CURRICULUM VITAE

PERSONAL INFORMATION:

First Name: Rahim
Last Name: Ghayour
Date of Birth: April 2nd, 1952

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EDUCATION:

B.S. In Electrical Eng., Electronics, Amir Kabir University, Iran.

M.S. In Electrical Eng., (Solid State Devices), Shiraz University, Iran, 1985.

Ph.D. In Electrical Eng., (Microelectronics), University of Birmingham, England, 1989.

POSITIONS:

- Instructor of Electronics at Shiraz University, 77-85.
- Assistant Professor of Electronics at Shiraz University, 89-98.
- Chairman of the Department of Electrical Engineering, Shiraz University, Sep.90-Jan.94.
- Associate Professor of Electronics at Shiraz University, Sabbatical leave, 98-2000.
- Associate Professor of Electronics at Shiraz University, Sep.2000 Sep.2001.
- Senior Optical Designer at Lumenon Innovative Lightwave Technology inc., Montreal, Canada. Sep.2001 Sep2003.
- Part time faculty member, Concordia University, Canada, Sep. 2000 Dec. 2003.
- Associate Professor of Electronics at Shiraz University, 2003-2008.
- Deputy in Graduate Studies of Engineering school, Shiraz University, 2006-2011
- Professor of Electronics at Shiraz University, Aug. 2008-Continued.
- Editorial Board of Iranian journal of Science and Technology, IJST since 2009
- Editor of Iranian journal of Science and Technology, IJSTE since 2013
- Professor of Electronics at Fars Science and Research Branch, Islamic Azad University, Feb.2010- Sep.2014
- Professor of Electronics at Shiraz Branch, Islamic Azad University, Sep.2014- Continued

ACADEMIC AND PROFESSIONAL EXPERIENCE:

1-ACADEMIC AND INDUSTRIAL EXPERIENCES

- Sabbatical leave at Concordia University, Canada, Sep.98-Sep.1999.
- Visiting Professor at Concordia University, Canada, Sep.99-Sep.2000.
- Part time faculty member, Concordia University, Canada, Sep.2000 Dec.2003.
- Senior Optical Designer at Lumenon Innovative Lightwave Technology inc., Montreal, Canada. Sep.2001 - Sep2003.

2-TEACHING EXPERIENCE

2(a) (Graduate courses)

- Optical Quantum Electronics
- Quantum Transport
- Optoelectronic Devices and Fiber Optics
- Fundamental of Optical Waveguides
- Laser Electronics
- Microtechnology and Microdevices
- Design of analog integrated circuits
- Advanced Semiconductor Devices
- Nanotechnology and nanodevices
- Optical Communication
- Optical Modulation
- Design of RF Electronic Circuits

2(b) (Undergraduate courses)

- Electrical Circuit Theory I & II
- Physical Electronics I & II
- Electronic Circuits I, II & III
- Probability and Statistic in Engineering
- B.Sc. Projects

3- RESEARCH EXPERIENCE

Projects:

The titles of the projects which are done or in process:

- P1: NIR Optical Tomography.
- P2: All optical switches for integrated optical network.
- P3: Carbon nanotube and graphene nanoribon FET characterisation and application.
- P4: Design of MMI device for Optical Course Wavelength Division Multiplexing (WDM) application
- P5: Analysis and Design of Broad Band Array waveguide NxN Wavelength Division Multiplexing / Demultiplexing (DWDM):
 - 1) Analysis, Design and Fabrication of DWDM of 3X16 channel 100GHz by polymer technology including different processing approaches.
 - 2) Analysis, Design and Fabrication of DWDM of 5X40 channel 100GHz by Plasma Enhanced Chemical Vapour Deposition (PECVD) technology.
- P6: Variable Optical Amplifier Multiplexing (VMUX) 16 channel 100GHz by polymer technology applying Mach-Zehnder Technique.
- P7: Design and Fabrication of the wide band 1X2, 1X4 and 1X8 Multimode Interference Optical Splitters.
- P8: Design of Mach-Zehnder Optical Thermal Switch by Polymer Technology.
- P9: Design of Optical Channel Monitor (OCM) of 16Channel DWDM.
- P10: Planning and installing of the Optoelectronic Lab at Lumenon.
- P11: Characterization of Breakdown of thin oxide (SiO2) layer at high field.

 Done at Concordia University with MITEL Company supported by NRC of Canada.
- P12: Characterization Test and Modeling of Breakdown in Short Channel MOSFET at high field.
- P13: Design and realization of a system to characterize and test the electronic components.
- P14: Reverse Engineering of 3 Hybrid Integrated Circuits for a Radar System. Supported by IEI company, Iran.

RESEARCH INTERESTS:

- Bioelectrical Engineering
 - 1) NIR tomography
 - 2) Lasers in medicine
- Optical engineering:
 - 1) Phased Array Waveguide for DWDM Applications.
 - 2) Multi-Mode Interference devices, Couplers, Multiplexer (WDM) and switches.
 - 3) Optical semiconductor devices: Photodetector, lasers, semiconductor optical amplifier.
 - 4) Optical Tomography.
 - 5) Optical communication devices: Circulators, Isolators, Add-Drop devices
 - 6) Photonic crystal for communication applications
- Device modelling and characterisation:
 - 1) Nano devices: carbon nanotube transistor, silicon nanowire FET, Graphene nanoscale transistor.
 - 2) Quantum Dot devices
 - 3) Thin film microelectronics and technology.
 - 4) MOS devices: Capacitors, MOSFET Memories.

PUBLICATIONS:

- 1) High-Q and High-absorption Photonic Crystal Nanobeam Cavity based on semi-cylinders of air coupled with graphene, accepted to be published in Applied Physics A Journal.
- 2) Short Channel Effects Evaluation of Single-Gate and Double-Gate Graphene Nanoribbon Field Effect Transistors for High Frequency Applications, submitted to Journal of Computational Electronics, under revision (Sarvari).
- 3) Study of phosphorene nanoribbon for making nanotube selective gas sensor, Int. J. Nano Dimens., 13 (1): August 2021.

- 4) Modeling electric field increment in the Tip-Enhanced Raman Spectroscopy by using grating on the probe of atomic force nanoscope, Optical and Quantum Electronics, Vol 53,No 7, Jul 2021.
- 5) Simulation and Analysis of the Effect of Parameters on the Spectral Response of Electric Field Enhancement Factor in the Proposed AFM-TERS System, Journal of Intelligent Procedures in Electrical Technology Vol. 13/ No. 50
- 6) Analysis and application of zigzag phosphorene nanotube as gas nanosensor, Applied Physics A May2021.
- 7) Attached two folded graphene nanoribbons as sensitive gas sensor, Sharieh Jamalzadeh Kheirabadi^a, Rahim Ghayour^{a,1}, Maryam Sanaee^b, submitted to Physica B, under revision.
- 8) Selective gas sensor based on bilayer armchair graphene nanoribbon" by Ghayour, Physica E: low dimensional systems and nanostructures 129 (2021) 114635, https://doi.org/10.1016/j.physe.2021.114635.
- 9) "Tunable graphene-dielectric metasurfaces for terahertz all-optical modulation" JAP20-AR-01307R1, JAP, ...2020 (Bahadori) , https://doi.org/10.1063/5.0006459 DOI: 10.1063/5.0006459
- 10) Negative differential resistance effect in different structures of armchair graphene nanoribbon, Diamond and related Materials, Elsevier, 108, 107970,2020 (Jamal).
- 11) Folded graphene nanoribbon as sensitive and selective gas sensor: first principle study, *Physica scripta, IOP Science*, Vol. 94, No. 11, doi:10.1088/1402-4896/ab2b75, **2019.(Jamal)**
- 12) Improving gas sensing properties of armchair graphene nanoribbons by oxygen- hydrogen terminated edges, *Nanotechnology*, *IOP Science*. Vol. 30, No. 43, pp. 435501, doi: 10.1088/1361-6528/ab31b6, 2019.(Jamal)
- 13) Double-layer graphene optical modulators based on Fano resonance in all-dielectric metasurfaces, Journal of Applied Physics, Jan 2019, (Bahadori)
- 14) Design of Conical Corrugated Horn Antenna Fed by Circular Microstrip Antenna (submitted, Moarefi)
- 15) A new high performance MSM hybrid plasmonic photodetector based on nanogratings and dual mode horn shape waveguide, Nanotechnology 29 (2018)(Sharaf & Danesh)
- 16) All-Optical Cross-Bar Switch Based on a Low Loss Suspended Graphene Plasmonic Coupler, Plasmonics, Aug 2018, (Bahadori)

17) Analysis of Single- and Multi-layer Phosphorene Nanoribbons Behavior Under Modulated Electric Fields Using Tight-Binding and Green's Function Formalism, Iranian Journal of Science and Technology, Sep2018 (Sarvari)

۱۸)طراحی و ساخت کارت مبدل سیگنال تفاضلی به تکی بر پایه استاندارد (FMC,ANSI/VITA 57.1)، سومین کنفرانس ملی فناوری در مهندسی برق و کامپیوتر، اردیبهشت Bahosh).۱۳۹۷

- 19) Simulation and Analysis of Phosphorene Nanoribbon Field Effer Transistors using Non-Equilibrium Green's Function Formalism. 233rd ECS ,conf, Seattle, USA, Jan 2018 (Sarvari)
- 20) Performance Comparison of Conventional and Junction-less Multilayer Phosphorene Nanoribbon Field Effect Transistors (IEEE Transactions on Electron)(Sarvari)
- 21) Design and analysis of low loss plasmonic waveguide and directional coupler based on pattern-free suspended graphene sheets, Carbon 129, 2018, (Bahadori)
- 22) Atomistic Quantum Transport Simulation of Multilayer Phosphorene Nanoribbon Field Effect Transistors, Physica E: Low-dimensional Systems and Nanostructures, Elsevier, 2017, (Sarvari)
- 23) 3-D Analysis of an Ultrashort Optical Cross-Bar Switch Based on a Graphene Plasmonic Coupler, IEEE Journal of Light wave Technology, 2017 (Bahadori)
- 24) Design and Simulation of Two Continues Wave AlGaAs/GaAs Semiconductor Cascade Quantum Well Lasers at Room Temperature, INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY SCIENCES AND ENGINEERING, VOL. 8, NO. 4, JUNE 2017 (Yaghtin)
- 25) Reversed Effects of Quantum Well Numbers and Temperature on Optical Power and Wavelength of a Designed Ultraviolet Semiconductor Laser Based on GaN/InGaN, International Journal of Optoelectronic Engineering 2017, 7(1): 13-18 (Yaghtin)
- 26) Ultrashort Teraherta Cross-Bar Switch Based on a Graphene Plasmonic Directional Coupler, 4th International conf on Millimeter_Wave and Trahertz Technologies, Tehran, Iran, Dec. 20-22, 2016. (Bahadori)
- 27) Tunable band (pass and stop) filters based on plasmonic structures using Kerrtype nonlinear rectangular nanocavity, accepted in SPIE Optical Engineering for publication in OE 50 (10), 2016, (Arianfard)

- 28) Analyses of Short Channel Effects of Single-Gate and Double-Gate Graphene Nanoribbon Field Effect Transistors, <u>H Sarvari</u>, A.H Ghayour, <u>Z Chen</u>, <u>R Ghayour</u> Journal of Materials, 2016.
- 29) A New GaAs Metal-Semiconductor-Metal Photodetector Based on Hybrid Plasmonic Structure to Improve the Optical and Electrical Responses

 <u>R Sharaf</u>, <u>O Daneshmandi</u>, <u>R Ghayour</u>, A Alighanbari Plasmonics, 2016 Springer
- ۳۰)شبیه سازی انتشار امواج رادیوئی داخل و اطراف ساختمان بر اساس روش تفاضل محدود در حوزه زمان (FDTD)، اولین همایش ملی مهندسی برق دانشگاه آزاد شیراز اردیبهشت ۱۳۹۵(خلیفه).
- ۳۱) بررسـی امنیت و برگشـت پذیری حسـگری طیف در سیستم های رادیو شناختگر، اولین همایش ملی مهندسـی برق دانشـگاه آزاد شیراز اردیبهشـت ۱۳۹۵(زارعی).
- 32) Investigation and Analysis of single layer Phosphorene Properties Based on Tight-binding and Green's function Formalism, 24th Iranian Conference on Electrical Engineering, 2016, Date Added to IEEE *Xplore*: 10 October 2016 (Sar, Shena)
- سوییچ تمام نوری جدید بلور فوتونی بر اساس نور کند در موجبرهای کاواک کوپل شده، کنفرانس بین المللی مهندسی برق دانشگاه تهران (EE2016)خرداد ۱۳۹۵. رضا پناه
- ۳۲) سیرکولاتور نوری سه درگاهه کریستال فوتونی با قابلیت انتخاب جهت چرخش بوسیله طول موج برای st International Conference on new research Achievements in Elec. Com. Eng., 2016 (عباس زاده)
- ۳۵)شبیه سازی و تحلیل یک سویچ تمام نوری بر پایه کریستال فوتونی با اشتفاده از خاصیت نور کند و اثر غیرخطی، سومین کنفرانس ملی و اولین کنفرانس بین المللی پژوهش های کاربردی در مکاترونیک،۱۳۹۴(Ghazanfari))
- ۳٦) سوِییچ جدید از نوع کوپلر هدایتی بلور فوتونی مبتنی بر خاصیت نور کند در موجبرهای کاواک کوپل شده، بیست و دومین کنفرانس اپتیک و فوتونیک (ICPET2016) . رضا پناه
- ۳۷)مدل سازی وشبیه سازی انتشار امواج رادیوئی داخل و اطراف ساختمان، سومین کنفرانس ملی و اولین کنفرانس بین المللی پژوهش های کاربردی در مکاترونیک،۱۳۹۴(خلیفه)
- 38) Simulation of an all-optical photonic crystal switch using nonlinear optics and slow light for hetero structures Y-junctions, International conference on Electrical Engineering, 2016. (Ghazanfari)
- 39) A new photonic crystal all optical switch based on slow light in coupled-cavity waveguides, International conference on Electrical Engineering, 2016. (Rezapanah)

- ٤٠) شبیه سازی و تحلیل مودهای هدایت شده در ساختار باند انرژی فوتونیک کریستالی، 1st International Conference on new research Achievements in Elec. Com. Eng., 2016 (Ghazanfari)
- 41) Tree port optical circulator based on photonic crystal with change rotation by magnetic field intensity variation for optical communication applications, International conference on Electrical Engineering, 2016. (Abbaszadeh)
- 42) Tunable band (pass and stop) filters based on plasmonic structures using Kerrtype nonlinear rectangular nanocavity,H Arianfard, <u>R Ghayour</u> Journal of optical engineering. Spie digital library, 2015.
- 43) Nanoscale plasmonic filter based on coupled metal-insulator-metal waveguides using nonlinear nanoslot resonator, Journal of Nanophotonics, Vol. 9,No.1, 2014 (Arian)
- 44) All-optical switching using a new photonic crystal directional coupler, S Bahadori-Haghighi, R Ghayour Advanced ..., 2015, AEMjournal.org
- 45) Plasmonic band-stop filter based on nonlinear nanocavity", Second International Conference on Advances in Engineering and Basic Sciences, London, March 2015.
- 46) Simulation and Analysis of Phosphorene Nanoribbon Field Effect Transistors Using Non- Equilibrium Green's Function Formalism, *Meeting Abstracts*. No. 10. The Electrochemical Society, 2018
- 47) Optical self-phase modulation using a new photonic crystal coupled-cavity waveguide, S Bahadori-Haghighi, <u>R Ghayour</u> Optica Applicata, 2014.
- 48) Investigations and Simulations of All optical Switches in linear state Based on Photonic Crystal Directional Coupler, Advanced Electromagnetics, 2014, S Maktoobi, R Ghayour
- 49) <u>Design and Simulation of Metal-Semiconductor-Metal Plasmonic Photodetector</u>
 <u>Based on Metallic Nanograting</u>", *First National Conference of Nanotechnology: Applications and Advantages*, Hamadan, Iran, March 2014.
- 50) Simulation of an All Optical Switch in Linear State, S Maktoobi, <u>R Ghayour</u> Majlesi Journal of Telecommunication conf., 2014
- 51) A theoretical investigation on the transport properties of overlapped graphene nanoribbons, under review by Elsevier, Carbon, vol75, pp411-419, 2014.
 - ۵۲)طراحی آنتن میکرواستریپ با پچ دایروی برای عملکرددر ماهواره مسیریاب ، دومین کنفرانس ملی ایده های نو در مهندسی اصفهان، آبان ۹۲.
 - ۵۳)طراحی آنتن میکرواستریپ با پچ Eشکل مطابق فرکانس E ، اولین همایش تخصصی علوم،

- فناوری و سامانه های مهندسی برق، پیام نور، تهران، مهر ۱۳۹۲.
- 54) A Quad-band Microstrip Coupled Line Coupler based on the E-CRLH Transmission Line, Conference, IMOC 2013, Brazil.
- 55) A Novel Quad-Band Coupled Line Coupler Using E-CRLH Structure, submitted to Journal of ACES 2013.(M.Keshavarz)
- 56) Frequency Compensation of Hybrid Cascode Three Stage Amplifier with Large Capacitive Load, submitted to Int. J. of Elec., Taylor and Fran. (Z. Ranjbar)
- 57) A new gene selection method based on maximum correlation and minimum redundancy, International Journal on Numerical and Analytical Methods in Engineering, Vol.1,N.3, June 2013.

- 59) <u>Numerical and Analytical Methods in Engineering</u>, M Ebrahimpour, <u>H Mahmoodian</u>, <u>R</u> Ghayour, 2013
- 60) Single Miller Capacitor Frequency Compensation on Three Stage Amplifier for Large Capacitive Load, Journal of Basic and Applied Scientific Research, Vol. 3, No. 9, Sep 2013, (Ranjbar)
- 61) Maximum Correlation Minimum Redundancy in Weighted Gene Selection, ICECCO Electronics, Computer, Turgut Ozal, November 2013, (M Ebrahimpour, <u>H Mahmoodian</u>, <u>R Ghayour</u>-)
- 62) Single Miller Capacitor Feed forward Frequency Compensation on Three Stage Amplifier for Large Capacitive Load, Journal of Basic and Applied Scientific Research, Vol. 3, No. 9, Sep 2013.
 - ٦٣)طراحی جبران سازی فرکانسی تک خازنی میلر بر روی تقویت کننده های سه طبقه برای بارهای بزرگ خازنی، همایش ملی پژوهش های کاربردی، دانشگاه آزاد، اردیبهشت ۹۲.
 - ٦٤)طراحی و شبیه سازی جبران سازی فرکانسی تک خازنی با شبکه پیش خور بر روی تقویت کننده های سه طبقه برای بارهای بزرگ خازنی، همایش ملی پژوهش های کاربردی، دانشگاه آزاد، اردیبهشت ۹۲.

- ۵۰)اثر ضخامت زیر لایه بر خصوصیات تشعشعی آنتن مایکرواستریپ با پچ دایروی، شانزدهمین کنفرانس دانشجوئی، کازرون، شهریور ۹۲.
- ۹۲)طراحی آنتن میکرواستریپ با پچ دایروی در باند S ، دومین همایش منطقه ای برق، دانشگاه آزاد،بروجرد، اسفند ۹۱.
- 67) Photonic crystal optical switch using a new slow light waveguide and heterostructure Y-junctions, Elsevier, Optik-International Journal for Light and ..., Elsevier, July 2013. (SB Haghighi, R Ghayour, B Vakili)
- 68) Physical Specifications of Photonic Crystal Slab Lenses and their effects on Image Quality, J. Opt. Soc. Am. B., Vol.29, No.8/August2012/(<u>S Safavi</u>, <u>R Ghayour</u>, <u>J Ekman</u>)
- 69) Performance of the Single-Gate and Double-Gate Short Channel Graphene Nanoribbon FETs " to be published in International Journal of Electronics, Taylor & Francis.
- 70) Design of GNRFET using different doping profile near the source and drain contacts, International Journal of Electronics, Taylor & Francis, Vol.99, No.5, pp673-682, May2012. (H Sarvari, R Ghayour)
- 71) Simulation and Analysis of the Frequency Performance of a New Silicon Nanowire MOSFET Structure, Elsevier, Physica E 45, 2012, 66-71.(Sar& Dast)
- 72) A new structural design of passive optical AWG-WDM to upgrade the multiplexing / Demultiplexing characteristics, Optical Engineering 50, Journal of SPIE, Oct 2011, USA.
- 73) Magneto-Optical Photonic Crystal 1X3 switchable power divider, Elsevier, Photonics and Nanostructures-Fundamentals and Applications10, Elsevier, 2012, pp.131-139 (A Esmaieli, <u>R Ghayour</u>)
 - ۷۴) بررسی مدهای هم فرکانس موجود در نوسانگرهای کریستال فوتونی نوری مغناطیسی و میزان تزویج بین آنها کنفرانس مهندسی برق دانشگاه آزاد گناباد خراسان تیرماه ۹۰.
 - ۷۵)تحلیل و بررسی مدولاتورفاز براساس موجبر کریستال فوتونی با خاصیت غیر خطی کنفرانس مهندسی برق دانشگاه آز ادگناباد خراسان تیر ماه ۹۰.
 - ۷۶) طراحی و شبیه سازی مدو لاتور نوری با ساختار تداخلی ماخ زندر کریستال فوتونی کنفرانس مهندسی برق دانشگاه آزاد گناباد خراسان تیرماه ۹۰.
- 77) A new structural design of an optical AWG, 2nd Iranian conference on optic engineering and lasers, 1390 (2011), Isfahan, Iran.

- 78) Analytical modeling of electrical characteristics of coaxial nanowire FETs Indian Journal of Physics, 2011 Springer (A Kargar, R Ghayour).
- 79) 3-D Quantum Mechanical Simulation of Square Nanowire MOSFETs by using NEGF Method, Central European Journal of Physics,472-481, DOI 102478/51, 2011, (Sar &Dast).
- 80) Investigation and simulation of characteristics of single gate and double gate graphene nanoribbon FETs." Tenth Nanotechnology Iranian Student Conference, 14-16 September 2011, Tehran University, Iran (Sarvari, H., and R. Ghayour)
- 81) Frequency analysis of Graphene Nanoribbon FET by Non-Equilibrium Green's Function in Mode Space, Elsevier, Physica E 43, 1509-1613, May 2011, (Sarvari, H., and R. Ghayour)
- 82) Improvement in the performance of a passive optical AWG-WDM, 5th International symposium on advances in science and technology, 2011, Mashhad, Iran.
- 83) A new approach to analyze and characterize the graphene nanoribbons and GNRFET, Journal of material science and engineering, vol4, no12, Dec. 2010, (<u>H Sarvari</u>, <u>R Ghayour</u>).
- 84) Investigation of cut-off frequency in silicon nanowire MOSFET by NEGF method, ICNST2010, 2010 International conference on nanoscience and Technology, China 2010.
- 85) Comparison of Single-gate and double gate Graphene nanoribbon FETs behaviour by Nonequlibrium Green's Function Method, ICNST2010, 2010 International conference on nanoscience and Technology, China 2010.
- 86) CAPACITANCES OF SCHOTTKY BARRIER CARBON NANOTUBE FIELD EFFECT TRANSISTORS, International Congress on Nanoscience & Nanotechnology (ICNN 2010), Shiraz-Iran.
- 87) EFFECT OF WAVE FUNCTION PENETRATION INTO THE OXIDE ON THE CHARGE AND POTENTIAL OF THE CHANNEL IN NANOMOSFETS, International Congress on Nanoscience & Nanotechnology (ICNN 2010), Shiraz-Iran.
- 88) A Comparative study of a SAW Filter for Cell Phone Applications, Accepted for publication in Journal of Materials Science and Engineering, USA.
- 89) A QUANTUM SIMULATING OF DOUBLE-GATE (DG) SILICON NANOWIRE MOSFET BY USING

- NEGF METHOD, International Congress on Nanoscience & Nanotechnology (ICNN 2010), Shiraz-Iran.
- 90) Analysis and Characterization of Graphene Nanoribbon-FET by Non-Equilibrium Green Function method, ICNB 2010 India.
- 91) SIMULATION OF DOUBLE-GATE GRAPHENE NANO-RIBBON FET BY USING NEGF METHOD, International Congress on Nanoscience & Nanotechnology (ICNN 2010), Shiraz-Iran.
- 92) A fast method to analyze and characterize the Graphene Nanoribbon FET by Non-Equilibrium Green's Function', 2010 IEEE International Conference on Semiconductor Electronics (ICSE2010), Melaka, Malaysia. (<u>H Sarvari</u>, <u>R Ghayour</u>)
- 93) Mechanically Changed Band Gap of Single Walled Carbon Nanotube, Central European Journal of Physics, DOI10.2478, 7..9.
- 94) Design and Simulation of a SAW Filter and a New Approach for Bandwidth's Tuning, Conference ASICON, IEEE 8th 2009, China, M Sadeghi, R Ghayour, H Abiri, M.Karimi
- 95) Analysis and Characterization of Graphene Nanoribon-FET by Non-equilibrium Green Function method, Conference ICNB2010, India.
- 96) SPM Response of a Distributed Coupling Coefficient DFB-SOA All Optical Flip-Flop, ۱۳۸۸,(فصلنامه علمی پژوهشی مهندسی برق مجلسی
- 97) XPM Response of Multiple Quantum Well chirped DFB<u>-SOA All Optical Flip-Flop</u>

 <u>Switching</u>, World Acad. Sci. Eng., Singapore, 2009, M Jabbari, <u>MK Moravvej-Farshi</u>...
 World Acad. Sci. Eng. ..., 2009 researchgate.net
 - ۹۸)حذف فیدبک ناخواسته به کمک Blind Deconvolution,سـومین کنفرانس مهندسـی رسـانه . 1388,
 - ۹۹)سوئیچ تمام نوری کریستال فوتونی با استفاده از مواد غیر خطی ، شانزدهمین کنفرانس اپتیک و فوتونیک ایران، ۱۳۸۸.
- 100) Cross-Phase modulation response of a DCC-DFB-SOA all-optical flip-flop, J. Opt. Soc Am. B/Vol. 26, No. 9/September 2009, M Jabbari, <u>MK Moravvej-Farshi</u>, <u>R Ghayour</u>, A Zarifkar
- 101) Quantum Mechanical Analysis of Nanowire FETs, Proceedings of the European Computing Conference, Springer, 2009., A Kargar, R Ghayour

- 102) SWCNTs: a fast method to calculate the band gap under lattice deformation, ELSEVIER physica E, Vol.41,2008
- 103) A symmetry based investigation of the band gap of SWCNTs, Central European Journal of Physics, 2008
- 104) Analysis of 2D Photonic Crystal Cavities Using a Multi -Scattering Approach Based on Weighted Bessel Functions, Progress in Electromagnetic Research M,2008
- 105) Mechanically Changed Band Gap of Single Walled Carbon Nanotube, Central European Journal of Physics, 2009
- 106) Noise Analysis of Coaxial Schottky Barrier Carbon Nanotube FETs Using Non Equilibrium Green, Central European Journal of Physics,7 (4), 2009.(I Hassaninia, **R Ghayour**, H Abiri, M Sheikhi)
- The Investigation of Band Gap Changes of SWCNTs using a Non-orthogonal Tight Binding Model, Fullerenes, Nanotubes and Carbon Nanostructures 17, 2009, 99-108.
- 108) XPM Response of a chirped DFB-SOA All-Optical, IEEE Journal of Lightwave Technology, 2008.
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