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Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Faculty of Engineering	Assistant Prof	Tenured	Full Time	

Papers in Conferences

1. Esmat Jafari, Mohamad Ali Mansouri و Birjandi, Alireza Tavousi.Refractive index sensor based on metasurface at near-infrared region.The ۲۷th Iran Optics and Photonics Conference and the ۱۳th Iran Photonics Engineering and Technology Conference، شماره صفحات ۴-۱، Zahedan، ۲۰۲۰.
2. Masoud Khammari, Mohammad Ali Mansouri و Birjandi, Alireza Tavousi.Design and Simulation of AND Logic Gate Based on Quantum Dot Semiconductor Optical Amplifiers.The ۲۷th Iran Optics and Photonics Conference and the ۱۳th Iran Photonics Engineering and Technology Conference، شماره صفحات ۴-۱، زاهدان، ۲۰۲۰.
3. M Khammari, MA Mansouri و Birjandi, A Tavousi.Design and simulation of XOR logic gate based on quantum dot semiconductor optical amplifiers.The ۲۶th Iran Optics and Photonics Conference and the ۱۰th Iran Photonics Engineering and Technology Conference، شماره صفحات ۱۲۴-۱۲۱، تهران، ۲۰۱۹.
4. A Tavousi, M Saffari, MA Mansouri و Birjandi.Proposal for a Kerr Tunable All Optical Switch Based on Photonic Crystal Ring Resonators.The ۲۴th Iran Optics and Photonics Conference and the ۱۰th Iran Photonics Engineering and Technology Conference، شماره صفحات ۸۲۰-۸۱۷، Shahrekord، ۲۰۱۷.
5. E Jafari, MA Mansouri ,& Birjandi, A Tavousi ,Photonic crystal fiber with ultra-flattened negative dispersion ,International Advanced School On Optoelectronic Devices (Riapa-Oed) ,2021، تبریز.
6. A Tavousi , MA Mansouri , Birjandi , M Janfaza ,Tuning contrivances of graphene Nano-ribbon based mid-infrared band-pass filter ,Electrical Engineering (ICEE), Iranian Conference on, 220-223 ,Mashhad ,2018.
7. A Tavousi, M Janfaza, MA Mansouri ,& Birjandi ,Graphene Nano-Ribbon Assisted FabryProt Resonator Based Mid-Infrared Bandpass Filter ,The 24th Iranian Optics and Photonics Conference and the 10th Iran Photonics Engineering and Technology Conference ,Shahrekord ,2017.
8. A Tavousi, A Rostami, G Rostami, M Dolatyari ,3-D Analysis of Terahertz Frequency Multiplier Excited Due to Interaction of Convection Electron Beam and Surface Waves - (Smith-Purcell Effect) ,2015 International Conference on Photonics, Optics and Laser Technology (PHOTOPTICS) ,pp. 34-39، برلین، 2015، آلمان.

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1. Esmat Jafari, Mohammad Ali Mansouri ,& Birjandi, Alireza Tavousi,Achieving high sensitivity by adding rings to a plasmonic metasurface with nano-holes,Materials Science and Engineering: B,2024.
2. Esmat Jafari, Mohammad Ali Mansouri ,& Birjandi, Alireza Tavousi,High-performance plasmonic metasurface sensor by triangular nano-structures,Optics Continuum,2024.
3. M Janfaza, MA Mansouri ,& Birjandi, A Tavousi,Applications of Tunable Mid-Infrared Plasmonic Square-Nanoring Resonator Based on Graphene Nanoribbon,Plasmonics,2022.
4. H Najafi ,& Ashtiani, A Tavousi, A Ramzannezhad, A Rahdar,Solution-Processable LaTiO x-PVP as Silicon-Free Gate Dielectric at Low Temperature for High-Performance Organic-Inorganic Field Effect Transistors,Journal of Electronic Materials,pp. 1-8,2021.
5. Hamid Heidarzadeh, Alireza Tavousi,Design of an LSPR-Enhanced Ultrathin CH₃NH₃PbX₃ Perovskite Solar Cell Incorporating Double and Triple Coupled Nanoparticles,Journal of Electronic Materials,pp. 1-10,2021.
6. Morteza Janfaza, Mohammad Ali Mansouri ,& Birjandi, Alireza Tavousi,Proposal for a graphene nanoribbon assisted mid-infrared band-stop/band-pass filter based on Bragg gratings,Optics Communications,Vol. 440,pp. 75,2019.
7. Alireza Tavousi, Mohammad Ali Mansouri ,& Birjandi & Morteza Janfaza,Graphene Nanoribbon Assisted Refractometer Based Biosensor for Mid-Infrared Label-Free Analysis,Plasmonics,Vol. 14,pp. 1207–1217,2019.
8. Hamid Heidarzadeh, Alireza Tavousi,Performance enhancement methods of an ultra-thin silicon solar cell using different shapes of back grating and angle of incidence light,Materials Science and Engineering: B,Vol. 240,pp. 1,2019.
9. Alireza Tavousi,Wavelength-division demultiplexer based on hetero-structure octagonal-shape photonic crystal ring resonators,Optik,Vol. 179,pp. 1169,2019.
10. Alireza Tavousi, Mohammad Ali Mansouri ,& Birjandi, and Morteza Janfaza,Optoelectronic application of graphene nanoribbon for mid-infrared bandpass filtering,Applied optics,Vol. 57,No. 20,pp. 5800-5805,2018.
11. Morteza Janfaza, Mohammad Ali Mansouri ,& Birjandi & Alireza Tavousi,Tunable plasmon-induced reflection based on graphene nanoribbon Fabry-Perot resonator and nanodisks,Optical Materials,Vol. 84,pp. 675,2018.
12. Mohammad Reza Rakhshani, Alireza Tavousi, and Mohammad Ali Mansouri ,& Birjandi,Design of a plasmonic sensor based on a square array of nanorods and two slot cavities with a high figure of merit for glucose concentration monitoring,Applied optics,Vol. 57,No. 27,pp. 7798-7804,2018.
13. A. Tavousi, M.R. Rakhshani, M.A. Mansouri ,& Birjandi,High sensitivity label-free refractometer based biosensor applicable to glycated hemoglobin detection in human blood using all-circular photonic crystal ring resonators,Optics Communications,Vol. 429,pp. 166,2018.
14. Morteza Janfaza, Mohammad Ali Mansouri ,& Birjandi and Alireza Tavousi,Dynamic switching between single and double plasmon induced reflection through graphene nanoribbons based structure,Materials Research Express,Vol. 5,pp. 115022,2018.
15. Alireza Tavousi, Hamid Heidarzadeh,Realization of a multichannel drop filter using an ISO-centric all-circular photonic crystal ring resonator,Photonics and Nanostructures - Fundamentals and Applications,Vol. 52,pp. 31,2018.
16. A.Tavousi, M.A. Mansouri ,& Birjandi,Optical-analog-to-digital conversion based on successive-like approximations in octagonal-shape photonic crystal ring resonators,Superlattices and Microstructures,Vol. 114,pp. 23,2018.
17. Morteza Janfaza, Mohammad Ali Mansouri ,& Birjandi & Alireza Tavousi,Tunable plasmonic band-pass filter based on Fabry–Perot graphene nanoribbons,Applied Physics B,No. 123,pp. 262,2017.
18. Mohammad Ali Mansouri ,& Birjandi, Morteza Janfaza & Alireza Tavousi,Flat-Band Slow Light in a Photonic Crystal Slab Waveguide by Vertical Geometry Adjustment and Selective Infiltration of

Optofluidics,Journal of Electronic Materials,Vol. 46,pp. 6528–6534,2017.

19. Alireza Tavousi ,Ali Rostami, Ghassem Rostami, Mahboubeh Dolatyari,3-D Numerical Analysis of Smith-Purcell based Terahertz Wave Radiation Excited by Effective Surface Plasmon,IEEE-OSA Journal of Lightwave Technology,Vol. 22,No. 33,pp. 4640 - 4647,2016.
20. Alireza Tavousi ,Ali Rostami, Ghassem Rostami, Mahboubeh Dolatyari,Proposal for simultaneous two-color Smith-Purcell terahertz radiation through effective surface Plasmon excitation,IEEE Journal of Selected Topics in Quantum Electronics,Vol. 23,No. 4,2016.
21. Alireza Tavousi, Mohammad Ali Mansouri , Birjandi, Majid Ghadrddan & Mina Ranjbar , Torkamani,Application of Photonic Crystal Ring Resonator Nonlinear Response for Full-Optical Tunable Add-Drop Filtering,Photonic Network Communications,Vol. 34,pp. pages131–139,2016.
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24. Alireza Tavousi, M. A. Mansouri ,& Birjandi, Mehdi Saffari,Successive approximation-like 4-bit full-optical analog-to-digital converter based on Kerr-like nonlinear photonic crystal ring resonators,Physica E: Low-dimensional Systems and Nanostructures,Vol. 83,pp. 101-106,2016.