Publication List of Prof. Z. Hugh Fan

Updated in July 2024

Referred Journal Publications

1. W. B. Vass, S. N. Shankar, J. A. Lednicky, M. Alipanah, B. Stump, P. Keady, Z. H. Fan, C. Y. Wu, “Concentrating viable airborne pathogens using a virtual impactor with a compact water-based condensation air sampler”, *Aerosol Science and Technology*, 58, **2024**, in press, DOI: 10.1080/02786826.2024.2380096.
2. G. Adedokun, M. Alipanah, Z. H. Fan, “Sample Preparation and Detection Methods in Point-of-Care Devices towards Future at-Home Testing”, *Lab on a Chip*, 24, **2024**, in press, DOI: 10.1039/d3lc00943b. (Review)
3. J. Amontree, K. Chen, J. Varillas, Z. H. Fan, "A Capillary-Force-Driven, Single-Cell Transfer Method for Studying Rare Cells", *Bioengineering*, 11, **2024**, 542 (11 pages), DOI: 10.3390/bioengineering11060542.
4. M. N. Le, K. A. Smith, P. J. Dopico, B. Greer, M. Alipanah, Y. Zhang, D. W. Siemann, J. P. Lagmay, and Z. H. Fan, “Investigating surface proteins and antibody combinations for detecting circulating tumor cells of various sarcomas”, *Scientific Reports*, 14, **2024**, 12374 (11 pages), DOI: 10.1038/s41598-024-61651-w.
5. Y. Zhang, S. N. Shankar, W. B. Vass, J. A. Lednicky, Z. H. Fan, D. Agdas, R. Makuch, and C. Y. Wu, “Air Change Rate and SARS-CoV-2 Exposure in Hospitals and Residences: A Meta-Analysis”, *Aerosol Science and Technology*, 58, **2024**, 217–243, DOI: 10.1080/02786826.2024.2312178.
6. Z. H. Fan, D. J. Harrison, "Celebrating 30th Anniversary of a Pioneering Microfluidics Paper", *Lab on a Chip*, 23, **2023**, 4157–4159, DOI: 10.1039/d3lc90076b. (Editorial)
7. W. B. Vass, S. N. Shankar, J. A. Lednicky, Y. Yang, C. Manzanas, Y. Zhang, J. Boyette, J. Chen, Y. Chen, A. Shirkhani, M. Washeem, Z. H. Fan, A. Eiguren-Fernandez, A. Jutla, C. Y. Wu, “Detection and isolation of infectious SARS-CoV-2 omicron subvariants collected from residential settings”, *Aerosol Science and Technology*, 57, **2023**, 1142–1153, DOI: 10.1080/02786826.2023.2251537.
8. M. Alipanah, C. Manzanas, X. Hai, J. A. Lednicky, A. Paniz-Mondolfi, J. G. Morris, Z. H. Fan, “Mayaro virus detection by integrating sample preparation with isothermal amplification in portable devices”, *Analytical and Bioanalytical Chemistry,* 415, **2023**, 5605–5617, DOI: 10.1007/s00216-023-04856-8.
9. V. A. Pedrosa, K. Chen, T. J. George, Z. H. Fan, “Gold Nanoparticle-based Microfluidics Chips for Capture and Detection of Circulating Tumor Cells”, *Biosensors*, 13, **2023**, 706 (9 pages), DOI: 10.3390/bios13070706.
10. H. Li, S. N. Shankar, C. T. Witanachchi, J. A. Lednicky, J. C. Loeb, M. M. Alam, Z. H. Fan, M. Lauzardo, K. Mohamed, A. Eiguren-Fernandez, A. Eiguren-Fernandez, C. Y. Wu, “Lack of SARS-CoV-2 in Environmental Samples Collected from September 2020-February 2021 in a University that Followed CDC Reopening Guidance”, *Hygiene and Environmental Health Advances*, 7, **2023**, 100061 (8 pages), DOI:10.1016/j.heha.2023.100061.
11. C. Manzanas, E. Morrison, Y. S. Kim, M. Alipanah, G. Adedokun, S. Jin, T. Z. Osborne, Z. H. Fan, “Molecular Testing Devices for on-Site Detection of *E. coli* in Water Samples”, *Scientific Reports*, 13, **2023**, 4245 (11 pages), DOI: 10.1038/s41598-023-31208-4.
12. W. B. Vass, J. A. Lednicky, S. N. Shankar, Z. H. Fan, A. Eiguren-Fernandez, C. Y. Wu, “Viable SARS-CoV-2 Delta Variant Detected in Aerosols in a Residential Setting with a Self-Isolating College Student with COVID-19”, *Journal of Aerosol Science*, 165, **2022**, 106038 (12 pages), DOI: 10.1016/j.jaerosci.2022.106038.

13. P. Dopico, M. N. Le, B. Burgess, Z. Yang, Y. Zhao, Y. Wang, T. J. George, Z. H. Fan, “Longitudinal Study of Circulating Biomarkers in Patients with Resectable Pancreatic Ductal Adenocarcinoma”, *Biosensors*, 12, **2022**, 206 (15 pages), DOI: 10.3390/bios12040206.
14. J. I. Varillas, K. Chen, P. Dopico, J. Zhang, T. J. George, Z. H. Fan, “Comparison of Sample Preparation Methods for Rare Cell Isolation in Microfluidic Devices”, *Canadian Journal of Chemistry*, 100, **2022**, 512–519, DOI: 10.1139/cjc-2021-0229.
15. H. Li, S. N. Shankar, C. T. Witanachchi, J. A. Lednicky, J. C. Loeb, M. M. Alam, Z. H. Fan, J. A. Boyette, A. Eiguren-Fernandez, C. Y. Wu, “Environmental Surveillance for SARS-CoV-2 in Two Restaurants from a Mid-scale City that Followed U.S. CDC Reopening Guidance”, *Aerosol and Air Quality Research*, 22, **2022**, 210304 (13 pages), DOI: 10.4209/aaqr.210304.
16. S. N. Shankar, C. T. Witanachchi, A. F. Morea, J. A. Lednicky, J. C. Loeb, M. M. Alam, Z. H. Fan, A. Eiguren-Fernandez, C.-Y. Wu, “SARS-CoV-2 in residential rooms of two self-isolating persons with COVID-19”, *Journal of Aerosol Science*, 159, **2022**, 105870 (12 pages), DOI: 10.1016/j.jaerosci.2021.105870.
17. C. Manzanas, M. M. Alam, J. C. Loeb, J. A. Lednicky, C. Y. Wu, Z. H. Fan, “A Valve-Enabled Sample Preparation Device with Isothermal Amplification for Multiplexed Virus Detection at the Point-of-Care”, *ACS Sensors*, 6, **2021**, 4176–4184, DOI: 10.1021/acssensors.1c01718.
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