

# Levitation Peer-Reviewed Publication List

June 2020

## Overview

Levitation technology was originally developed by researchers at Stanford and Harvard Universities and extensively tested and published. Please find some of our most recent and interesting peer-reviewed publications describing the use of the technology for a variety of key applications.

## Key Publications

- Durmus NG, Tekin HC, Guven S, Sridhar K, Yildiz AA, Calibasi G, Ghiran I, Davis RW, Steinmetz LM, Demirci U, "Magnetic Levitation of Single Cells", Proceedings of the National Academy of Sciences (PNAS), 2015, Jul 14;112(28):E3661-8
- S. M. Knowlton, I. Sencan, Y. Aytar, J. Khoory, M. M. Heeney, I. C. Ghiran, S. Tasoglu, Sickle cell detection using a smartphone, Scientific Reports, 10.1038/srep15022, 5, 1, (2015)
- Baday M, Calamak S, Durmus NG, Davis RW, Steinmetz LM, Demirci U, "Integrating cell phone imaging with magnetic levitation (i-LEV) for label-free blood analysis at the point-of-living", Small, 2015, doi: 10.1002/sml.201501845
- Servick, Kelley, "Sorting cells through levitation", Science, 2015.
- S. Ge, A. Nemiroski, K. A. Mirica, C. R. Mace, J. W. Hennek, A. A. Kumar, and G. M. Whitesides. "Magnetic Levitation in Chemistry, Materials Science, and Biochemistry." Angew. Chem. Int. Ed. Eng., 2019, doi: 10.1002/anie.201903391
- C. K. Abrahamsson, A. A. Nagarkar, M.J. Fink, D.J. Preston, S. Ge, J.S. Bozenko, and G. M. Whitesides. 2020. "Analysis of Powders Containing Illicit Drugs Using Magnetic Levitation." Angewandte Chemie, 59, Pp. 874-881.
- S. Ge, Y. Wang, N. Deshler, D.J. Preston, and G. M. Whitesides. 2018. "High-Throughput Density Measurement Using Magnetic Levitation." J. Amer. Chem. Soc., 140, 24, Pp. 7510-7518
- J. W. Hennek, A. Nemiroski, A. B. Subramaniam, D. K. Bwambok, D. Yang, D. V. Harburg, S. Tricard, A. K. Ellerbee, and G. M. Whitesides. 2015. "Using Magnetic Levitation for Non-Destructive Quality Control of Plastic Parts." Adv. Materials, 27, Pp. 1587-1592
- Durmus G, Gupta R, Badamjav O, Reddy V, Eisenberg ML, Behr B, Demirci U, "A magnetic levitation platform for the isolation of mature sperm from TESE/TESA samples", Fertility and Sterility, 2018; 109 (3) e26-e27.