

Angeleene S. Ang

Personal Information

PhD student, Electro-optical Engineering, Ben-Gurion University of the Negev
aka: Zemmy
e-mail angeleene.ang@gmail.com
phone Philippines/Roaming: +63 915 4444 905
Israel: +972 58 456 27 96
Skype [zemmy.ang](https://zemmyang.skype.com)
Website <https://zemmyang.github.io>

Summary

Research student specializing in the design of nanostructured materials for micro/nanomanipulation and ultrasensitive sensing purposes, with multiple articles in international publications. Experienced in using Matlab, Comsol, and Lumerical for numerical electromagnetic simulation, Python, C++, and Fortran for general programming. Able to use 3D modeling programs for visualization; can read and write in fluent technical English. Very willing and capable of learning new systems and technologies towards various applications.

Publications

- Ang AS, Karabchevsky A, Minin IV, Minin OV, Sukhov SV, Shalin AS. 'Photonic Hook' based optomechanical nanoparticle manipulator. *Sci Rep.* 2018;8(1):2029.
- Ang AS, Sukhov SV, Dogariu A, Shalin AS. Scattering Forces within a Left-Handed Photonic Crystal. *Sci Rep.* 2017;7:41014.
- Ang AS, Sugon QM, and McNamara DJ, Skew ray tracing in a step-index optical fiber using geometric algebra. *Appl. Opt.* 54, 3764-3773 (2015)

Presentations

- Ang AS, Minin IV, Minin OV, Sukhov SV, Shalin AS, Karabchevsky A. "Low-contrast photonic hook manipulator for cellular differentiation META 2018, the 9th International Conference on Metamaterials, Photonic Crystals and Plasmonics, Round-trip Marseilles Cruise. (Invited Talk, June 2018)
- Ang AS, Minin IV, Minin OV, Sukhov SV, Shalin AS, Karabchevsky A. "Photonic Hook as Nanoparticle Manipulator When Light Meets Matter, Weizmann Institute of Science, Rehovot, Israel. (Poster Presentation, 2018)
- Ang AS, Sukhov SV, Dogariu A, and Shalin AS, "Electromagnetic Forces in Negatively Refracting Photonic Crystals," Days of Diffraction 2017, St. Petersburg, Russia. (Poster Presentation, 2017)
- Ang AS, Sugon QM, and McNamara DJ, "Apparent Retrograde Motion of Mars Using Geometric Algebra," 31st Physics Congress of the Samahang Pisika ng Pilipinas, Cebu City, Philippines (Poster Presentation, 2013)

Formal Education

- Oct 2017 - present PhD student in Electrooptical Engineering,
Ben-Gurion University of the Negev, Be'er Sheva, Israel.
Research: Tailoring Optical Forces Through Electromagnetic Field Manipulation Using Auxiliary Structures
Supervisor: Dr. Alina Karabchevsky
Expected Year of Graduation: 2021
- Sept 2017 - present PhD student in Optics,
ITMO University, Saint Petersburg, Russia.
Supervisor: Dr. Alexander Shalin
- Sept 2015 - Master of Science in Photonics and Opto-informatics,
June 2017 Specialization in Metamaterials,
ITMO University, Saint Petersburg, Russia.
диплом с отличием / Diploma with honors
Thesis: Scattering Forces within a Left-Handed Photonic Crystal
Supervisor: Dr. Alexander Shalin
Advisor: Dr. Sergey Sukhov (University of Central Florida)
- Jun 2010 - Bachelor of Science in Physics,
Mar 2015 Ateneo de Manila University, Quezon City, Philippines.
Thesis: Multipole Moments of a Gravitating Body and its Effects on Orbits
Supervisor: Dr. Jerrold Garcia

Scholarships

- Sept 2015 - ITMO University Scholarship "Year of Light"
June 2017 Department of Nanophotonics and Metamaterials

Employment

- Aug 2016 - present Engineer,
Nano-Optomechanics Laboratory, ITMO University, St. Petersburg, Russia.

Additional Education

- Feb 2017 International Workshop on Emerging Applications of Optical Nanostructures
Tel-Aviv University, Tel Aviv, Israel
- June 2016 XXXI European Doctoral School on Metamaterials: Nanophotonics and Metamaterials
ITMO University