

Forough Bozorgzadeh

Date of birth: 29th June 1985

Gender: Female

+989171457903

Research Institute for Applied Physics and Astronomy, University of Tabriz, East Azerbaijan, 51666-16471, Iran.

fbozorgzadeh@tabrizu.ac.ir

Education	Postdoctoral Researcher 2018 <i>Title: Design, fabrication and optimization of FBG optical filters</i> Research Institute for Applied Physics & Astronomy University of Tabriz, Tabriz, Iran
	Ph.D. in Photonics – Optical Telecommunications 2012-2017 <i>Title of thesis: Controlling the Diffraction Pattern via Electromagnetically Induced Transparency</i> Research Institute for Applied Physics and Astronomy University of Tabriz, Tabriz, Iran Supervisor: Prof. Mostafa Sahrai
	M.Sc. in Photonics Engineering 2008-2011 <i>Title of thesis: Study of Beam Propagation Method (BPM) for calculation of electromagnetic mode evolution in optical waveguides</i> School of Physics Iran University of Science and Technology, IUST, Tehran, Iran Supervisors: Dr. Hooman Akhavan, Dr. Esmail Eslami
	B.Sc. in Solid State Physics 2003-2007 Department of physics Yasouj University, Yasouj, Iran

Current Activities

- Quantum Optics
 - Optical Telecommunications
 - Laser Physics
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Teaching Experience

Teaching Assistant (TA), Research Institute for Applied Physics and Astronomy, University of Tabriz

- Classical Electrodynamics

Advisor, Research Institute for Applied Physics and Astronomy, University of Tabriz

- Ph.D. thesis
Design, fabrication and optimization of optical fiber Bragg grating filters – Davoud Ahmadi

Advisor, Research Institute for Applied Physics and Astronomy, University of Tabriz

- M.Sc. thesis
All-optical switching based on EIT in quantum well semiconductor intersubband transition devices – Jalil Shiri

Advisor, Research Institute for Applied Physics and Astronomy, University of Tabriz

- M.Sc. thesis
Two dimensional atom localization via probe field absorption through the standing wave – Ali Aghlmand
-

Publications

- Photonics : optical electronics in modern communications, Esmail Eslami, Hooman Akhavan, Forough Bozorgzadeh, IUST pub, ISBN: 978-964-454-255-8 (1391).
- Forough Bozorgzadeh, Mostafa Sahrai, and Habib Khoshshima, "Controlling the electromagnetically induced grating via spontaneously generated coherence," Eur. Phys. J. D **70**, 191 (2016).
- Mostafa Sahrai, Forough Bozorgzadeh, and Habib Khoshshima, "Phase control of electromagnetically induced grating in a four-level atomic system," Opt. Quantum Electron. **48**, 438 (2016).
- Forough Bozorgzadeh and Mostafa Sahrai: All-optical grating in a $V + \Xi$ configuration using a Rydberg state, Phys. Rev. A, **98**, 4, 43822 (2018).

Papers Presented at National Scientific Assemblies

- Jalil Shiri, Mostafa Sahrai, Jafar Poursamad, Forough Bozorgzadeh: *Design of an Optical switching based on Semiconductor double coupled quantum well*. Opsi Journal 3.; 22 (8) :208-211 (2016)
- Jalil Shiri, Mostafa Sahrai, Forough Bozorgzadeh, Mohammadreza Mehmannaavaz: *Design of an electro-optical switch based on quintuple coupled quantum dots molecule*. The 4rd Iranian Conference on Optics & Laser Engineering ICOLE (2015)
- Forough Bozorgzadeh, Mostafa Sahrai, Habib Khoshshima: *Electromagnetically induced grating in a Three-Level Ladder-type Atomic System in presence of Incoherent Pump*. Physics Conference of Iran (2015)
- Forough Bozorgzadeh, Masoud Yousefi, Hooman Akhavan, Esmail Eslami: *Simulation of Gaussian beam propagation in nonlinear anisotropic Kerr medium using numerical beam propagation method*. 4th Conference on Photonics Engineering (2012)
- Forough Bozorgzadeh, Hooman Akhavan: *Simulation of Single-Mode Rib Optical Waveguide Using a Numerical Method Called Finite Difference*. 3th Iranian Conference on Photonics Engineering (2011)
- Mohamadbagher ghorashi, Forough Bozorgzadeh, Rohallah Borniaie, Hesam Hashemi: *Calculation of magnetic field from a current-carrying loop and in Helmholtz coils with different cross sections*. Physics Conference of Iran (2007)

Memberships & Affiliations

- Optics and Photonics Society of Iran (OPSI)
- Physics Society of Iran (PSI)

Awards & achievements

- Acknowledged Paper, the 4th Iranian Conference on Optics and Laser Engineering (ICOLE), Shahinshahr, Iran (2015)
- Acknowledged Paper, 3rd Conf. of Photonics Engineering, Mahan, Iran (2011)

Software Skills

- Matlab Simulations
- OptiBPM Optical Simulation Software
- Maple
- LaTeX
- Endnote/ Mendeley/ RefWorks / Zotero
- Microsoft office + Mathtype

Experimental Skills

- Optoelectronics Laboratory
- Laser laboratory
- Optics laboratory
- Modern physics laboratory
- Electronics laboratory
- Basic physics laboratory

Research Interests

- Optical Telecommunications
- Photonics
- Optoelectronics
- Laser Physics
- atomic and molecular physics
- Computational Physics
- Nonlinear optics

Languages

- Persian
- English
- Turkish