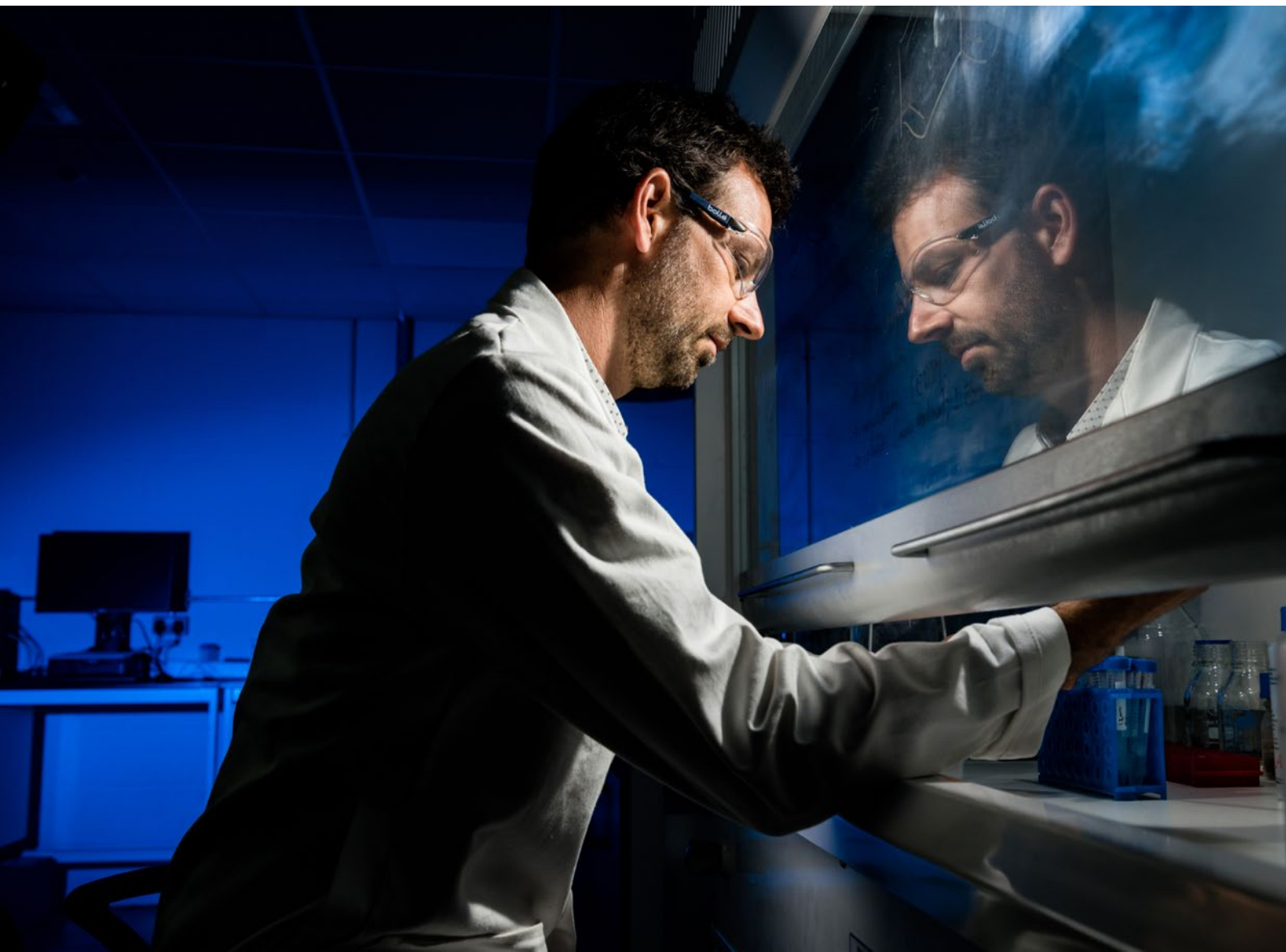


Microfluidic Diffusional Sizing (MDS) in the Literature

REFERENCE LIST OF PUBLICATIONS RELATING TO MDS

Released September 2021



Microfluidic Diffusional Sizing (MDS) in the Literature

Here you can find a summary of all the papers showing the research behind Fluidic Analytics and [microfluidic diffusional sizing \(MDS\)](#). As well as seeing where others have used our products to make amazing discoveries. Below you can find links directly to the publications.

1. Lattanzi et al., *JCIS Open*, **2021**, 100024. DOI: [10.1016/j.jciso.2021.100024](https://doi.org/10.1016/j.jciso.2021.100024)
2. Fiedler et al., Mutations in two SARS-CoV-2 variants of concern reflect two distinct strategies of antibody escape, *bioRxiv* 2021.07.23.453327.
DOI: [10.1101/2021.07.23.453327](https://doi.org/10.1101/2021.07.23.453327)
3. Denninger et al., Understanding the role of memory re-activation and cross-reactivity in the defense against SARS-CoV-2. *bioRxiv* 2021.07.23.453352.
DOI: [10.1101/2021.07.23.453352](https://doi.org/10.1101/2021.07.23.453352)
4. Laserna et al., Protein Conjugation by Electrophilic Alkynylation Using 5-(Alkynyl)dibenzothiophenium Triflates. *Bioconjugate Chem.* **2021**, Article ASAP.
DOI: [10.1021/acs.bioconjchem.1c00317](https://doi.org/10.1021/acs.bioconjchem.1c00317)
5. Samarina et al., Recruitment of phospholipase Cy1 to the non-structural membrane protein pK15 of Kaposi Sarcoma-associated herpesvirus promotes its Src-dependent phosphorylation. *PLoS Pathog.*, **2021**, 17 (6): e1009635.
DOI: [10.1371/journal.ppat.1009635](https://doi.org/10.1371/journal.ppat.1009635)
6. Fiedler et al., Antibody Affinity Governs the Inhibition of SARS-CoV-2 Spike/ACE2 Binding in Patient Serum. *ACS Infect. Dis.*, **2021**. Article ASAP. DOI: [10.1021/acsinfecdis.1c00047](https://doi.org/10.1021/acsinfecdis.1c00047)
7. Pansieri et al., Templating S100A9 amyloids on A β fibrillar surfaces revealed by charge detection mass spectrometry, microscopy, kinetic and microfluidic analyses. *Chem. Sci.*, **2020**, 11, 7031-7039. DOI: [10.1039/C9SC05905A](https://doi.org/10.1039/C9SC05905A)
8. Aprile et al., Rational design of a conformation-specific antibody for the quantification of A β oligomers. *PNAS*, **2020**, 117 (24), 13509-13518. DOI: [10.1073/pnas.1919464117](https://doi.org/10.1073/pnas.1919464117)
9. Schneider et al., Microfluidic Antibody Affinity Profiling for In-Solution Characterisation of Alloantibody - HLA Interactions in Human Serum. *bioRxiv*, **2020**, 296442.
DOI: [10.1101/2020.09.14.296442](https://doi.org/10.1101/2020.09.14.296442)

10. Schneider et al., Microfluidic Affinity Profiling reveals a Broad Range of Target Affinities for Anti-SARS-CoV-2 Antibodies in Plasma of Covid Survivors. *medRxiv*, **2020**, 20196907. DOI: [10.1101/2020.09.20.20196907](https://doi.org/10.1101/2020.09.20.20196907)
11. Linse et al., Kinetic fingerprints differentiate the mechanisms of action of anti-A β antibodies. *Nat. Struct. Mol. Biol.*, **2020**, 27 1125-1133. DOI: [10.1038/s41594-020-0505-6](https://doi.org/10.1038/s41594-020-0505-6)
12. Hoppen and Growth., Novel insights into the transfer routes of the essential copper cofactor to the ethylene plant hormone receptor family. *Taylor & Francis*, **2020**, 1716512. DOI: [10.1080/15592324.2020.1716512](https://doi.org/10.1080/15592324.2020.1716512)
13. Wright et al., Analysis of α B-crystallin polydispersity in solution through native microfluidic electrophoresis. *Analyst*, **2019**, 144, 4413-4424. DOI: [10.1039/C9AN00382G](https://doi.org/10.1039/C9AN00382G)
14. Azouz et al., Microfluidic diffusional sizing probes lipid nanodiscs formation. *BBA - Biomembranes*, **2020**, 1862, 183215. DOI: [10.1016/j.bbamem.2020.183215](https://doi.org/10.1016/j.bbamem.2020.183215)
15. Macikova et al., Putative interaction site for membrane phospholipids controls activation of TRPA1 channel at physiological membrane potentials. *The FEBS Journal*, **2019**, 14931. DOI: [10.1111/febs.14931](https://doi.org/10.1111/febs.14931)
16. Gang et al., A microfluidic diffusion platform for characterizing the size of lipid vesicles and the thermodynamics of protein-lipid interactions. *Anal. Chem.*, **2018**, 90, 3284-3290. DOI: [10.1021/acs.analchem.7b04820](https://doi.org/10.1021/acs.analchem.7b04820)
17. Scheidt et al., Secondary nucleation and elongation occur at different sites on Alzheimer's amyloid- β aggregates. *Science Advances*, **2019**, 5, eaau3112. DOI: [10.1126/sciadv.aau3112](https://doi.org/10.1126/sciadv.aau3112)
18. Falke et al., α -Synuclein-derived lipoparticles in the study of α -Synuclein amyloid fibril formation. *Chemistry and Physics of Lipids*, **2019**, 220, 57-65. DOI: [10.1016/j.chemphyslip.2019.02.009](https://doi.org/10.1016/j.chemphyslip.2019.02.009)
19. Wright et al., Cooperative Assembly of Hsp70 Subdomain Clusters. *Biochemistry*, **2018**, 57, 3641-3649. DOI: [10.1021/acs.biochem.8b00151](https://doi.org/10.1021/acs.biochem.8b00151)
20. Saar et al., On-chip label-free protein analysis with downstream electrodes for direct removal of electrolysis products. *Lab Chip*, **2018**, 18, 162-170. DOI: [10.1039/C7LC00797C](https://doi.org/10.1039/C7LC00797C)
21. Lapinska et al., Gradient-free determination of isoelectric points of proteins on chip. *Phys. Chem. Chem. Phys.*, **2017**, 19, 23060-23067. DOI: [10.1039/C7CP01503H](https://doi.org/10.1039/C7CP01503H)

22. Zhang et al., Protein Aggregate-Ligand Binding Assays Based on Microfluidic Diffusional Separation. *ChemBioChem.*, **2016**, 17, 1920-1924. DOI: [10.1002/cbic.201600384](https://doi.org/10.1002/cbic.201600384)
23. Herling et al., A Microfluidic Platform for Real-Time Detection and Quantification of Protein-Ligand Interactions. *Biophysical Journal*, **2016**, 110, 1957-1966.
DOI: [10.1016/j.bpj.2016.03.038](https://doi.org/10.1016/j.bpj.2016.03.038)
24. Arosio et al., Microfluidic diffusion viscometer for rapid analysis of complex solutions. *Anal. Chem.*, **2016**, 88, 488-3493. DOI: [10.1021/acs.analchem.5b02930](https://doi.org/10.1021/acs.analchem.5b02930)
25. Arosio et al., Microfluidic diffusion analysis of the sizes and interactions of proteins under native solution conditions. *ACS Nano.*, **2016**, 10, 333-341. DOI: [10.1021/acsnano.5b04713](https://doi.org/10.1021/acsnano.5b04713)
26. Yates et al., Latent analysis of unmodified biomolecules and their complexes in solution with attomole detection sensitivity. *Nature Chemistry*. **2015**, 7, 802-809.
DOI: [10.1038/nchem.2344](https://doi.org/10.1038/nchem.2344)

About us

We envision a world where information about proteins and their behaviour transforms our understanding of how the biological world operates, and helps all of us make better decisions about how we diagnose diseases, develop treatments and maintain our personal well-being.

Unit A The Paddocks Business Centre, Cherry Hinton Road Cambridge, CB1 8DH, UK

www.fluidic.com