

Curriculum Vitae



Personal Details

Full Name : *Abdolkarim Afroozeh*

Gender: *Male*

Nationality: *Iranian*

Passport Number: *J14993227*

Date Of Birth: *05/06/1975*

City of Birth : *Jahrom*

Mobile: *09177913216*

Email: *afroozeh155@yahoo.com, afroozeh@lar.ac.ir*

Education

2010-2013 *Ph.d (Photonics and Atomics), UTM (Malaysia)(18.25)*

1999-2001 *Master Of Science in Physics , Shiraz University
Shiraz-Iran(16.09)*

1994-1998 *Bachelor in Teacher Physics, Hormozgan University
Bandar Abbas- Iran(16.08)*

Work Experiences

2013-2016	<i>Young Researchers and Elite Club</i>
2013-2016	<i>Editor Board of several International Journal</i>
2013	<i>(postdoc) Visiting Reescher in UTM for 6 months</i>
2011-2013	<i>Refree of several ISI Journals</i>
2010-Present	<i>Working in Institute of Advanced Photonics Science</i>
1998-Present	<i>Teaching of Physics at high School of Jahrom ,Iran</i>
2005-Present	<i>Lecturer of Physics at University</i>
1999-2001	<i>Working in Biruni Observatory - Shiraz-Iran</i>

Activities

BOOKS

1. [Soliton Generation by Ring Resonator for Optical Communication Application](#) by Iraj Sadegh Amiri, Sayed Ehsan Alavi, Sevia Mahdaliza Idrus, **Abdolkarim Afroozeh** , Publisher: **Nova Science Publisher**, Editor: Jennifer Ramirez.(2014)
2. [Ring Resonator Systems to Perform the Optical Communication Enhancement Using Soliton](#) , Iraj Sadegh Amiri, Abdolkarim Afroozeh
Publisher: Springer., ISBN: 978-981-287-196-1(2014)
3. [Micro Ring Resonators and Applications: New Technology of Optics](#)
by Abdolkarim Afroozeh, Iraj Sadegh Amiri and Alireza Zeinalinezhad. Publisher:
LAP LAMBERT Academic Publishing (February 12, 2014)
4. [Integrated Micro-ring Photonics:Principles and Applications as Slow Light Devices, Soliton Generation and Optical Transmission](#) By Iraj Sadegh Amiri, Abdolkarim Afroozeh, Harith Ahmad CRC Press – 2015 – 230 pages, ISSN: 978-1-13-802783-1.(2015)

5. [ANALYSIS OF OPTICAL RING RESONATOR](#) by Afroozeh, I.S. Amiri, K. Chaudhary, J. Ali, P. P. Yupapin ; In book: Advances in Laser and Optics Research, Edition: 11, Chapter:, Publisher: Nova Science Publisher. Advances in Laser and Optics Research. ISBN:978-1-63463-494-6. 2015
6. [Spatial and Temporal Soliton Pulse Generation By Transmission of Chaotic Signals Using Fiber Optic Link](#) by I. S. Amiri, A. Afroozeh , 01/2014: pages In Press will be published in Nova Science Publisher. Advances in Laser and Optics Research. ISBN:978-1-63463-494-6. 2015
7. [WIRELESS TERAHERTZ GENERATION USING OPTICAL WAVEGUIDES](#)
Author: Abdolkarim Afroozeh, Reza Mosalanezhad, Seyed Ebrahim Pourmand, Alireza Zeinalinezhad, Publication Year: 2015 ISBN: 9781631817281
- 8- [Microring Resonators : Fabrication and Applications in Soliton Communications.](#)
By (author) A Afroozeh , By (author) Is Amiri , By (author) Y Farhang • Language English • Illustrations note black & white illustrations • ISBN10 1519611552 • ISBN13 9781519611550/ 2016

PAPERS

1. [A New Teaching method in Physics Classroom](#)”: Physics Education **A. Afroozeh**, (2006). " , Department of Physics, Tehran-Iran
2. [Physics Analytic Of Shoot In Football](#)”**A. Afroozeh**, M. Afroozeh (2007), “, Sport Education Department of Sport, Tehran-Iran
3. [Photometric Observation And Apsidal Motion Study Of V1143 Cygni](#) A. Dariush, **A. Afroozeh**, N. Riazzi(2004),”” Astro-Ph/0411788
4. [Times Of Minima Of Eclipsing Binaries DI Herculis Ana V1143 Cygni](#) A. Dariush, **A. Afroozeh**, N. Riazzi(2001).“”: Information Bulletin On Variable Stars,5136-IBVS
5. [Generation of THz frequency using PANDA ring resonator for THz imaging](#) M A Jalil , **A. Afroozeh**, Saktioto, Yupapin. (2012). ". " *International Journal of Nanomedicine* 7: 773.

6. [THz frequency generation using Gaussian pulse for medical applications](#) **A. Afroozeh**, J. Ali, P.P Yupapin. (2012). " " *Optik-International Journal for Light and Electron Optics*.
7. [Multi soliton generation for enhance optical communication](#) **A. Afroozeh**, I. S. Amiri, M. A. Jalil, M. Kouhnavard, J. Ali, P. P. Yupapin,. (2011). ." *Applied Mechanics and Materials* 83: 136-140.
8. [Slow light generation using microring resonators for optical buffer application](#) M. Bahadoran , **A.Afroozeh**, J.Ali, P.P Yupapin.(2012),"" *Optical Engineering* 51(4): 044601-044601-044601-044608.
9. [High-terahertz-frequency carrier generation by optical pulse for radio-over-fiber applications](#).**A. Afroozeh**, J. Rangsang; J. Ali, P.P Yupapin,(2011),""*Optical Engineering*, Volume 50, Issue 12, pp. 125005-125005-11.
10. [Radio Wave Generation Using Dark and Bright Soliton](#)M.A. Jalil, **A. Afroozeh**, M.S. Aziz, I.N. Nawi, J.Ali, P.P. Yupapin. (2011), , , , *Procedia Engineering*, Volume 8, Pages 401-406
11. [Bright and Dark Soliton Stopping using Nonlinear Waveguide](#)**A. Afroozeh**, M.S. Aziz, M.A. Jalil, J. Ali, P.P. Yupapin, (2011), “,”*Procedia Engineering*, Volume 8, Pages 412-416.
12. [Determination of FWHM for Soliton Trapping](#),”**A. Afroozeh**, I. S. Amiri, J. Ali & P. P. Yupapin. (2011),” *Jurnal Teknologi*, 55 (Sains & Kej.) Keluaran Khas (1), 77–83, © Penerbit UTM Press, Universiti Teknologi Malaysia.
[Generation Of Quantum Codes Using Up And Down Link Optical Solition](#) I. S. Amiri, **A. Afroozeh**, J. Ali & P. P. Yupapin. (2011),”Generation Of Quantum Codes Using Up And Down Link Optical Solition,”*Jurnal Teknologi*, 55 (Sains & Kej.) Keluaran Khas (1), 97–106, © Penerbit UTM Press, Universiti Teknologi Malaysia.
13. ,”[Molecular Transporter System For Qubits Generation](#) I. S. Amiri, **A. Afroozeh**, M. Bahadoran, J. Ali & P. P. Yupapin. (2011), ,”*Jurnal Teknologi* Keluaran Khas, 55 : 155–165, © Penerbit UTM Press, Universiti Teknologi Malaysia.
14. [Simulation Of Soliton Amplification In Micro Ring Resonator For Optical Communication](#) **A. Afroozeh**, I. S. Amiri, M. Bahadoran, J. Ali & P. P. Yupapin. (2011), “,”*Jurnal Teknologi* Keluaran Khas, 55: 271–277, , © Penerbit UTM Press, Universiti Teknologi Malaysia.
15. [Fast Light Generation using GaAlAs/GaAs Waveguide](#) **A. Afroozeh**, I. S. Amiri, M. Bahadoran, J. Ali & P. P. Yupapin. (2012), “,”*Jurnal Teknologi* Keluaran Khas, 57: 17–23, , © Penerbit UTM Press, Universiti Teknologi Malaysia.

16. [Generation of DSA for Security Application](#) I.S. Amiri, K. Raman, **A. Afroozeh**, M.A. Jalil, I.N. Nawi, J. Ali, P.P. Yupapin. (2011), " , " *Procedia Engineering*, Volume 8, Pages 360-365.
17. [Dark Soliton Array for Communication Security](#) I.S. Amiri, **A. Afroozeh**, I.N. Nawi, M.A. Jalil, A. Mohamad, J. Ali, P.P. Yupapin. (2011), , *Procedia Engineering*, Volume 8, Pages 417-422.
18. [Capacity Enhancement in Communication System via NNRR](#), M.S. Aziz, **A. Afroozeh**, M.S. Roslan, M.A. Jalil, I.N. Nawi, J. Ali, P.P. Yupapin. (2011), " " *Procedia Engineering*, Volume 8, 2011, Pages 407-411.
19. [Nano Radio and RoF Applications](#) Pipatsart, S., **A. Afroozeh**, J. Ali, P.P. Yupapin. (2012). " ." *Procedia Engineering* 32: 1-12.
20. [Simulation and Analysis of Multisoliton Generation Using a PANDA Ring Resonator System](#) I. S. Amiri, **A. Afroozeh**, M. Bahadoran. (2011), " " . *CHIN. PHYS. LETT.* Vol. 28, No. 10 (2011) 104205
21. [Stop Light Generation using Nano Ring Resonators for ROM](#) **A. Afroozeh**, A. Zeinalinezhad, S. E. Pourmand, I. S. Amiri, , J. Ali, , *Journal of Computational and Theoretical Nanoscience*, Volume 12, Number 3, March 2015, pp. 468-472(5).
22. [Femtosecond Pulse Generation Using Microring Resonators for Eye Nano Surgery](#) P. Sanati, **A. Afroozeh**, I. S. Amiri, J. Ali, and Lee Suan Chua, *Nanosci. Nanotechnol. Lett.* 6, 221-226 (2014)
23. [EVALUATION OF THE PROTEIN OF NANOSTRUCTURED SILICA BASED BIOMATERIAL](#) **AFROOZEH A**, ZEINALINEZHAD A, POURMAND S. E, . *IJBPAS*, November, 2014, 3(11): 2580-2586
24. [DETERMINATION OF SUITABLE MATERIAL TO CONTROL OF LIGHT](#) **AFROOZEH A**, ZEINALINEZHAD A, POURMAND S. E AND AMIRI I. S, , *IJBPAS*, November, 2014, 3(11): 2410-2421
25. [OPTICAL SOLITON PULSE GENERATION TO REMOVAL OF TISSUE](#) **AFROOZEH A**, ZEINALINEZHAD A AND POURMAND S. E, , *IJBPAS*, November, 2014, 3(11): 2587-2594
26. [Simulation and Calculation of the Parameters of PCF under Terahertz Wave Band](#) **A. Afroozeh**, S.E. Pourmand, A. Zeinalinezhad " " *Advances in Environmental Biology*, 8(21) October 2014, Pages: 263-268
27. [EVALUATION OF THE PROTEIN OF NANOSTRUCTURED SILICA BASED BIOMATERIAL](#) **AFROOZEH A**, ZEINALINEZHAD A, POURMAND S. E, " " *IJBPAS*, November, 2014, 3(11): 2580-2586
28. [ATTOSECOND PULSE GENERATION USING NANO RING WAVEGUIDES](#) **A. Afroozeh**, A. Zeinalinezhad, S. E. Pourmand and I. S. Amiri, " " *International Journal of Current Life Sciences - Vol.4, Issue, 9*, pp. 7573-7575, September, 2014

29. [SECURED COMMUNICATION GENERATION USING OPTICAL SOLITON PULSE](#) A. AFROOZEH, E.AREFI, S. E. POURMAND, A. ZEINALINEZHAD , " " IJBPAS, March, 2015, 4(3): 1627-1635.
30. [EFFECTS OF ETHYLENE GLYCOL TREATMENT TEMPERATURE ON THE TRANSFER CHARACTERISTICS OF ZNO](#) Abdolkarim Afroozeh, Seyed Ebrahim Pourmand, Alireza Zeinalinezhad, ", Bulletin Of Environment, Pharmacology and Life Sciences, Volume 4(4) March – 2015
31. [INVESTIGATION OF OPTICAL PROPERTIES OF TRANSPARENT CONDUCTING OXIDE BASED ON Al₂ZnO₄](#) Abdolkarim Afroozeh, Seyed Ebrahim Pourmand, Alireza Zeinalinezhad, "" Bulletin Of Environment, Pharmacology and Life Sciences, Volume 4(4) March – 2015
32. [OPTIMIZED PERTURBATION EFFECT OF PHOTONIC CRYSTAL NANO CAVITIES](#) Abdolkarim Afroozeh, Alireza Zeinalinezhad, Seyed Ebrahim Pourmand," " Bulletin Of Environment, Pharmacology and Life Sciences, Volume 4(3) February – 2014
33. [ISVR Modeling of Interferon Gamma \(IFN- \$\gamma\$ \) Biosensor Based on Graphene.](#) E Akbari, Z Buntat, M Nilashi, A Afroozeh, A Zeinalinezhad Analytical Methods, 2016
34. [Silicene and Graphene Nano materials in Gas Sensing Mechanism](#) E Akbari, Z Buntat, A Afroozeh, SE Pourmand, P Sanaati RSC Advances, 2016
35. [Analytical investigations of gas-sensor using methane decomposition system MHSa](#) Elnaz Akbari, Zolkafle Buntat , Abdolkarim Afroozeh, Alireza ... Environmental Earth Sciences 75 (5), 2016
36. [Sensor application in Direct Methanol Fuel Cells \(DMFCs\)](#) E.Elnaz Akbari, Zolkafle Buntat, Ali Nikoukar, Azadeh Kheirandish,A.afroozeh. Renewable and Sustainable Energy Reviews 60 (1), 1125-1139, 2016
37. [Analytical investigation of CO₂ sensor based on carbon strand](#) E Akbari, Z Buntat, A Afroozeh, A Zeinalinezhad, M Khaledian International Journal of Environmental Science and Technology 13 (1), 339-348, 2016
38. [Escherichia coli bacteria detection by using graphene-based biosensor](#) E Akbari, Z Buntat, A Afroozeh, A Zeinalinezhad, A Nikoukar IET Nanobiotechnology 9 (5), 273-279, 2015
39. [Detection of bilayer lipid with graphene nanoribbon](#) E Akbari, Z Buntat, A Afroozeh, A Zeinalinezhad, M Nilashi Electronic Materials Letters 11 (5), 806-814, 2015
40. [Analytical assessment of carbon allotropes for gas sensor applications](#) Elnaz Akbari ; Abdolkarim Afroozeh, Journal of the International Measurement Confederation 92(8)/ 2016
41. [Effect on the Optical Properties of Liquid Photonic Crystal Fiber](#) Buletin Optik 2016. eISSN no: 2504-8546

42. [Spatial and temporal soliton pulse generation by transmission of chaotic signals using fiber optic link](#)
IS Amiri, A Afroozeh, Journal of Optics Research 16 (2), 121, 2014
43. [Analysis of optical ring resonator](#)
A Afroozeh, IS Amiri, K Chaudhary, J Ali, PP Yupapin, Advances in Laser and Optics Research, 1-16, 2014

Participation in Conferences

1. **A.Afroozeh**, S.M.Zabihin (2006), “Photometry And Analytic of Eclipsing Binary of V566 OPH”, Conference of Payame-noor University, Orumieh.Iran
2. S.M.Zabihin, **A.Afroozeh**(2007),” Analysis of Roch Model in Eclipsing Binary system GO Cygni” Conference of Kurdistan University, Sanandaj-Iran
3. **A.Afroozeh**, S.M.Zabihin (2007),” Determinig of Minimum Time and Period of Eclipsing Binary system V566 Oph By Photometry and Analysis of Light Curve , Conference of Kurdistan University, Sanandaj- Iran-2007
4. **A.Afroozeh**, A.Kamaliyan, S.pilban (2008), Determination Of Speed Of Light By Quranic According result of NASA, , Conference of Payame-noor University , Ahvaz-Iran-2008
5. **A. Afroozeh**, (2009),”Determination of electromagnetic activation eclipsing binary Stars.Conference of Astronomy in Shiraz University, Fars, Iran.
6. Iraj Sadegh Amiri, Muhammad Arif Jalil, **Abdolkarim Afroozeh**, Jalil Ali, and Preecha P Yupapin, “Storage of Optical Soliton Wavelengths Using NMRR,”ICEM 2010, 29 November – 1 December 2010, Legend Hotel, Kuala Lumpur, Malaysia
7. Iraj Sadegh Amiri, Muhammad Arif Jalil, **Abdolkarim Afroozeh**, Jalil Ali, and Preecha P Yupapin, “Storage of Atom/Molecules/Photon using Optical Potential Wells,” ICEM 2010, 29 November – 1 December 2010, Legend Hotel, Kuala Lumpur, Malaysia
8. **A. Afroozeh**, I. S. Amiri, M. A. Jalil, J. Ali, and P.P. Yupapin, “Dark and Bright Soliton trapping using NMRR,” ICEM 2010, 29 November – 1 December 2010, Legend Hotel, Kuala Lumpur, Malaysia
9. **A. Afroozeh**, I. S. Amiri, M. A. Jalil, J. Alia, and P.P. Yupapin, “Optical Memory Time using Multi Bright Soliton,”ICEM 2010, 29 November – 1 December 2010, Legend Hotel, Kuala Lumpur, Malaysia

10. I. S. Amiri, M. A. Jalil, **A. Afroozeh**, M. Kouhnavard , J. Ali, P.P. Yupapin, “Controlling Center Wavelength and Free Spectrum Range by MRR Radii,”FSPGC 2010, 5-7 OCT 2010, IBNU SINA INSTITUTE, UTM, Malaysia
11. M. A. Jalil, I. S. Amiri, M. Kouhnavard, **A. Afroozeh**, J. Ali, P.P. Yupapin, “Finesse Improvements of Light Pulses within MRR System” FSPGC 2010, 5-7 OCT 2010, IBNU SINA INSTITUTE, UTM, Malaysia
12. M. Kouhnavard, **A. Afroozeh**, M. A. Jalil, I. S. Amiri, , J. Ali, P.P. Yupapin, “Soliton Signals and The Effect of Coupling Coefficient in MRR Systems” FSPGC 2010, 5-7 OCT 2010, IBNU SINA INSTITUTE, UTM, Malaysia
13. **A. Afroozeh**, M. Kouhnavard, I. S. Amiri, M. A. Jalil, J. Ali, P. P. Yupapin , “Effect of Center Wavelength on MRR Performance,” FSPGC 2010, 5-7 OCT 2010, IBNU SINA INSTITUTE, UTM, Malaysia
14. Muhammad Arif Jalil, Iraj Sadegh Amiri, **Abdolkarim Afroozeh**, Jalil Ali and Preecha P Yupapin , “Effects of MRR Parameter on the Bifurcation Behavior,”ESciNano 2010, December 1- 3, 2010, KLCC, Kuala Lumpur, Malaysia
15. Muhammad Arif Jalil, Iraj Sadegh Amiri, **Abdolkarim Afroozeh**, Jalil Ali and Preecha P Yupapin, “MRR Quantum Dense Coding,” ESciNano 2010, December 1- 3, 2010, KLCC, Kuala Lumpur, Malaysia
16. Mojgan Kouhnavard, Iraj Sadegh Amiri, Muhammad Arif Jalil, **Abdolkarim Afroozeh**, Jalil Ali and Preecha P Yupapin, “Quantum Signal Processing Via an Optical Potential Well,” ESciNano 2010, December 1- 3, 2010, KLCC, Kuala Lumpur, Malaysia
17. Mojgan Kouhnavard, Iraj Sadegh Amiri, Muhammad Arif Jalil, **Abdolkarim Afroozeh**, Jalil Ali and Preecha P Yupapin, “QKD Via a Quantum Wavelength Router using Spatial Soliton,” ESciNano 2010, December 1- 3, 2010, KLCC, Kuala Lumpur, Malaysia
18. Iraj Sadegh Amiri, Muhammad Arif Jalil, Muhamad Hamdi, **Abdolkarim Afroozeh**, Jalil Ali and Preecha P Yupapin, “Proposed Molecule Transporter System for qubits Generation,” ESciNano 2010, December 1- 3, 2010, KLCC, Kuala Lumpur, Malaysia
19. Iraj Sadegh Amiri, Muhammad Arif Jalil, Muhamad Hamdi, **Abdolkarim Afroozeh**, Jalil Ali and Preecha P Yupapin, “Trapping Spatial and Temporal Soliton System for Entangled Photon Encoding,” ESciNano2010, December 1- 3, 2010, KLCC, Kuala Lumpur, Malaysia
20. **A. Afroozeh**, I. S. Amiri, M. A. Jalil, J. Ali, and P.P. Yupapin, “Optical Dark and Bright Soliton Generation and Amplification,” ESciNano2010, December 1- 3, 2010, KLCC, Kuala Lumpur, Malaysia

21. **A. Afroozeh**, I. S. Amiri, M. A. Jalil, J. Ali, and P.P. Yupapin, “Wide and narrow signal generation using chaotic wave,”ESciNano 2010, December 1-3, 2010, KLCC, Kuala Lumpur, Malaysia
22. **A. Afroozeh**, I. S. Amiri, A. R. Samavati, J. Ali, and Preecha Yupapin. “ THz Frequency Generation using MRRs for THz Imaging”, International Conference on Enabling Science and Nanotechnology 2012 (ESciNano 2012) 5-7 January 2012, Persada Johor International Convention Center, Johor Bahru, MALAYSIA
23. A. R. Samavatia, S. K. Ghoshalb, Z. Othaman a, **A. Afroozeh**, Germanium Nanostructure on Si(100) Surface Grown by RF Magnetron Sputtering Technique International Conference on Enabling Science and Nanotechnology 2012 (ESciNano 2012) 5-7 January 2012, Persada Johor International Convention Center, Johor Bahru, MALAYSIA
24. Amplified Optical Bright Soliton by Nonlinear Waveguides, 3rd International Conference on Science and Engineering Istanbul Turkey, 2016
25. DSA Generation using Micro Ring Resonators, 3rd International Conference on Science and Engineering Istanbul Turkey, 2016
26. Performance of PCF under the variations of optical parameters, 3rd International Conference on Science and Engineering Istanbul Turkey, 2016

Project

- 1- *Photometry and analysis of light curve has been done in payame noor.*
- 2- *Nano surgery using micro ring has been done in UTM.*

Invention

Terahertz generation for wireless communication got silver medal in INATEX 2014.

Workshop

- 2010** ***Learning Matlab Software***
- 2011** ***Seminar and Research work Nanophotonics***
- 2012** ***How to do academic research***
- 2000** ***Astronomy***

Awards

- 2013** ***Selection as a Best Teacher in Iran***
- 2015** ***Selection as best researcher in Iran***
- 2014** ***Best Student award***
- 2012** ***Getting IDF (International Doctoral Fellowship) from
Universiti Teknologi Malaysia***
- 2012** ***Getting Award from Optical Engineering Journal for
serving as a reviewer***
- 2011** ***Getting IDF (International Doctoral Fellowship) from
Universiti Teknologi Malaysia***
- 2010** ***Getting IDF (International Doctoral Fellowship) from
Universiti Teknologi Malaysia***
- 2010** ***Selecton As a Active student in Malaysia***
- 2006** ***Selection As a Best Teacher in Fars Province –Iran***