Naira Yurik Gasparyan

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Institute of Physics
Chair of Physical Process Modeling and Signal Processing
Senior laboratory assistant

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Senior laboratory assistant
Institute of Physics
Chair of Physical Process Modeling and Signal Processing
Lecturer on an hourly basis

Education

Institution	Yerevan State University
Faculty	Institute of Physics
Date	2023 - 2024
Degree name	PhD student

Faculty	Quantum and Mesoscopic Physics
Date	2022 - 2024
Degree name	Masters

Institution	Yerevan State University
Faculty	Faculty of Radiophysics
Date	2019 - 2021
Degree name	Masters

Institution	Yerevan State University
Faculty	Faculty of Radiophysics
Date	2015 - 2019
Degree name	Bachelor

Language skills

Հայերեն English Русский

Work experience

Institution	Yerevan State University
Period of time	2022 till now

Rank/degree	Lecturer

Institution	A. Alikhanyan National Science Laboratory
Period of time	2021 till now
Rank/degree	Assistant

Institution	Yerevan State University
Period of time	2020 till now
Rank/degree	Assistant

State awards and honorary titles

2024 "Annual educational award for the best students in the field of IT" in the "Best PhD" category

Publications

Article

Hybrid Bispectrum–Waterfall Feature Extraction with CS-DSB for RF Receiver
N.Y. Gasparyan, A.A. Hakhumian, E.R. Sivolenko

Armenian Journal of Physics 2025 43-47

Article

Bispectral Analysis as a Diagnostic Tool for Nonlinearities in RF Signal Transmission Using a Modular USRP-LabVIEW Framework
Naira Gasparyan
International Conference on Electrical Engineering and Photonics, EExPolytech 2025 192-194
https://ieeexplore.ieee.org/document/11252492/authors#authors

Article

Bispectrum-Based Signal Processing Using Waterfall Features
Eduard Sivolenko, Mane Harutyunyan, Sergey Makarov, Naira Gasparyan, Hayk Martirosyan,

Arsen Hakhoumian
International Conference on Electrical Engineering and Photonics, EExPolytech 2025 175-177

Article

Transmitter and Receiver Architecture for Human Presence and Movement Detection
Eduard Sivolenko, Aram Antonyan, Naira Gasparyan, Sergey Makarov, Hayk Martirosyan

International Conference on Electrical Engineering and Photonics, EExPolytech 2025 181-183

https://ieeexplore.ieee.org/document/11252393

Article

Simulation and Degradation Analysis of UAV Command Signals Using SC-DSB Modulation in LabVIEW
N.Y. Gasparyan
Armenian Journal of Physics 2025 72-76
https://arar.sci.am/dlibra/publication/459701

Article

Adaptive Transformation Algorithm for Detecting Parameters of a Sinusoidal Signal
E.R. Sivolenko, N.Y. Gasparyan, A.K. Aharonyan, L.A. Mkhitaryan, M.A. Karapetyan

Armenian Journal of Physics 2025 59-63

https://arar.sci.am/dlibra/publication/459698

Article

Analysis of Harmonic Signals in Non-Real Time of Moving Targets in Complex Environments Using Higher-Order Statistics in LabVIEW [Анализ гармонических сигналов в нереальном времени движущихся целей в сложных средах с использованием статистики более выс...
A. Hakhoumian, M. Barseghyan, N. Gasparyan, B. Hovhannisyan, E. Sivolenkoa

Proceedings of NAS RA Physics 2024 408–412

Article

15.5 MeV proton irradiation treatment of liquid phase exfoliated graphene
Narek Margaryan, Naira Gasparyan, Samvel Mayilyan, Eduard Aleksanyan, Andranik Manukyan,

Mikayel S. Torosyan

Diamond and Related Materials 2024 111224

Article

Combining Bispectral Analysis with the Levenberg–Marquardt Algorithm for Enhanced Non-linear Signal Processing in Astronomy
E. Sivolenko, N. Gasparyan, A. Aharonyan, V. Avetisyan, M. Vinnichenko

Communications of the Byurakan Astrophysical Observatory 2024 402-408

Article

More accurate and effective monitoring of moving targets in complex environments using “spectral mask” for harmonic signatures using higher-ordered statistics
Eduard Sivolenko, Arsen Hakhoumian, Naira Gasparyan, Mane Barseghyan, Hakob Babayan

IET conference proceedings. 2024 49-52

Article

SC-DSB signal as a probe signal for testing nonlinearity in electronic circuits
Naira Gasparyan, Arsen Hakhoumian, Eduard Sivolenko, Mane Barseghyan

IET conference proceedings. 2024 75-78

Article

Functionalization of Graphene Oxide Layers Simultaneously with Liquid Phase Exfoliation
L. Anjo, A. Arshakyan, N. Gasparyan, A. Shahinyan, E. Aleksanyan, N. Margaryan

Armenian Journal of Physics 2023 56-61
