

# Stanford

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## Elaine Ng

Postdoctoral Research Fellow, Materials Science and Engineering

### Bio

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#### HONORS AND AWARDS

- Bruce and Elizabeth BioX SIGF Fellow, BioX SIGF
- NSF Graduate Research Fellow, NSF

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , BIOE-PHD (2019)
- Bachelor of Science, University of Texas Austin , Biomedical Engineering (2013)
- Master of Science, Stanford University , BIOE-MS (2015)

#### STANFORD ADVISORS

- Shan Wang, Postdoctoral Faculty Sponsor

#### LINKS

- LinkedIn: <http://www.linkedin.com/pub/elaine-ng/55/943/97b/>

### Publications

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#### PUBLICATIONS

- **Magneto-nanosensor smartphone platform for the detection of HIV and leukocytosis at point-of-care** *NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE*  
Ng, E., Yao, C., Shultz, T. O., Ross-Howe, S., Wang, S. X.  
2019; 16: 10–19
- **An Automated, Quantitative, and Multiplexed Assay Suitable for Point-of-Care Hepatitis B Virus Diagnostics.** *Scientific reports*  
Gani, A. W., Wei, W., Shi, R. Z., Ng, E., Nguyen, M., Chua, M. S., So, S., Wang, S. X.  
2019; 9 (1): 15615
- **Magneto-nanosensor Smartphone Platform for the Detection of HIV and Leukocytosis at Point-of-Care.** *Nanomedicine : nanotechnology, biology, and medicine*  
Ng, E., Yao, C., Shultz, T. O., Ross-Howe, S., Wang, S. X.  
2018
- **Giant magnetoresistive sensor array for sensitive and specific multiplexed food allergen detection.** *Biosensors & bioelectronics*  
Ng, E., Nadeau, K. C., Wang, S. X.  
2016; 80: 359-365
- **Multi-Dimensional Nanostructures for Microfluidic Screening of Biomarkers: From Molecular Separation to Cancer Cell Detection** *ANNALS OF BIOMEDICAL ENGINEERING*

Ng, E., Chen, K., Hang, A., Syed, A., Zhang, J. X.

2016; 44 (4): 847-862

- **Magneto-nanosensor platform for probing low-affinity protein-protein interactions and identification of a low-affinity PD-L1/PD-L2 interaction.** *Nature communications*

Lee, J., Bechstein, D. J., Ooi, C. C., Patel, A., Gaster, R. S., Ng, E., Gonzalez, L. C., Wang, S. X.

2016; 7: 12220-?

- **Microfluidic multiplexed partitioning enables flexible and effective utilization of magnetic sensor arrays.** *Lab on a chip*

Bechstein, D. J., Ng, E., Lee, J., Cone, S. G., Gaster, R. S., Osterfeld, S. J., Hall, D. A., Weaver, J. A., Wilson, R. J., Wang, S. X.

2015; 15 (22): 4273-4276

- **Micro Patterned Quantum Dots Excitation for Cellular Microarray Imaging** *Conference on Bioinspired, Biointegrated, Bioengineered Photonic Devices III*

Bhave, G., Ng, E., Lee, Y., Zhang, J. X.

SPIE-INT SOC OPTICAL ENGINEERING.2015

- **Microfluidic multiplexed partitioning enables flexible and effective utilization of magnetic sensor arrays** *LAB ON A CHIP*

Bechstein, D. J., Ng, E., Lee, J., Cone, S. G., Gaster, R. S., Osterfeld, S. J., Hall, D. A., Weaver, J. A., Wilson, R. J., Wang, S. X.

2015; 15 (22): 4273-4276

- **Microfluidic immunodetection of cancer cells via site-specific microcontact printing of antibodies on nanoporous surface.** *Methods (San Diego, Calif.)*

Ng, E., Hoshino, K., Zhang, X.

2013; 63 (3): 266-75