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College: Faculty of Electrical Engineering

### Education

Degree	Graduated in	Major	University
Ph.D	2014	Electronics Engineering	Iran University of Science and Technology

### Subjects Taught

- Optoelectronics
- Advanced Optoelectronics
- Optical Modulation
- Solar Cells
- Electronics I

### Papers in Conferences

1. K. Tahriri ,& A. Bahrami ,Acoustic Analog to Digital Converter based on Phononic Crystals ,The 6th National Conference on New Technologies in Electrical, Computer and Mechanical Engineering of Iran ,2023.
2. M. R. Rahimi ,& A. Bahrami ,Phononic Crystal Sensor for Detection of D2O Concentration in H2O\_D2O Mixture ,The 12th International Conference on Acoustics and Vibration ,2022, تهران.
3. A novel proposal for DWDM demultiplexer design using resonance cavity in photonic crystal structure ,2009 Asia Communications and Photonics conference and Exhibition (ACP) ,pp. 1-9 ,2009.

### Papers in Journals

1. E. Bahrami ,& A. Bahrami,Three-channel acoustic switch based on topological phononic crystals,The European Physical Journal Plus,2024.
2. F. Motaei ,& A. Bahrami,Acoustic energy harvesting using phononic crystal fiber with conical input,Scientific Reports,2024.
3. K. Tahriri , A. Bahrami , F. Motaei,Acoustic analog-to-digital converter based on solid–solid phononic crystal cavity,The European Physical Journal Plus,pp. 52,2024.
4. M. Zaremanesh ,& A. Bahrami,Two-dimensional honeycomb lattice structure for underwater acoustic cloaking using pentamode materials,Physica Scripta,pp. 015946,2024.

5. M. Rahimi ,& A. Bahrami,Sensing the Heavy Water Concentration in H<sub>2</sub>O-D<sub>2</sub>O Mixture by Solid-Solid Phononic Crystals,Chinese Physics B,2023.
6. F.H. Asgharkhani ,& A. Bahrami,Acoustic 4×2 Encoder based on Linear Waveguides in Two-dimensional Solid-Solid Phononic Crystals,Optik,2023.
7. F.H. Asgharkhani ,& A. Bahrami,Four-Input Acoustic XOR Logic Gate based on Solid-Solid Phononic Crystals,Photonics and Nanostructures-Fundamentals and Applications,pp. 101192,2023.
8. M. Rahimi ,& A. Bahrami,Phononic Crystal Sensor-Demultiplexer for Detection of Benzene Isomers,Optik,pp. 171112,2023.
9. M. Ghoreishi ,& A. Bahrami,Reciprocal invisibility cloaking with self-collimation effect of phononic crystals,Physica Scripta,pp. 015704,2023.
10. M. Zaremanesh ,& A. Bahrami,Multilayer acoustic invisibility cloak based on composite lattice,Scientific Reports,pp. 16096,2022.
11. M. Ghoreishi ,& A. Bahrami,Acoustic invisibility cloak based on two-dimensional solid-fluid phononic crystals,Solid State Communications,pp. 114646,2022.
12. F. Ahmadzadeh ,& A. Bahrami,Mechanically Tuned Gradient-Index Phononic Crystal Lens,Chinese Journal of Physics,pp. 2773-2780,2022.
13. F. Motaei ,& A. Bahrami,Energy harvesting from sonic noises by phononic crystal fibers,Scientific Reports,pp. 10522,2022.
14. A. Khaligh , A. Bahrami , H. Badri , Ghavifekr,Phononic crystal locally-resonant cavity for detecting vinegar acidity,Journal of Molecular Liquids,pp. 116972,2021.
15. F. Motaei ,& A. Bahrami,An elastic fiber based on phononic crystals,Scientific Reports,pp. 1-7,2021.
16. S. Z. Aboutalebi ,& A. Bahrami,A proposal for four channel demultiplexer based on phoxonic crystal ring resonators,Mechanics of Advanced Materials and Structures,pp. 1-10,2021.
17. M. Zaremanesh et al.,Temperature biosensor based on triangular lattice phononic crystals,APL Materials,2021.
18. S. Z. Aboutalebi ,& A. Bahrami,Opto-acoustical filter based on phoxonic crystal ring resonator,Journal of Acoustical Society of Iran,pp. 36-43,2021.
19. A. Bahrami , M. Alinejad , F. Motaei,A proposal for 1×4 phononic switch/demultiplexer using composite lattices,Solid State Communications,pp. 114179,2021.
20. M. Alinejad ,& A. Bahrami,Two-channel ultrasonic switch based on two-dimensional fluid/fluid phononic crystals with composite lattices,Physica Scripta,pp. 015702,2021.
21. H. Gharibi , A. Mehaney , A. Bahrami,High performance design for detecting NaI–water concentrations using a two-dimensional phononic crystal biosensor,Journal of Physics D: Applied Physics,pp. 015304,2021.
22. A. Mehaney , H. Gharibi , A. Bahrami,Phononic Eco-sensor for Detection of Heavy Metals Pollutions in Water with Spectrum Analyzer,IEEE Sensors Journal,pp. 6733 - 6740,2021.
23. F. Motaei ,& A. Bahrami,Nonlinear elastic switch based on solid–solid phononic crystals,Journal of Materials Science,2020.
24. M. Alinejad , A. Bahrami , H. B. Ghavifekr,A proposal for three-channel hypersonic wave thermo-switch,Indian Journal of Physics,pp. 1391-1399,2020.
25. F. Motaei ,& A. Bahrami,Two-channel all-elastic solid-solid phononic switch,Physica Scripta,pp. 065703,2020.
26. H. Gharibi ,& A. Bahrami,Phononic crystals for sensing FAMEs with demultiplexed frequencies,Journal of Molecular Liquids,pp. 112841,2020.
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28. M. Alinejad ,& A. Bahrami,Ultrasonic Add/Drop Filter based on Two-Dimensional Solid/Fluid Phononic Crystals,TABRIZ JOURNAL OF ELECTRICAL ENGINEERING,pp. 1185-1195,2019.
29. A. Heydari , A. Bahrami , A. Mahmoodi,All-optical XOR, XNOR, NAND and OR logic gates based on photonic crystal 3-DB coupler for BPSK signals,Journal of Optical Communications,2019.

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31. P. Moradi ,& A. Bahrami,Three channel GHz-ranged demultiplexer in solid-solid phononic crystals,Chinese Journal of Physics,pp. 291-297,2019.
32. M. Alinejad ,& A. Bahrami,Thermal switching of ultrasonic waves in two-dimensional solid/fluid phononic crystals,Physica Scripta,pp. 125705,2019.
33. H. Gharibi , A. Khaligh , A. Bahrami,A very high sensitive interferometric phononic crystal liquid sensor,Journal of Molecular Liquids,pp. 111878,2019.
34. H. Khalilzadeh , A. Bahrami , H. B. Ghavifekr,MMI-based all-optical four-channel wavelength division demultiplexer,Photonic Network Communications,pp. 217-223,2018.
35. Z. Farrokhi , A. Bahrami , S. Mohammadnejad,Ultra-compact all-optical phase-controlled NAND, OR, XOR, XNOR, and NOT multi-function logic gate,Optical and Quantum Electronics,pp. 1-8,2018.
36. P. Moradi ,& A. Bahrami,Design of an Optomechanical Filter Based on Solid/Solid Phoxonic Crystals,Journal of Applied Physics,2018.
37. A. Heydari ,& A. Bahrami,All Optical Half Adder Based on Photonic Crystals for BPSK Signals,Optical and Quantum Electronics,2018.
38. M. Dehdast ,& A. Bahrami,Design of all-optical simultaneous AND, NAND, OR, and NOR logic gates using phase-based control of three coupled waveguides,Photonic Network Communications,pp. 136-142,2017.
39. A. Bahrami,Tunable All-Optical Switch/Demultiplexer Using Nonlinear MMI Waveguides,Journal of Modern Optics,pp. 1693-1698,2017.
40. M. Dehdast , A. Bahrami , S. Mohammadnejad,A novel trapezoidal profile of optimized diffraction grating for light trapping in thin silicon solar cells,Optica Applicata,pp. 75-83,2017.
41. A. Salmanpour , S. Mohammadnejad , A. Bahrami,Photonic crystal logic gates: an overview,Optical and Quantum Electronics,pp. 2249-2275,2015.
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47. A. Bahrami , S. Mohammadnejad , N. Jouyandeh Abkenar , S. Soleimaninezhad,Optimized single and double layer antireflection coatings for GaAs solar cells,International journal of renewable energy research,pp. 79-83,2013.
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