



جمال بروستانی

استاد

دانشکده: فیزیک



سوابق تحصیلی

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کارشناسی ارشد	۱۳۸۲	فیزیک حالت جامد و الکترونیک	تبریز
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مقالات در نشریات

- Barvestani Jamal, Mohammadpour Ali, The effect of the centric graphene layer on the exceptional points of parity-time symmetric photonic crystals, OPTICAL AND QUANTUM ELECTRONICS, Vol. 56, pp. 880, 2024.
- Barvestani Jamal, Current-induced nonreciprocal transmittance in graphene-embedded photonic multilayers comprising the Octonacci sequence, OPTICAL MATERIALS, Vol. 151, pp. 15328, 2024.
- Hasanpour Kashani Sharareh, Barvestani Jamal, Meshginqalam Bahar, Sensing behavior of various gas molecules adsorbed on Fe doped and bare antimonene armchair nanoribbon, Applied Physics A, Vol. 130, pp. 1, 2024.
- Allahverdikhani Tayyebbeh, Barvestani Jamal, Meshginqalam Bahar, Allahverdikhani Tayyebbeh, .4

- Barvestani Jamal, Meshginqalam Bahar, 2024, Theoretical investigation of the effect of mole fraction on the electronic and optical properties of a binary armchair antimonene -phosphorene .nanoribbon,PHYSICA SCRIPTA,,Vol. 99,pp. 035967,2024
- Meshginqalam Bahar, Barvestani Jamal,,Combination of Bragg reflector and photonic crystal .5 .fiber for bio samples detection,,European Physical Journal Plus,,Vol. 138,pp. 612,2023
- Barvestani Jamal, Mohammadpour Ali,,Tunable and giant spatial Goos–Hñnchen shifts in a .6 parity-time symmetric Cantor photonic crystals incorporated with a centered graphene .layer,,PHYSICA SCRIPTA,,Vol. 98,pp. 055511,2023
- Mohammadpour Ali, Barvestani Jamal, Soltani Vala Ali,Comprehensive study of singular points .7 .in a PT-symmetric Thue-Morse multilayer,PHYSICA SCRIPTA,Vol. 97,pp. 125501,2022
- Hasanpour Kashani Sharareh, Barvestani Jamal, Meshginqalam Bahar,,The effect of different .8 dopants and their positions on the magnetic properties of an armchair antimonene nanoribbon: .comprehensive theoretical investigation,PHYSICA SCRIPTA,Vol. 97,pp. 0858,2022
- Ali porghovveh Neda, Barvestani Jamal, Meshginqalam Bahar,High-performance surface .9 plasmon resonance-based photonic crystal fiber sensor with four open surface rings,Journal of .Computational Electronics,Vol. 22,pp. 01895,2022
- Kaviani Baghbadorani Hajar, Barvestani Jamal,Photonic crystal-based biosensor with the .10 irregular defect for detection of blood plasma,APPLIED SURFACE SCIENCE,Vol. 599,pp. .153743,2022
- Meshginqalam Bahar, Barvestani Jamal,Highly sensitive photonic crystal fiber-based .11 plasmonic biosensor with improved malaria detection application,European Physical Journal .Plus,Vol. 137,pp. 1-10,2022
- Ghahramani Soghra, Barvestani Jamal, Meshginqalam Bahar,Design and analysis of surface .12 plasmon resonance based photonic crystal fiber sensor employing gold nanowires,OPTIK,Vol. .260,pp. 169026,2022
- Meshginqalam Bahar, Barvestani Jamal,High performance surface plasmon resonance-based .13 photonic crystal fiber biosensor for cancer cells detection,European Physical Journal Plus,Vol. .137,pp. 1-10,2022
- Allahverdikhani Tayyebe, Barvestani Jamal, Meshginqalam Bahar,Theoretical Investigation of .14 the Effect of Different Dopants and Their Positions on the Magnetic Properties of an Armchair .Graphene Nanoribbon,JOURNAL OF ELECTRONIC MATERIALS,Vol. 51,pp. 29,2022
- Mohammadpour Ali, Barvestani Jamal, Soltani Vala Ali,Extraordinary directional optical .15 properties of a parity-time symmetric one-dimensional photonic lattice,OPTICS .COMMUNICATIONS,Vol. 500,pp. 127342,2021
- Kaviani Baghbadorani Hajar, Barvestani Jamal,Sensing improvement of 1D photonic crystal .16 sensors by hybridization of defect and Bloch surface modes,APPLIED SURFACE SCIENCE,Vol. .537,pp. 147730,2021
- Ghahramani Soghra, Barvestani Jamal, Meshginqalam Bahar,High-performance Opening-up .17 Dual-core Photonic Crystal Fiber Sensors Based on Surface Plasmon Resonance,Plasmonics,Vol. .17,pp. 181,2021
- Meshginqalam Bahar, Barvestani Jamal,Comparative study of the highly sensitive plasmonic .18 sensor based on a D-Shaped photonic crystal fiber with silver or gold layers,PHYSICA .SCRIPTA,Vol. 96,pp. 125535,2021
- Meshginqalam Bahar, Barvestani Jamal,Vacancy defected blue and black phosphorene .19 nanoribbons as gas sensor of NO_x and SO_x molecules,APPLIED SURFACE SCIENCE,Vol. 526,pp. .146692,2020
- Meshginqalam Bahar, Barvestani Jamal,Doped Arsenene Nanoribbon as a Promising .20 Candidate for Sensing Toxic Gas Molecules: Theoretical Approach,IEEE SENSORS JOURNAL,Vol. .20,pp. 5984,2020
- Abedini Aminabad Zahra, Barvestani Jamal, Soltani Vala Ali,Hybrid of graphene surface .21

- plasmons and surface magneto-plasmons in a waveguide, *SUPERLATTICES AND MICROSTRUCTURES*, Vol. 140, pp. 106426, 2020
- Bejani mousa, Pulci Olivia, Barvestani Jamal, Soltani Vala Ali, Cannuccia Elena, Lattice vibrations and electronic properties of GaSe nanosheets from first principles, *Physical Review Materials*, Vol. 3, pp. 124003, 2019
- Meshginqalam Bahar, Barvestani Jamal, Highly sensitive toxic gas molecule sensor based on defect-induced silicene, *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS*, Vol. 30, pp. 18637, 2019
- Javad BASHIRI, Behrooz REZAEI, Jamal BARVESTANI, Carlos J. ZAPATA, & RODRIGUEZ, Bloch surface waves engineering in one-dimensional photonic crystals with a chiral cap layer, *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*, Vol. 36, pp. 2106, 2019
- Abedini Aminabad Zahra, Barvestani Jamal, Soltani Vala Ali, Surface magnetoplasmons in a slit waveguide with graphene monolayers, *SUPERLATTICES AND MICROSTRUCTURES*, Vol. 130, pp. 221-231, 2019
- Kaviani Baghbadorani Hajar, Aurelio Daniele, Barvestani Jamal, Liscidini Marco, Guided modes in photonic crystal slabs supporting Bloch surface waves, *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*, Vol. 35, pp. 805, 2018
- Kaviani Baghbadorani Hajar, Barvestani Jamal, Effect of Uniaxial Strain on the Performance of One Dimensional Graphene Fibonacci Photonic Crystal Biosensors, *J. of Lightwave tech*, Vol. 36, pp. 5406, 2018
- Meshginqalam Bahar, Barvestani Jamal, Aluminum and phosphorene based ultrasensitive SPR biosensor, *Optical materials*, Vol. 86, pp. 119-125, 2018
- Meshginqalam Bahar, Barvestani Jamal, Performance Enhancement of SPR Biosensor Based on Phosphorene and Transition Metal Dichalcogenides for Sensing DNA Hybridization, *IEEE SENSORS JOURNAL*, Vol. 18, pp. 7537-7543, 2018
- Dehghan Seifollah, Barvestani Jamal, Photonic crystal narrow filters with two neighboring waveguides and a semiconducting point defect, *OPTICAL AND QUANTUM ELECTRONICS*, Vol. 49, pp. 315, 2017
- Soltani Vala Ali, Barvestani Jamal, Effects of anisotropy on the optical rectification of a disk-like quantum dot with donor impurity in external electric and magnetic fields, *Physica B: Condensed Matter*, Vol. 518, pp. 88-93, 2017
- H. Kaviani Baghbadorani, J. Barvestani, S. Roshan Entezar, 2017, Biosensors based on Bloch surface waves in one dimensional Photonic crystal with graphene nanolayers, *Applied Optics*, 56(3), 462, H. Kaviani Baghbadorani, J. Barvestani, S. Roshan Entezar, 2017, Biosensors based on Bloch surface waves in one dimensional Photonic crystal with graphene nanolayers, *Applied Optics*, 56(3), 462, H. Kaviani Baghbadorani, J. Barvestani, S. Roshan Entezar, 2017, Biosensors based on Bloch surface waves in one dimensional Photonic crystal with graphene nanolayers, *Applied Optics*, 56(3), 462, Vol. 56, pp. H. Kaviani Baghbadorani, J. Barvestani, S. Roshan Entezar, 2017, Biosensors based on Bloch surface waves in one dimensional Photonic crystal with graphene nanolayers, *Applied Optics*, 56(3), 462, 2017
- Zamani Ghara Chamani Behzad, Hamidi Heris Hamed, Barvestani Jamal, introduction of measurement networks of the electric precursors of earthquakes in NW of Iran with VAN method, *Journal of the Earth and Space Physics*, Vol. 4, pp. 1, 2016
- Oskooi Somayeh, Barvestani Jamal, The study of thermal tunable coupling between a Superconducting photonic crystal waveguide and semi-circular photonic crystal, *PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS*, Vol. 527, pp. 28-32, 2016
- Jahani Darioush, Soltani Vala Ali, Barvestani Jamal, Strain control of one-dimensional graphene-based photonic crystal, *EUROPEAN PHYSICAL JOURNAL D*, Vol. 70, pp. 119, 2016
- Hosseinpour Parinaz, Barvestani Jamal, Soltani Vala Ali, Rashba spin-orbit interaction effect

- .on the optical properties of a disk-like quantum dot, *Physica Scripta*, Vol. 91, pp. 045803, 2016
- Hosseinpour Parinaz, Soltani Vala Ali, Barvestani Jamal, Effect of impurity on the absorption of a parabolic quantum dot with including Rashba spin-orbit interaction, *Physica E: Low-Dimensional Systems and Nanostructures*, Vol. 80, pp. 48-52, 2016
- Jahani Darioush, Soltani Vala Ali, Barvestani Jamal, A leap over Dirac cones in one-dimensional graphene-based photonic crystal, *Physica B: Condensed Matter*, Vol. 491, pp. 93-97, 2016
- Bakhshi Germi F, Barvestani Jamal, The focusing effect of electromagnetic waves in two-dimensional photonic crystals with gradually varying lattice constant, *Iranian Journal of Physics Research*, Vol. 15, pp. 401, 2016
- Soltani Vala Ali, Rezaei Emad, Hosseini Naser, Barvestani Jamal, Electro-tuning of surface state in two-dimensional photonic crystals, *Physica Status Solidi (A) Applications and Materials*, Vol. 208, pp. 1854-1857, 2014
- Barvestani Jamal, deghghan Seifollah, Soltani Vala Ali, Temperature tunability of cavity-semiconducting waveguide coupling in a two-dimensional photonic crystal, *Photonics and Nanostructures*, Vol. 12, pp. 482-486, 2014
- Barvestani Jamal, Omnidirectional narrow bandpass filters based on one-dimensional superconductor-dielectric photonic crystal heterostructures, *Physica B: Condensed Matter*, Vol. 457, pp. 218-224, 2014
- Jahani Darioush, Soltani Vala Ali, Barvestani Jamal, Hajian Hojjat, Magneto-tunable one-dimensional graphene-based photonic crystal, *Journal of Applied Physics*, Vol. 115, pp. 153101, 2013
- Hashemi Rasool, Barvestani Jamal, Superconducting Point Defect in a Two-Dimensional Photonic Crystal, *Journal of Superconductivity and Novel Magnetism*, Vol. 27, pp. 371-377, 2013
- Barvestani Jamal, Rezaei Emad, Soltani Vala Ali, Tunability of waveguide modes in two-dimensional photonic crystals based on superconducting materials, *Optics Communications*, Vol. 297, pp. 74-78, 2013
- Barvestani Jamal, Temperature-dependent absorbance spectra of semiconductor-dielectric photonic crystals, *Physica Status Solidi (C) Current Topics in Solid State Physics*, Vol. 9, pp. 2618-2620, 2012
- Soltani Vala Ali, Rezaei Emad, Hosseini Naser, Barvestani Jamal, Electro-tuning of surface state in two-dimensional photonic crystals, *Physica Status Solidi (A) Applications and Materials*, Vol. 208, pp. 1854-1857, 2011
- Mehrabi Mohsen, Soltani Vala Ali, Barvestani Jamal, Localized photonic modes in photonic crystal heterostructures, *Optics Communications*, Vol. 284, pp. 5444-5447, 2011
- Barvestani Jamal, Analytical investigation of one-dimensional photonic crystals with a dielectric-superconducting pair defect, *Optics Communications*, Vol. 284, pp. 231-235, 2011
- Barvestani Jamal, Kalafi Manouchehr, Soltani Vala Ali, Namdar Abdollahman, Backward surface electromagnetic waves in semi-infinite one-dimensional photonic crystals containing left-handed materials, *Physical Review A-Atomic, Molecular, and Optical Physics*, Vol. 77, pp. 013805, 2008
- Soltani Vala Ali, Barvestani Jamal, Kalafi Manouchehr, Surface Optical Waves in Semi-Infinite One-Dimensional Photonic Crystals Containing Alternating Layers of Positive and Negative Media, *Advanced Materials Research*, Vol. 31, pp. 7-10, 2008
- Barvestani Jamal, Kalafi Manouchehr, Soltani Vala Ali, Surface optical waves in semi-infinite one-dimensional photonic crystals containing alternating layers of positive and negative media with a cap layer, *ACTA PHYSICA POLONICA A*, Vol. 112, pp. 1089, 2007
- Kalafi Manouchehr, Soltani Vala Ali, Barvestani Jamal, Surface optical waves in semi-infinite one-dimensional photonic crystals with a thin nonlinear cap layer, *Optics Communications*, Vol. 272, pp. 403-406, 2007