

Stanford



Punnag Padhy

Postdoctoral Scholar, Materials Science and Engineering

Bio

STANFORD ADVISORS

- Jennifer Dionne, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Currently, I am working on an on-chip platform to simultaneously trap and manipulate micron scale beads and droplets with an intention to implement chemical reactions on a chip at ultrasmall volumes.

Publications

PUBLICATIONS

- **On the substrate contribution to the back action trapping of plasmonic nanoparticles on resonant near-field traps in plasmonic films** *OPTICS EXPRESS*
Padhy, P., Zaman, M., Hansen, P., Hesselink, L.
2017; 25 (21): 26198–214
- **Dielectrophoresis-assisted plasmonic trapping of dielectric nanoparticles** *PHYSICAL REVIEW A*
Zaman, M. A., Padhy, P., Hansen, P. C., Hesselink, L.
2017; 95 (2)
- **Adjoint method for estimating Jiles-Atherton hysteresis model parameters** *JOURNAL OF APPLIED PHYSICS*
Zaman, M. A., Hansen, P. C., Neustock, L. T., Padhy, P., Hesselink, L.
2016; 120 (9)
- **Metal wire waveguide based all plasmonic refractive index sensor for terahertz frequencies** *SENSORS AND ACTUATORS B-CHEMICAL*
Padhy, P., Sahu, P. K., Jha, R.
2016; 225: 115-120