

## Institute of Physics

Chair of Physical Process Modeling and Signal Processing

Lecturer on an hourly basis

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## Publications

Article

### Hybrid Bispectrum-Waterfall Feature Extraction with CS-DSB for RF Receiver

N.Y. Gasparyan, A.A. Hakhoumian, E.R. Sivolenko

Armenian Journal of Physics 2025 43-47

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 высоко]

A. Hakhoumian, M. Barseghyan, N. Gasparyan, B. Hovhannisyan, E. Sivolenko

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 408-412

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

### Electrically Small Microstrip Antenna Based on Magnetodielectric Materials

Hovhannes Haroyan, Arsen Hakhoumian, Ararat Stepanyan

Journal of Telecommunications and Information Technology 2022 98-102

Article

### Միկրոսլիբային խոցող զենք. տեսության և կառուցվածքի որոշ հարցեր

Հ. Ս. Հարոյան, Խ. Վ. Ներկարարյան, Ա. Ա. Հախումյան, Ա. Հ. Մակարյան, Կ. Ռ. Միրզոյան

Հայկական Բանալ 2021 67-82

Article

### ВЛИЯНИЕ ПОГЛОЩЕНИЯ НА ЭФФЕКТИВНОСТЬ ГЕНЕРАЦИИ ТЕРАГЕРЦОВОГО ИЗЛУЧЕНИЯ В МЕТАЛЛИЧЕСКОМ ВОЛНОВОДЕ, ЧАСТИЧНО ЗАПОЛНЕННОМ НЕЛИНЕЙНЫМ КРИСТАЛЛОМ LiNbO<sub>3</sub>, DAST ИЛИ ZnTe

А.С. НИКОГОСЯН, Р.М. МАРТИРОСЯН, А.А. АХУМЯН, А.О. МАКАРЯН, В.Р. ТАТЕВОСЯН, Г.Н. ГОЛЬЦМАН,

С.В. АНТИПОВ

*Article*

**Single zone Fresnel dielectric plate antenna**

A. Hakhoumian, A. Sargsyan

IEEE Xplore 2019 153046

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*Article*

**Effect of Absorption on The Efficiency of THz Radiation Generation in a Nonlinear Crystal Placed Into a Waveguide**

A.S. Nikoghosyan, R.M. Martirosyan, A.A. Hakhoumian, A.H. Makaryan, V.R.Tadevosyan, G.N. Goltsman,

S.V. Antipov

Armenian Journal of Physics 2018 257-262

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*Article*

**Efficient Ultrashort THz Pulse Generation in LiNbO<sub>3</sub>, ZnTe, GaSe and DAST Crystals**

A. S. Nikoghosyan, R. M. Martirosyan, A. A. Hakhoumian

Armenian Journal of Physics 2018 263-268

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*Article*

**Magneto-Optical Visualization by Bi:YIG Thin Films Prepared at Low Temperatures**

Ogsen Galstyan, Hanju Lee, Arsen Babajanyan, Arsen Hakhoumian, Barry Friedman, Kiejun Lee

Journal of Applied Physics 2015 163914. 6

<http://aip.scitation.org/jap/info/contact>

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*Article*

**Аналитическое описание тороидального резонатора высокой добротности в терагерцовой области частот**

Т. А. Арутюнян, А. Ю. Варданян, А. А. Ахумян, Х. В. Неркарарян

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2012

433-441

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*Conference*

**Ferromagnetic detector of infrared radiation**

D. Bagdasaryan, A. Hakhoumian, R. Martirosian, A. Julfayan, A. Makaryan, F. Nazari, V. Tadevosyan

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*Conference*

**Effect of attenuation on the efficiency of THz radiation generation in a nonlinear crystal integrated into a waveguide**

A.S. Nikoghosyan, R.M. Martirosyan, A.A. Hakhoumian, A.O. Makaryan, V.R. Tadevosyan, G.N. Goltsman,

S.V. Antipov

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