



## Amr Ahmed Essawi Saleh

Postdoctoral Research Fellow, Materials Science and Engineering

### Bio

---

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , EE-PHD (2015)
- Master of Science, Cairo University , Engineering Physics (2008)
- Bachelor of Science, Cairo University , Electronics and Communications (2005)

#### PATENTS

- Amr A. E. Saleh, Jennifer A. Dionne. "United States Patent 9281091 Method and structure for plasmonic optical trapping of nano-scale particles", Leland Stanford Junior University, Mar 8, 2016

### Publications

---

#### PUBLICATIONS

- **Nanoscope control and quantification of enantioselective optical forces** *Nature Nanotechnology*  
Zhao, Y., Saleh, A., van de Haar, M., Baum, B., Briggs, J. A., Lay, A., Reyes-Becerra, O. A., Dionne, J. A.  
2017; 1055–59
- **Grating-flanked plasmonic coaxial apertures for efficient fiber optical tweezers.** *Optics express*  
Saleh, A. A., Sheikhoelislami, S., Gastelum, S., Dionne, J. A.  
2016; 24 (18): 20593-20603
- **Enantioselective Optical Trapping of Chiral Nanoparticles with Plasmonic Tweezers** *ACS PHOTONICS*  
Zhao, Y., Saleh, A. A., Dionne, J. A.  
2016; 3 (3): 304-309
- **Toward Efficient Optical Trapping of Sub-10-nm Particles with Coaxial Plasmonic Apertures** *NANO LETTERS*  
Saleh, A. A., Dionne, J. A.  
2012; 12 (11): 5581-5586
- **Waveguides with a silver lining: Low threshold gain and giant modal gain in active cylindrical and coaxial plasmonic devices** *PHYSICAL REVIEW B*  
Saleh, A. A., Dionne, J. A.  
2012; 85 (4)