**فهرست مقاله ها**

**Books**

1. Mohammad Danaie, Behdad Barahimi, Basics of theoretical and numerical analysis of photonic crystals, Publisher: Semnan University Press, ISBN: 978-600-8424-66-6, June 2018. (In Persian language)

2. Hamed Aminzadeh, Mohmmad Danaie, Analog Electronics, Publisher: Payame Noor University Press, ISBN: 978-964-14-0300-5, May 2016. (In Persian language)

3. Mohammad Danaie, Hassan Kaatuzian,  “Employing Optical Nonlinearity in Photonic Crystals: A Step Towards All-Optical Logic Gates,” Chapter 8, pp. 123-142, in the book “Photonic Crystals - Innovative Systems, Lasers and Waveguides” edited by Alessandro Massaro, ISBN 978-953-51-0416-2, InTech, March 3, 2012. ([PDF](http://cdn.intechopen.com/pdfs/34572/InTech-Employing_optical_nonlinearity_in_photonic_crystals_a_step_towards_all_optical_logic_gates.pdf))

[Employing Optical Nonlinearity in Photonic Crystals: A Step Towards All-Optical Logic Gate](http://www.intechopen.com/books/photonic-crystals-innovative-systems-lasers-and-waveguides/employing-optical-nonlinearity-in-photonic-crystals-a-step-towards-all-optical-logic-gates)

**Journal papers (English)**

1. Nohoji AH, Keshavarzi P, Danaie M. A photonic crystal waveguide intersection using phase change material for optical neuromorphic synapses. Optical Materials. 2024 May 1;151:115372. ([Click here](https://doi.org/10.1016/j.optmat.2024.115372) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/10002))
2. Mohammadi G, Orouji AA, Danaie M. Highly selective single-mode graphene bandpass filter based on Wilkinson power divider structure. Diamond and Related Materials. 2024 Apr 25:111141. ([Click here](https://doi.org/10.1016/j.diamond.2024.111141) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/10001))
3. Moradi M, Danaie M, Orouji AA. Design of all-optical AND gate based on a hybrid photonic crystal and plasmonic structure. Optical and Quantum Electronics. 2024 Jan 30;56(4):577. ([Click here](https://doi.org/10.1007/s11082-023-06265-8) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9843))
4. Korani N, Hajshahvaladi L, Danaie M. Realization of a single-mode plasmonic bandpass filter based on a ring-shaped resonator and silver nanorods. Optical and Quantum Electronics. 2024 Jan;56(1):23. ([click here](https://doi.org/10.1007/s11082-023-05616-9) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9675))
5. Korani N, Danaie M. A plasmonic terahertz perfect absorber based on L-shaped graphene patches and gold rods. Applied Physics A. 2023 Nov;129(11):806. ([Click here](https://doi.org/10.1007/s00339-023-07096-w) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9563))
6. Mohammadi G, Orouji A, Danaie M. Highly compact tunable hourglass-shaped graphene band-stop filter at terahertz frequencies. Results in Optics. 2023 Dec 1;13:100575. ([Click here](https://doi.org/10.1016/j.rio.2023.100575) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9561))
7. Ghafari B, Danaie M, Afsahi M. A Narrowband Optical Perfect Absorber and Refractive Index Sensor Based on an Epsilon-Near-Zero Metamaterial Using Ag-Ge-Si Nanowires. Brazilian Journal of Physics. 2023 Dec;53(6):162. ([Click here](https://doi.org/10.1007/s13538-023-01374-x) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9527))
8. Ghafari B, Danaie M, Afsahi M. A Multilayered Infrared Optical Absorber Based on Epsilon-Near-Zero Metamaterials. Plasmonics. 2023 Oct 10:1-8. ([Click here](https://doi.org/10.1007/s11468-023-02076-5) PDF)
9. Malek M, Danaie M. A single molecule diode based on gold electrodes and benzene molecule: conductivity and coupling analysis. Journal of Molecular Modeling. 2023 Nov;29(11):332. ([Click here](https://doi.org/10.1007/s00894-023-05740-z) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9440))
10. Korani N, Abbasi A, Danaie M. Band-pass and Band-stop Plasmonic Filters Based on Wilkinson Power Divider Structure. Plasmonics. 2023 Sep 5:1-10. ([Click here](https://doi.org/10.1007/s11468-023-01998-4) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9949))
11. Danaie M, Hajshahvaladi L, Ghaderpanah E. A single-mode tunable plasmonic sensor based on an 8-shaped resonator for cancer cell detection. Scientific Reports. 2023 Aug 26;13(1):13976. ([Click here](https://doi.org/10.1038/s41598-023-41193-3) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9430))
12. Ghafari B, Danaie M, Afsahi M. Perfect Absorber Based on Epsilon-Near-Zero Metamaterial as a Refractive Index Sensor. Sensing and Imaging. 2023 May 22;24(1):15. ([Click here](https://doi.org/10.1007/s11220-023-00420-x) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/9175))
13. Nickpay MR, Danaie M, Shahzadi A. A triple‑band metamaterial graphene-based absorber using rotated split-ring resonators for THz biomedical sensing. Optical and Quantum Electronics. 2023 Feb;55(2):1-23. ([Click here](https://doi.org/10.1007/s11082-022-04462-5) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8885))
14. Nourmohamadi K, Danaie M, Soltanizadeh H. Refractive index optical sensor using gold-walled silicon nanowire. Optical and Quantum Electronics. 2023;55(1):1-28. ([Click here](https://doi.org/10.1007/s11082-022-04372-6) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8833))
15. Hajshahvaladi L, Kaatuzian H, Moghaddasi M, Danaie M. Hybridization of surface plasmons and photonic crystal resonators for high-sensitivity and high-resolution sensing applications. Scientific Reports. 2022 Dec 9;12(1):1-5. ([Click here](https://doi.org/10.1038/s41598-022-25980-y) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8832))
16. Nickpay MR, Danaie M, Shahzadi A. Graphene-based tunable quad-band fan-shaped split-ring metamaterial absorber and refractive index sensor for THz spectrum. Micro and Nanostructures. 2022 Dec 8:207473. ([Click here](https://doi.org/10.1016/j.micrna.2022.207473) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8831))
17. Nickpay MR, Danaie M, Shahzadi A. Graphene-based metamaterial absorber for refractive index sensing applications in terahertz band. Diamond and Related Materials. 2022 Nov 17:109539. ([Click here](https://doi.org/10.1016/j.diamond.2022.109539) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8761))
18. Khani S, Danaie M, Rezaei P. Plasmonic all-optical modulator based on the coupling of a surface Plasmon stub-filter and a meandered MIM waveguide. Optical and Quantum Electronics. 2022 Oct 22;54(12):849. ([Click here](https://doi.org/10.1007/s11082-022-04227-0) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8687))
19. Nohoji AH, Danaie M. Highly Sensitive Refractive Index Sensor based on Photonic Crystal Ring Resonators Nested in a Mach-Zehnder Interferometer. Optical and Quantum Electronics. 2022 Aug 3;54(9):574. ([Click here](https://doi.org/10.1007/s11082-022-04006-x) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8583))
20. Hajshahvaladi L, Kaatuzian H, Danaie M. A very high-resolution refractive index sensor based on hybrid topology of photonic crystal cavity and plasmonic nested split-ring resonator. Photonics and Nanostructures-Fundamentals and Applications. 2022 Jun 17:101042. ([Click here](https://doi.org/10.1016/j.photonics.2022.101042) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8585))
21. Moradi M, Danaie M, Orouji AA. All-optical NOR and NOT logic gates based on ring resonator-based plasmonic nanostructures. Optik. 2022 Mar 16:168905. ([Click here](https://doi.org/10.1016/j.ijleo.2022.168905) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8586))
22. Hajshahvaladi L, Kaatuzian H, Danaie M, Karimi Y. Design of a highly sensitive tunable plasmonic refractive index sensor based on a ring-shaped nano-resonator. Optical and Quantum Electronics. 2022;54(1):1-7. ([Click here](https://doi.org/10.1007/s11082-021-03431-8) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8588))
23. Nickpay MR, Danaie M, Shahzadi A. Design of a graphene-based multi-band metamaterial perfect absorber in THz frequency region for refractive index sensing. Physica E: Low-dimensional Systems and Nanostructures. 2021 Dec 7:115114. ([Click here](https://doi.org/10.1016/j.physe.2021.115114) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8589))
24. Shafagh SG, Kaatuzian H, Danaie M. Design and Analysis of Infrared Tunable All-Optical Filters Based on Plasmonic Hybrid Nanostructure Using Periodic Nanohole Arrays. Plasmonics. 2021 Nov 2:1-6. ([Click here](https://doi.org/10.1007/s11468-021-01558-8) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8590))
25. Hajshahvaladi L, Kaatuzian H, Danaie M. Design of a hybrid photonic-plasmonic crystal refractive index sensor for highly sensitive and high-resolution sensing applications. Physics Letters A. 2021 Oct 11:127754. ([Click here](https://doi.org/10.1016/j.physleta.2021.127754) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8591))
26. Nasirifar R, Danaie M, Dideban A. Highly Sensitive Surface Plasmon Resonance Sensor using Perforated Optical Fiber for Biomedical Applications. Optik. 2021 Sep 30:168051. ([Click here](https://doi.org/10.1016/j.ijleo.2021.168051) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8592))
27. Khatami SA, Rezaei P, Danaie M, Daroonkola AH. Photonic Crystal 180° Ring-Shaped Hybrid: From Microwave To Optics. IEEE Photonics Technology Letters. 2021 Sep 10. ([Click here](https://doi.org/10.1109/LPT.2021.3109633) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8593))
28. Hajshahvaladi L, Kaatuzian H, Danaie M. A high-sensitivity refractive index biosensor based on Si nanorings coupled to plasmonic nanohole arrays for glucose detection in water solution. Optics Communications. 2021 Aug 31:127421. ([Click here](https://doi.org/10.1016/j.optcom.2021.127421) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8594))
29. Rahmani K, Mohammadi S, Danaie M. Analytical investigation on the electro-optical characteristics of white graphene. Journal of Computational Electronics. 2021 Aug 28:1-8. ([Clik here](https://doi.org/10.1007/s10825-021-01768-7) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8595))
30. Nickpay MR, Danaie M, Shahzadi A. Highly Sensitive THz Refractive Index Sensor Based on Folded Split-Ring Metamaterial Graphene Resonators. Plasmonics. 2021 Aug 10:1-2. ([Click here](https://doi.org/10.1007/s11468-021-01512-8) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8596))
31. Jafari D, Danaie M, Rezaei P, Nurmohammadi T. A Novel Variable-Length Header Extraction Scheme Based on Ring Laser for All-Optical Packet Switching Network. Optical and Quantum Electronics. 2021 Jun 24: 329. ([Click here](https://link.springer.com/article/10.1007/s11082-021-02973-1) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8597))
32. Karimi Y, Kaatuzian H, Tooghi A, Danaie M. All-Optical Plasmonic Switches Based on Fano Resonance in an X-Shaped Resonator Coupled to Parallel Stubs for Telecommunication Applications. Optik. 2021 Jun 12:167424. ([Click here](https://doi.org/10.1016/j.ijleo.2021.167424) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8598))
33. Jafari D, Danaie M, Orouji AA. Ultra-fast Two-bit All-Optical Analog to Digital Convertor Based on Surface Plasmons and Kerr-Type Nonlinear Cavity. Plasmonics. 2021 Jun 9:1-8. ([Click here](https://doi.org/10.1007/s11468-021-01474-x) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8599))
34. Nosrati M, Rezaei P, Danaie M, Parvizi S. Wideband transmitarray antenna using Electric ring resonator shaped slot element. Journal of Electromagnetic Waves and Applications. 2021 Jun 9:1-0. ([Click here](https://doi.org/10.1080/09205071.2021.1934567) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8600))
35. Khani S, Danaie M, Rezaei P. Fano Resonance Using Surface Plasmon Polaritons in a Nano-disk Resonator Coupled to Perpendicular Waveguides for Amplitude Modulation Applications. Plasmonics. 2021 May 4:1-18. ([Click here](https://doi.org/10.1007/s11468-021-01447-0) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8601))
36. Nasirifar R, Danaie M, Dideban A. Surface plasmon resonance biosensor using inverted graded index optical fiber. Photonics and Nanostructures-Fundamentals and Applications. 2021 Mar 17:100916. ([Click here](https://doi.org/10.1016/j.photonics.2021.100916) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8602))
37. Khani S, Danaie M, Rezaei P. Plasmonic all-optical metal–insulator–metal switches based on silver nano-rods, comprehensive theoretical analysis and design guidelines. Journal of Computational Electronics.:1-6. ([Click here](https://doi.org/10.1007/s10825-020-01638-8) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8603))
38. Nickpay MR, Danaie M, Shahzadi A. A Wideband and Polarization-Insensitive Graphene-Based Metamaterial Absorber. Superlattices and Microstructures. 2020 Dec 22:106786. ([Click here](https://doi.org/10.1016/j.spmi.2020.106786) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8604))
39. Beiranvand E, Danaie M, Afsahi M. Design of photonic crystal horn antenna for transverse electric modes. Optica Applicata. 2020;50(3). ([Click here](http://dx.doi.org/10.37190/oa200306) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8605))
40. Khani S, Danaie M, Rezaei P. Realization of a plasmonic optical switch using improved nano-disk resonators with Kerr-type nonlinearity: A theoretical and numerical study on challenges and solutions. Optics Communications. 2020 Aug 10:126359. ([Click here](https://doi.org/10.1016/j.optcom.2020.126359) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8606))
41. Rahmatiyar M, Afsahi M, Danaie M. Design of a Refractive Index Plasmonic Sensor Based on a Ring Resonator Coupled to a MIM Waveguide Containing Tapered Defects. Plasmonics. 2020 Aug 3:1-8. ([Click here](https://doi.org/10.1007/s11468-020-01238-z) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8607))
42. Shafagh SG, Kaatuzian H, Danaie M. Analysis, design and simulation of MIM plasmonic filters with different geometries for technical parameters improvement. Communications in Theoretical Physics. 2020 Jul 20;72(8):085502. ([Click here](https://doi.org/10.1088/1572-9494/ab95f8) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8608))
43. Nasirifar R, Danaie M, Dideban A. Hollow-core graded index optical fiber refractive index sensor based on surface plasmon resonance. Optical and Quantum Electronics. 2020 Jul;52(7):1-23. ([Click here](https://doi.org/10.1007/s11082-020-02461-y) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8609))
44. Khani S, Danaie M, Rezaei P. Hybrid All-Optical Infrared Metal-Insulator-Metal Plasmonic Switch Incorporating Photonic Crystal Bandgap Structures. Photonics and Nanostructures-Fundamentals and Applications. 2020 May 17:100802. ([Click here](https://doi.org/10.1016/j.photonics.2020.100802) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8610))
45. Khani S, Danaie M, Rezaei P. Compact and Low-Power All-Optical Surface Plasmon Switches with Isolated Pump and Data Waveguides and a Rectangular Cavity Containing Nano-Silver Strips. Superlattices and Microstructures. 2020 Mar 16:106481. ([Click here](https://doi.org/10.1016/j.spmi.2020.106481) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8611))
46. Rahmatiyar M, Danaie M, Afsahi M. Employment of cascaded coupled resonators for resolution enhancement in plasmonic refractive index sensors. Optical and Quanctum Electronics. 2020 Mar;52(3):1-9. ([Click here](https://doi.org/10.1007/s11082-020-02266-z) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8612))
47. Khani S, Danaie M, Rezaei P. All-Optical Plasmonic Switches Based on Asymmetric Directional Couplers Incorporating Bragg Gratings. Plasmonics. 2019 Dec 20:1-1. ([Click here](https://doi.org/10.1007/s11468-019-01106-5) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8613))
48. Rahman-Zadeh F, Danaie M, Kaatuzian H. Design of a highly sensitive photonic crystal refractive index sensor incorporating ring-shaped GaAs cavity. Opto-Electronics Review. 2019 Dec 1;27(4):369-77. ([Click here](https://doi.org/10.1016/j.opelre.2019.11.007) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8614))
49. Kiani N, Hamedani FT, Rezaei P, Chashmi MJ, Danaie M. Polarization controling approach in reconfigurable microstrip graphene-based antenna. Optik. 2019 Nov 30:163942. ([Click here](https://doi.org/10.1016/j.ijleo.2019.163942) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8615))
50. Geravand A, Danaie M, Danaee E. Low cross-talk waveguide intersections for TE polarization using photonic crystals. Optics Communications. 2019 Oct 31. ([Click here](https://doi.org/10.1016/j.optcom.2019.124838) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8616))
51. Hajshahvaladi L, Kaatuzian H, Danaie M. Design and analysis of a plasmonic demultiplexer based on band-stop filters using double-nanodisk-shaped resonators. Optical and Quantum Electronics. 2019 Dec 1;51(12):391. ([Click here](https://doi.org/10.1007/s11082-019-2108-1) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8617))
52. Armaghani S, Khani S, Danaie M. Design of all-optical graphene switches based on a Mach-Zehnder interferometer employing optical Kerr effect. Superlattices and Microstructures. 2019 Nov 1;135:106244. ([Click here](https://doi.org/10.1016/j.spmi.2019.106244) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8618))
53. Nickpay MR, Danaie M, Shahzadi A. Wideband Rectangular Double-Ring Nanoribbon Graphene-Based Antenna for Terahertz Communications. IETE Journal of Research. 2019 Sep 12:1-0. ([Click here](https://doi.org/10.1080/03772063.2019.1661801) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8619))
54. Khani S, Danaie M, Rezaei P, Shahzadi A. Compact Ultra-Wide Upper Stopband Microstrip Dual-Band BPF Using Tapered and Octagonal Loop Resonators. Frequenz. 2019. ([Click here](https://doi.org/10.1515/freq-2019-0060) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8620))
55. Khani S, Danaie M, Rezaei P. Size reduction of MIM surface plasmon based optical bandpass filters by the introduction of arrays of silver nano-rods. Physica E: Low-dimensional Systems and Nanostructures. 2019 Sep 1;113:25-34. ([Click here](https://doi.org/10.1016/j.physe.2019.04.015) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8621))
56. Nasirifar R, Danaie M, Dideban A. Dual channel optical fiber refractive index sensor based on surface plasmon resonance. Optik. 2019 Jun 1;186:194-204. ([Click here](https://doi.org/10.1016/j.ijleo.2019.04.104) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8622))
57. Moradi M, Danaie M, Orouji AA. Design of all-optical XOR and XNOR logic gates based on Fano resonance in plasmonic ring resonators. Optical and Quantum Electronics. 2019 May 1;51(5):154. ([Click here](https://doi.org/10.1007/s11082-019-1874-0) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8623))
58. Khani S, Danaie M, Rezaei P. Tunable single-mode bandpass filter based on metal–insulator–metal plasmonic coupled U-shaped cavities. IET Optoelectronics. 2019 Jan 22. ([Click here](https://doi.org/10.1049/iet-opt.2018.5098) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8624))
59. Danaie M, Shahzadi A. Design of a High-Resolution Metal–Insulator–Metal Plasmonic Refractive Index Sensor Based on a Ring-Shaped Si Resonator. Plasmonics. 2019:1-3. ([Click here](https://doi.org/10.1007/s11468-019-00926-9) [PDF](https://danaie.profile.semnan.ac.ir/downloads/file/8625))
60. Danaie M, Geravand A. Design of low-cross-talk metal–insulator–metal plasmonic waveguide intersections based on proposed cross-shaped resonators. Journal of Nanophotonics. 2018 Oct;12(4):046009. ([Click here](https://doi.org/10.1117/1.JNP.12.046009))
61. Khani S, Danaie M, Rezaei P. Double and triple-wavelength plasmonic demultiplexers based on improved circular nanodisk resonators. Optical Engineering. 2018 Oct;57(10):107102. ([Click here](https://doi.org/10.1117/1.OE.57.10.107102))
62. Danaee E, Geravand A, Danaie M. Wide-band low cross-talk photonic crystal waveguide intersections using self-collimation phenomenon. Optics Communications. 2019 Jan 15; 431:216-228. ([Click here](https://doi.org/10.1016/j.optcom.2018.09.032))
63. Geravand A, Danaie M, Mohammadi S. All-optical photonic crystal memory cells based on cavities with a dual-argument hysteresis feature. Optics Communications. 2019 Jan 1; 430:323-335. ([Click here](https://doi.org/10.1016/j.optcom.2018.08.052))
64. Danaie M, Kiani B. Design of a label-free photonic crystal refractive index sensor for biomedical applications. Photonics and Nanostructures-Fundamentals and Applications. 2018 Sep 1;31:89-98. ([Click here](https://doi.org/10.1016/j.photonics.2018.06.004))
65. Moradi M, Danaie M, Orouji AA. Design and analysis of an optical full-adder based on nonlinear photonic crystal ring resonators. Optik. 2018 Jul 5. ([Click here](https://doi.org/10.1016/j.ijleo.2018.07.016))
66. Khani S, Danaie M, Rezaei P. Miniaturized microstrip dual-band bandpass filter with wide upper stop-band bandwidth. Analog Integrated Circuits and Signal Processing. 2018:1-10. ([Click here](https://doi.org/10.1007/s10470-018-1254-x))
67. Khani S, Danaie M, Rezaei P. Design of a Single-Mode Plasmonic Bandpass Filter Using a Hexagonal Resonator Coupled to Graded-Stub Waveguides. Plasmonics. 2018:1-10. ([Click here](https://doi.org/10.1007/s11468-018-0777-4))
68. Khani S, Danaie M, Rezaei P. Realization of single-mode plasmonic bandpass filters using improved nanodisk resonators. Optics Communications. 2018 Aug 1;420:147-56. ([Click here](https://doi.org/10.1016/j.optcom.2018.03.047))
69. Danaie M, Ranjbar E, Khanesar MA. MOSCAP compensation of three-stage operational amplifiers: Sensitivity and robustness, modeling and analysis. Integration. 2018 May 18. ([Click here](https://doi.org/10.1016/j.vlsi.2018.01.003))
70. Khani S, Mousavi SM, Danaie M, Rezaei P. Tunable compact microstrip dual‐band bandpass filter with tapered resonators. Microwave and Optical Technology Letters. 2018 May;60(5):1256-61. ([Click here](https://doi.org/10.1002/mop.31151))
71. Danaie M, Geravand A, Mohammadi S. Photonic crystal double-coupled cavity waveguides and their application in design of slow-light delay lines. Photonics and Nanostructures-Fundamentals and Applications. 2018 Feb 28;28:61-9. ([Click here](https://doi.org/10.1016/j.photonics.2017.11.009))
72. Khalili S, Danaie M. Interface analysis of indium antimonide and passive layer in infrared detector and presenting a new structure to improve dark current. Superlattices and Microstructures. 2018 Feb 3. ([Click here](https://doi.org/10.1016/j.spmi.2018.01.011))
73. Danaie M, Nasiri Far R, Dideban A. Design of a High-Bandwidth Y-Shaped Photonic Crystal Power Splitter for TE Modes. International Journal of Optics and Photonics. 2018 Jan 15;12(1):33-42. ([Click here](http://dx.doi.org/10.29252/ijop.12.1.33))
74. Khani S, Makki SV, Mousavi SM, Danaie M, Rezaei P. Adjustable compact dual‐band microstrip bandpass filter using T‐shaped resonators. Microwave and Optical Technology Letters. 2017 Dec 1;59(12):2970-5. ([Click here](https://doi.org/10.1002/mop.30864))
75. Danaie M, Nasirifar R, Dideban A. Design of adjustable T-shaped and Y-shaped photonic crystal power splitters for TM and TE polarizations. Turkish Journal of Electrical Engineering & Computer Sciences. 2017 Oct 6;25(5):4398-408. ([Click here](https://doi.org/10.3906/elk-1702-334))
76. Ranjbar E, Danaie M. Frequency compensation of three-stage operational amplifiers: Sensitivity and robustness analysis. Microelectronics Journal. 2017 Aug 1;66:155-66. ([Click here](https://doi.org/10.1016/j.mejo.2017.06.010))
77. Hajshahvaladi L, Kaatuzian H, Danaie M. Analysis and Design of Semiconductor Photonic Crystal Double Bandpass Filter for CWDM Systems. International Journal of Optics and Applications. 2017;7(3):49-54. ([Click here](http://article.sapub.org/10.5923.j.optics.20170703.01.html))
78. Dadras M, Rezaei P, Danaie M. Planar Double-Band Monopole Antenna with Photonic Crystal Structure. Indian Journal of Science and Technology. 2016 Dec 3;8(36). ([Click here](https://doi.org/10.17485/ijst/2015/v8i36/87670))
79. Ghomashi M, Kaatuzian H, Danaie M. Design and simulation of normally open and normally closed all-optical switches based on photonic crystal triple-waveguide directional coupler. Optical and Quantum Electronics. 2016 Jan 1;48(1):35. ([Click here](https://doi.org/10.1007/s11082-015-0304-1))
80. Pilehvar E, Kaatuzian H, Danaie M. Design of a high-transmission waveguide bend for Kagome photonic crystal lattice. Optik-International Journal for Light and Electron Optics. 2015 Oct 1;126(19):1914-7. ([Click here](https://doi.org/10.1016/j.ijleo.2015.05.042))
81. Aminzadeh H, Danaie M, Serdijn WA. Hybrid cascode feedforward compensation for nano-scale low-power ultra-area-efficient three-stage amplifiers. Microelectronics Journal. 2013 Dec 1;44(12):1201-7. ([Click here](https://doi.org/10.1016/j.mejo.2013.08.004))
82. Pilehvar E, Kaatuzian H, Danaie M. Simulation and Design of a Low Crosstalk Hexagonal Photonic Crystal Crossover Waveguide. Optics and Photonics Journal. 2013 Jun 28;3(02):209. ([Click here](https://pdfs.semanticscholar.org/9773/47bdf1331a7e3f76c4ff74fb25723d94b29e.pdf))
83. Danaie M, Kaatuzian H. Design and simulation of an all-optical photonic crystal AND gate using nonlinear Kerr effect. Optical and Quantum Electronics. 2012 May 1;44(1-2):27-34. ([Click here](https://doi.org/10.1007/s11082-011-9527-y))
84. Danaie M, Kaatuzian H. Bandwidth improvement for a photonic crystal optical Y-splitter. Journal of the Optical Society of Korea. 2011 Sep 1;15(3):283-8. ([Click here](https://www.osapublishing.org/josk/abstract.cfm?uri=josk-15-3-283))
85. Danaie M, Kaatuzian H. Design of a photonic crystal differential phase comparator for a Mach–Zehnder switch. Journal of Optics. 2010 Dec 7;13(1):015504. ([Click here](https://doi.org/10.1088/2040-8978/13/1/015504))
86. Danaie M, Kaatuzian H. Improvement of power coupling in a nonlinear photonic crystal directional coupler switch. Photonics and Nanostructures-Fundamentals and Applications. 2011 Feb 1;9(1):70-81. ([Click here](https://doi.org/10.1016/j.photonics.2010.10.002))
87. Foghani S, Kaatuzian H, Danaie M. Simulation and design of a wideband T-shaped photonic crystal splitter. Optica Applicata. 2010 Dec 1;40(4). ([Click here](https://dbc.wroc.pl/Content/58565/optappl_4004p863.pdf))
88. Danaie M, Attari AR, Mirsalehi MM, Naseh S. Design of a high efficiency wide-band 60° bend for TE polarization. Photonics and Nanostructures-Fundamentals and Applications. 2008 Dec 1;6(3-4):188-93. ([Click here](https://doi.org/10.1016/j.photonics.2008.08.003))
89. Danaie M, Attari AR, Mirsalehi MM, Naseh S. Optimization of two-dimensional photonic crystal waveguides for TE and TM polarizations. 2008; 41(2):183-92. ([Click here](https://www.dbc.wroc.pl/Content/62961/optappl_3804p643.pdf))
90. Aminzadeh H, Danaie M, Lotfi R. Design of high-speed two-stage cascode-compensated operational amplifiers based on settling time and open-loop parameters. INTEGRATION, the VLSI journal. 2008 Feb 1;41(2):183-92. ([Click here](https://doi.org/10.1016/j.vlsi.2007.05.003))

**Persian Journals**

**(مجلات فارسی)**

1. ناصر حسن زاده، محمد دانائی، یک راهکار جدید برای کاهش جریان نشتی در کلیدهای CMOS، نشریه مهندسی برق و الکترونیک ایران، سال سیزدهم، شماره چهارم، ص 33-40، زمستان 1395. ([فایل مقاله](https://jiaeee.com/article-1-43-fa.pdf))
2. فاطمه مظلوم تهرانی، محمد دانائی، پرویز کشاورزی، طراحی طبقه تطبیق گر برای موج بر بلور فوتونی نور آهسته بر مبنای تزویج گر سمتی، مجله مهندسی برق دانشگاه تبریز، جلد 48، شماره 4، ص 1773-1783، زمستان 1397. ([فایل مقاله](https://tjee.tabrizu.ac.ir/article_8522_00a5a05a525c3abd77a1d5d37cff1177.pdf))
3. محمد دانائی، شیوا خانی، احسان نوروز زاده، محسن وحدانی، بهبود عملکرد سلول خورشیدی کادمیوم تلوراید CdTe با لایه های بافر مختلف، مجله پژوهش فیزیک ایران، جلد 19، شماره 1، ص 139-147، بهار 1398. ([فایل مقاله](https://ijpr.iut.ac.ir/article_1422_36f0d8d1b92c8405e4f73e14f388a987.pdf))
4. اسماعیل رنجبر کلیبی، محمد دانائی، مجتبی احمدیه خانه سر، استخراج روابط میان پارامترهای مداری به کمک الگوریتم ژنتیک چند هدفه برای طراحی تقویت کننده های عملیاتی مجتمع با جبرانسازی غیرخطی، دوره 17، شماره 58، ص 127-142، پائیز 1398. ([فایل مقاله](https://modelling.semnan.ac.ir/article_4007_5665fe4513ebf8576c4a241c930bb1fc.pdf))
5. محمد دانایی، عبدالله عباسی، محمد باویر، محسن وحدانی، شبیه سازی و بررسی سلول خورشیدی کادمیوم تلوراید و بهبود عملکرد آن با ایجاد یک میدان الکتریکی در سطح پسین، دوره 11، شماره 3، ص 86-79، پاییز 1399. ([فایل مقاله](http://ei.sinaweb.net/article_591575_5fbbc2d4b046e0748ae484e314e95e7c.pdf))