Sahand University of Technology

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. E. Bahrami ,& A. Bahrami,Topological phononic switch based on reconfigurable symmetry-broken crystals with rotatable scatterers,Scientific Reports,2025.
2. A. Khaligh , A. Bahrami , H. Badri Ghavifekr,Phononic crystal sensor for high-sensitive detection of heavy metal concentrations,Physica Scripta,2025.
3. A. Bahrami ,& F. Motaei,One-dimensional phononic crystal fiber for energy harvesting application,Mechanics of Advanced Materials and Structures,2025.
4. M. Zaremanesh ,& A. Bahrami,Two-dimensional honeycomb lattice structure for underwater acoustic cloaking using pentamode materials,Physica Scripta,pp. 015946,2024.

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. F. Motaei ,& A. Bahrami,Acoustic energy harvesting using phononic crystal fiber with conical input,Scientific Reports,2024.
7. E. Bahrami ,& A. Bahrami,Three-channel acoustic switch based on topological phononic crystals,The European Physical Journal Plus,2024.
8. A. Bahrami ,& F. Motaei,A review of phononic-crystal-based energy harvesters,Progress in Energy,2024.
9. 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.
10. M. Rahimi ,& A, Bahrami,Sensing the Heavy Water Concentration in H2O-D2O Mixture by Solid-Solid Phononic Crystals,Chinese Physics B,2023.
11. F.H. Asgharkhani ,& A. Bahrami,Acoustic 4×2 Encoder based on Linear Waveguides in Two-dimensional Solid-Solid Phononic Crystals,Optik,2023.
12. 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.
13. M. Rahimi ,& A. Bahrami,Phononic Crystal Sensor-Demultiplexer for Detection of Benzene Isomers,Optik,pp. 171112,2023.
14. M. Ghoreshi ,& A. Bahrami,Reciprocal invisibility cloaking with self-collimation effect of phononic crystals,Physica Scripta,pp. 015704,2023.
15. F. Ahmadzadeh ,& A. Bahrami,Mechanically Tuned Gradient-Index Phononic Crystal Lens,Chinese Journal of Physics,pp. 2773-2780,2022.
16. M. Zaremanesh ,& A. Bahrami,Multilayer acoustic invisibility cloak based on composite lattice,Scientific Reports,pp. 16096,2022.
17. F. Motaei ,& A. Bahrami,Energy harvesting from sonic noises by phononic crystal fibers,Scientific Reports,pp. 10522,2022.
18. M. Ghoreshi ,& A. Bahrami,Acoustic invisibility cloak based on two-dimensional solid-fluid phononic crystals,Solid State Communications,pp. 114646,2022.
19. 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.
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. A. Bahrami , M. Alinejad , F. Motaei,A proposal for 1×4 phononic switch/demultiplexer using composite lattices,Solid State Communications,pp. 114179,2021.
22. S. Z. Aboutalebi ,& A. Bahrami,Opto-acoustical filter based on phoxonic crystal ring resonator,Journal of Acoustical Society of Iran,pp. 36-43,2021.
23. M. Zaremanesh et al.,Temperature biosensor based on triangular lattice phononic crystals,APL Materials,2021.
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25. F. Motaei ,& A. Bahrami,An elastic fiber based on phononic crystals,Scientific Reports,pp. 1-7,2021.
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