Curriculum vitae

Ph.D., Assistant. Prof. of Electrical Engineering

Department of Electrical Engineering, Sahand University of Technology (SUT), Tabriz, Iran.

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Personal information **Date of Birth August. 1988**
Place of Birth Tabriz, Iran

Educational Background

Degree	Field of specialization	Name of Institution	City	Country	average	Started	Finished
PhD	Electronics and Optical Engineering	Shahid Chamran University of Ahvaz	Ahvaz	Iran	19.34	2012	2015
M. SC	Design of OIC	Tabriz University	Tabriz	Iran	19.13	2010	2012
B. SC	Electrical Engineering	Tabriz University	Tabriz	Iran	16.47	2006	2010

Bachelor of science thesis:
"Controlling the speed of a DC motor using microcontroller"
Master of science thesis:
"Extraction efficiency enhancement in white organic light emitting diodes (WOLED) based on periodic and quasi-periodic structures"
PhD thesis:
"Design of self-collimating structures based on photonic crystals"

Awards

Bright talented student in B.SC and M.SC.
First rank in M.SC and PhD with averages of 19.13 and 19.34, respectively.

Fields of Interest

1. Quasi-periodic structures, Solar cells, Optical and Plasmonic sensors, Photonic crystals, semiconductor lasers, self-collimation, slow light, invisibility cloaking, negative refraction, LPGs, Super continuum generation, …
2. Logical circuit, Electronics, Circuit, Optics, Computer Architecture, …

Research Activities

1. Survey on Lasers, Optical filters, Optical Sensors, Optical Fibers, optical multiplexers and demultiplexers, photonic, phononic, and phoxonic crystals, Metamaterials, cloaking, solar cells, photodetectors.
2. Research on Multi-layered, periodic and quasi- periodic Structures.

Academic Experiences

Associate Professor of SUT: *Jul 2016 – Present*
Head of nano-optic and photonic research lab (NOPRL): *Sep 2017 – Present*
Head of Electronic Group in SUT: *Sep 2018 –oct 2020*
Head of Brilliant Talented Students in Sahand University: *oct 2019-sep 2023*

Teaching experiences

English Teaching	Language institute of Bayan
Electronics I	Shahid Chamran university of Ahvaz
Electronics Lab (I and II)	Shahid Chamran university of Ahvaz, SUT
Measurement Lab	Shahid Chamran university of Ahvaz, SUT
Basics of electrical engineering	SUT
Digital Circuit Lab	University of Tabriz
Photonic crystals	SUT
Laser	SUT
Solid State Physics	SUT
Semiconductor devices	SUT
Optical Sensors	SUT
Optical Fibers	SUT
Applications of Optoelectronic	SUT
Physics of Electronic	SUT
Special English for the students of Electrical engineering	SUT
Waves and Electromagnetics	SUT

Publications

Peer Reviewed Journal papers

S. Matloub, M. Noori, A. Rostami, **"Reduction of guided waves in ITO/glass interface of white organic light emitting dioses (WOLEDs): layer optimization,"** Optik - International Journal for Light and Electron Optics, 124 (21), pp. 5061-5063, 2013.

A. Rostami, M. Noori, S. Matloub, H. Baghban**, "Light extraction efficiency enhancement in oprganic light emitting diodes based on optimized multilayer structures,"** Optik, International Journal for Light and Electron Optics, 124(18), pp. 3287-3291, 2013.

A. Rostami, M. Noori, **"A novel proposal for enhancement of light extraction efficiency in WOLEDs based on optimized photonic crystal structures,"** Optik - International Journal for Light and Electron Optics, 125 (23), pp. 6977-6980, 2014.

M. Noori, M. Soroosh, H. Baghban, " **All-angle self-collimation in two dimensional square array photonic crystals based on index contrast tailoring,**" Optical Engineering, 54 (3), 037111-037111, 2015.

M. Noori, M. Soroosh, H. Baghban**, "An approach to achieve all-angle polarization-insensitive and broad-band self-collimation in 2D square-lattice photonic crystals,"** Ukr. J. Phys. Opt, 16 (2), p. 85, 2015.

M. Noori, M. Soroosh**, "A comprehensive comparison of photomic band gap and self-collimation based 2D square array waveguides,"** Optik - International Journal for Light and Electron Optics, 126, pp. 4775-4781, 2015.

M. Noori, M. Soroosh, H. Baghban**, "Highly Efficient Self-Collimation based Waveguide for Mid-IR Applications,"** Photonics and Nanostructures - Fundamentals and Applications, 19, pp. 1-11, 2016.

M Noori, M Soroosh, H Baghban "**Design of highly efficient polarization beam splitter based on self-collimation on Si platform**",Journal of Modern Optics 64 (5), 491-499, 2017.

M Noori, M Soroosh, H Baghban, "**Self-Collimation in Photonic Crystals: Applications and Opportunities,**"Annalen der Physik 530 (2), 1700049, 2018.

Ali Ebrahimi, Mina Noori,"**Ultra-slow light with high NDBP achieved in a modified W1 photonic crystal waveguide with coupled** cavities," Optics Communication, vol. 424, 37-43, 2018.

Mahsa Vakili, Mina Noori, "**A Highly Accurate Refractive Index Sensor with Two Operation Modes Based on Photonic Crystal Ring Resonator**," Annalen der Physik, https://doi.org/10.1002/andp.201800453.

Mahsa Vakili, Mina Noori, "**Highly efficient elliptical microcavity refractive index sensor with single detection unit**", Opt Quant Electron (2019) 51: 77.

Nima Mohammadzadehasl, Mina Noori, "**Design of Low Loss and Ultra-Flattened Near Zero Dispersion PCF for Broadband Optical Communication**," Photonics and Nanostructures - Fundamentals and Applications, vol. 35, 100703, 2019.

Mansour Zaremanesh, Mina Noori, "**Highly efficient subwavelength imaging in Mid-IR range using high dielectric hexagonal lattice photonic crystals**", Optical engineering, vol 58(6), 067108, 2019.

Mansour Zaremanesh, Mina Noori," **All-angle polarization-insensitive negative refraction in high-dielectric photonic crystal**", Applied Optics, vol. 58, pp. 5631-5636, 2019.

Saied Karimpour, Mina Noori, "**All-angle polarization insensitive cloaking in 2D photonic crystals**", Optik, vol. 194, p.163086, 2019.

Amin Abbasiyan, Mina Noori, Hamed Baghban, "**Investigation of quasi-periodic structures to increase the efficiency of thin-film silicon solar cells: A comparative study**", Solar energy materials and solar cells, vol. 202, p. 110129, 2019,

Mansour Zaremanesh, Mina Noori, "**Large angle Polarization Insensitive Negative Refraction in the Diagonal Array Photonic Crystals**" Physica Scripta, IOP publishing, vol. 95, 125510 (2019).

Amin Abbasiyan, Mina Noori, Hamed Baghban, "**Efficiency Enhancement in Si Solar Cell Using 1D Quasi-Periodic Antireflection Coating**" Optical and Quantum Electronics, vol.51, 338 (2019).

Amin Abbasiyan, Mina Noori, Hamed Baghban,"**Quasi-periodic selective intermediate structure for perovskite/Si tandem solar cells**", Solar Energy, vol. 198, 461-468 (2020)

Saied Karimpour, Mina Noori, "**All-angle Self-collimation-based Invisibility Cloaking in 2D Square Lattice Photonic Crystals**" Annalen der Physik, p. 2000026, 2020, DOI: 10.1002/andp.202000026, 2020.

Seyed Ali Seyed Hashemi, Mina Noori, "**Dispersion tailoring of photonic crystal fibers for flat-top, coherent, and broadband sup**ercontinuum generation," Physica Scripta, IOP · May 21, 2020.

Mohammad Lotfi, Mina Noori "**A highly-sensitive temperature sensor based on GeO2–SiO2 long period fiber grating**," IOP Publishing/Physica Scripta · Nov 18, 2020.

A.Samadian Barough, M, Noori, A. Abbasiyan,"**Self-Collimation and Slow Light-Based Refractive Index Sensor with a Large Detection Range**," Annalen der Physik · May 13, 2021.

A.Samadian Barough, M, Noori, A. Abbasiyan, "**Slow light-based refractive index sensor in single mode photonic crystal waveguide**,"Physica Scripta · May 14, 2021.

H. Imanian, M. Noori, A. Abbasiyan, "**Highly efficient gas sensor based on quasi-periodic phononic crystals**," Sensors and Actuators B: Chemical · Jul 13, 2021.

S. Piran, M. Noori, S. A. S. Hashemi, H. Baghban, "**Super-Continuum Generation in Graphene-Based Chalcogenide Slot Waveguide**," Annalen der Physik, vol. 534 (1), 2100226, 2022.

S. Mirzaiee, M. Noori, H. Baghban, H. Veladi, "**All-optical memory based on slow light and Kerr effect in photonic crystal platform with independent write/read/hold control**," Physica Scripta, vol. 97(6), 065502, 2022.

H. Imanian, M. Noori, A. Abbasiyan, "**A highly efficient Fabry-Perot based phononic gas sensor**," Ultrasonics, vol. 124, 106755, 2022.

A. Abbasiyan, M. Noori, H. Baghban, "**A highly efficient 4-terminal perovskite/silicon tandem solar cells using QIBC and IBC configurations in the top and bottom cells, respectively**," Materials Today Energy, vol. 28, 101055, 2022.

طرح پژوهشی داخل دانشگاه با عنوان : طراحی حسگر شناسایی سیال مبتنی بر کاواک بلور فوتونی

Conference papers

M. Noori, M. Soroosh , **"Diffraction free light guiding in channel-less 2D square array Waveguides using self-collimation,"** *7th International Symposium on Telecommunications (IST)*, 2014, pp.193-197.

M. Noori, M. Soroosh, H. Baghban, **"Self-Collimation based All-Angle, Polarization Insensitive Backbone for Photonic Integration,"** *Sixth International Conference on Nanostructures (ICNS6)*, 2016, will be held on 7th of March.

Hakimeh Fokarie, Mina Noori "**Temperature Sensor Based on Single Mode Photonic Crystal Fiber Bragg Grating**," *7th international conference on nanostructures (ICNS 7)*, Tehran 2018.

Mahsa Vakili, Mina Noori, " **A Novel Refractive Index Sensor based on Photonic Crystal Shoulder Coupled Cavity**," *7th international conference on nanostructures (ICNS 7)*, Tehran 2018.

Nima Mohammadzadehasl, Mina Noori, "**Design and Manipulation of Characteristics of Photonic Crystal Fibers**," *7th international conference on nanostructures (ICNS 7)*, Tehran 2018.

Ali Ebrahimi, Mina Noori, "**Slow Light with High NDBP Achieved in a Modified W1 Photonic Crystal Waveguide**," *7th international conference on nanostructures (ICNS 7)*, Tehran 2018.

A. Abbasiyan, M. Noori, "**Large Angle 1D Self-Collimating Photonic Crystals for Si Solar cells**", *3rd International Conference on Electrical Engineering*, Tehran, 2018.

M. Zaremanesh, M. Noori, "**Anomalous All-Angle Negative Refraction in High Dielectric Photonic Crystals**", *3rd International Conference on Electrical Engineering*, Tehran, 2018.

M. Alizadeheslami, M. Noori, "**Self-collimated Slow Light in Square Lattice Photonic Crystals**," *3rd International Conference on Electrical Engineering*, Tehran ,2018.

M. Vakili, M. Noori, "**Highly efficient photonic crystal based refractive index sensor**", *1st national Microelectronic conference of Iran*, 2019, Tehran.

Seyed Ali Seyed Hashemi, Mina Noori, "**Dispersion Management in photonic crystal fibers to achieve supercontinuum generation at Mid-IR**", *8th international conference on nanostructures (ICNS8)*, 2020, Tehran.

Ali Samadian Barough, Mina Noori, "**Slow Light Self-Collimation based Waveguides**",*8th international conference on nanostructures (ICNS8)*, 2020, Tehran.

Nima Tourinejad, Mina Noori, Amin Abbasiyan, "**Surface Plasmon Polariton Refractive Index Sensor based on Photonic Crystal Fiber**", *8th international conference on nanostructures (ICNS8)*, 2020, Tehran.

H. Imaninan, M. Noori, A. Abbasiyan,"**Investigation of 1D periodic and quasi-periodic phononic crystalsInvestigation of 1D periodic and quasi-periodic phononic crystals**," 5th international conference on electrical engineering, computer science & information technonlogy, 2020, Hmedan, Iran. · Feb 3, 2021.

S. Piran, M. Noori, S. A. S. Hashemi,"**super-continuum generation in As2S3waveguide in Mid-IRsuper-continuum generation in As2S3waveguide in Mid-IR**,"5th international conference on electrical engineering, computer science & information technonlogy, 2021, 3 Feb, Hmedan, Iran. · Feb 3, 2021.

H. Dehghanpour, M. Noori, "**Glucose detection by 2D fluid-fluid PnC sensor**," International Conference of Biophotonics and Biomedical optics (ICBBO 2021), Islamic Azad University, Tabriz Branch, Tabriz, Iran.

H. Hashennezhad, M. Noori, "**Intrinsic layer manipulation in Ge-Si lateral p-i-n photodetector for fast detection**," International Conference of Biophotonics and Biomedical optics (ICBBO 2021), Islamic Azad University, Tabriz Branch, Tabriz, Iran.

M. Asa, A. Abbasiyan, M. Noori, "**SPR biosensor for uric acid detection**," International Conference of Biophotonics and Biomedical optics (ICBBO 2021), Islamic Azad University, Tabriz Branch, Tabriz, Iran.

H. Hashemnezhad, M. Noori, "**Systematic study of a tapered waveguide for Ge vertical PIN photodetector**," 2022 4th West Asian Symposium on Optical and Millimeter-wave Wireless Communications (WASOWC).

M. S. Yekani, M. Noori, "**Analysis of a single-mode DBR laser at 850nm using TWLM**," 2022 4th West Asian Symposium on Optical and Millimeter-wave Wireless Communications (WASOWC).

M, Noori, N. Mirzakhani, "**Study of fluid-fluid boron-nitride phononic crystal**," The Third Conference on Applied Research in ELECTRICAL ENGINEERING, 2023.

M. Noori, V. Pirzadeh, "**Investigation of solid-solid honeycomb lattice phononic crystal for hypersonic application**," The Third Conference on Applied Research in ELECTRICAL ENGINEERING, 2023.

حدیثه ایمانیان، مینا نوری، امین عباسیان، "بررسی باند ممنوعه فونونی در ساختارهای چندلایه¬ای شبه پریودیکبررسی باند ممنوعه فونونی در ساختارهای چندلایه ای شبه پریودیک" چهارمین همایش ملی فناوریهای نوین در مهندسی برق، کامپیوتر و مکانیک ایران -۳۰مرداد ۱۴۰۰ Jul ۰ 13, 2021.

حکیمه فکاری، مینا نوری، امین عباسیان، "حسگر دمایی فشرده و بسیار کارآمد مبتنی بر فیبر توری براگ، اولین کنفرانس ملی میکروالکترونیک ایران- ۱۳۹۸-۲۰۱۹

Language Proficiency

Language	Degree of Proficiency								
	Writing			Reading			Speaking		
	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor
English	√			√			√		