



Ali Bahrami

Professor

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. K. Tahriri , A. Bahrami , F. Motaei , H. Hu,Acoustic analog-to-digital converter using coupled waveguides in phononic crystals,Mechanics of Advanced Materials and Structures,2024.
2. A. Bahrami ,& F. Motaei,A review of phononic-crystal-based energy harvesters,Progress in Energy,2024.
3. E. Bahrami ,& A. Bahrami,Three-channel acoustic switch based on topological phononic crystals,The European Physical Journal Plus,2024.
4. F. Motaei ,& A. Bahrami,Acoustic energy harvesting using phononic crystal fiber with conical input,Scientific Reports,2024.

5. 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.
6. M. Zaremanesh ,& A. Bahrami,Two-dimensional honeycomb lattice structure for underwater acoustic cloaking using pentamode materials,*Physica Scripta*,pp. 015946,2024.
7. M. Rahimi ,& A. Bahrami,Sensing the Heavy Water Concentration in H₂O-D₂O Mixture by Solid-Solid Phononic Crystals,*Chinese Physics B*,2023.
8. F.H. Asgharkhani ,& A. Bahrami,Acoustic 4×2 Encoder based on Linear Waveguides in Two-dimensional Solid-Solid Phononic Crystals,*Optik*,2023.
9. 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.
10. M. Rahimi ,& A. Bahrami,Phononic Crystal Sensor-Demultiplexer for Detection of Benzene Isomers,*Optik*,pp. 171112,2023.
11. M. Ghoreishi ,& A. Bahrami,Reciprocal invisibility cloaking with self-collimation effect of phononic crystals,*Physica Scripta*,pp. 015704,2023.
12. M. Ghoreishi ,& A. Bahrami,Acoustic invisibility cloak based on two-dimensional solid-fluid phononic crystals,*Solid State Communications*,pp. 114646,2022.
13. M. Zaremanesh ,& A. Bahrami,Multilayer acoustic invisibility cloak based on composite lattice,*Scientific Reports*,pp. 16096,2022.
14. F. Motaei ,& A. Bahrami,Energy harvesting from sonic noises by phononic crystal fibers,*Scientific Reports*,pp. 10522,2022.
15. F. Ahmadzadeh ,& A. Bahrami,Mechanically Tuned Gradient-Index Phononic Crystal Lens,*Chinese Journal of Physics*,pp. 2773-2780,2022.
16. 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.
17. 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.
18. M. Alinejad ,& A. Bahrami,Two-channel ultrasonic switch based on two-dimensional fluid/fluid phononic crystals with composite lattices,*Physica Scripta*,pp. 015702,2021.
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. S. Z. Aboutalebi ,& A. Bahrami,Opto-acoustical filter based on phoxonic crystal ring resonator,*Journal of Acoustical Society of Iran*,pp. 36-43,2021.
21. M. Zaremanesh et al.,Temperature biosensor based on triangular lattice phononic crystals,*APL Materials*,2021.
22. 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.
23. F. Motaei ,& A. Bahrami,An elastic fiber based on phononic crystals,*Scientific Reports*,pp. 1-7,2021.
24. A. Khaligh , A. Bahrami , H. Badri , Ghavifekr,Phononic crystal locally-resonant cavity for detecting vinegar acidity,*Journal of Molecular Liquids*,pp. 116972,2021.
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26. F. Motaei ,& A. Bahrami,Two-channel all-elastic solid-solid phononic switch,*Physica Scripta*,pp. 065703,2020.
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28. H. Gharibi ,& A. Bahrami,Phononic crystals for sensing FAMEs with demultiplexed frequencies,*Journal of Molecular Liquids*,pp. 112841,2020.
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32. P. Moradi ,& A. Bahrami,Three channel GHz-ranged demultiplexer in solid-solid phononic crystals,Chinese Journal of Physics,pp. 291-297,2019.
33. 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.
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37. A. Heydari ,& A. Bahrami,All Optical Half Adder Based on Photonic Crystals for BPSK Signals,Optical and Quantum Electronics,2018.
38. 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.
39. H. Khalilzadeh , A. Bahrami , H. B. Ghavifekr,MMI-based all-optical four-channel wavelength division demultiplexer,Photonic Network Communications,pp. 217-223,2018.
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