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Language skills

Հայերեն Русский English

Publications

Article
Sensor Technologies for Brain Signal Registration and RF Emission Analysis
Babken Hovhannisyan, Tigran Hovhannisyan, Armen Makaryan, Vanand Mkhoyan

Armenian Journal of Physics 2025 48-52

Article
Narrowband terahertz generation in a plane-parallel Rb:KTP crystal using a phase mask
Yuri H. Avetisyan, Armen H. Makaryan

Journal of the Optical Society of America B 2024 873-878

Article
Investigation of Nerve Fiber Network in THz Spectrum Range
T. Hovhannisyan, A. Makaryan

Armenian Journal of Physics 2024 17-20

Article
Исследование параметров нейронной системы спинного мозга в терагерцовой области частот
Т. Н. Оганесян, А. О. Макарян, академик Р. М. Мартиросян

Доклады НАН РА 2024 16-23

Article
Investigation of nonlinear properties of animal spinal cord in THZ range
Tigran Hovhannisyan, Armen Makaryan, Radik Martirosyan

IET conference proceedings. 2024 19 - 22 / 208333

Article

Statistical analysis of the electroencephalographic signals
Babken Hovhannisyan, Tigran Hovhannisyan, Armen Makaryan, Eduard Sivolenko, Vanand Mkhoyan

IET conference proceedings. 2024 23-25

Article

Generation of THz radiation in a plane-parallel artificial PPLN crystal with a THz diffraction grating in output
Y. Sahakyan, Yu. Avetisyan, A. Kirakosyan, A. Makaryan, V. Tadevosyan

IET conference proceedings. 2024 42-44/208333

Article

Generation of THz Pulses in the Transparent Ferromagnetic Materials by Optical Rectification of Ultrafast Laser Pulses
David Baghdasaryan, Armen Makaryan, Vahram Mekhitarian, Aram Poghosyan, Yuri Sahakyan

IET conference proceedings. 2024 79 - 81

Article

Biosignal processing using machine learning methods
A. Mkoyan, A. Manasyan, A. Makaryan, B. Hovhannisyan, T. Hovhannisyan, S. Khachunts

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)
2023 22987012/ 4-6

Article

Исследование оптического детектирования наносекундных лазерных импульсов в ферромагнитных кристаллах Y3Fe5O12 и YFeO3
Д.А. Багдасарян, Г.С. Геворкян, А.О. Макарян, Ю.С. Саакян, В.Р. Татевосян

Proceedings of NAS RA Physics 2023 250-254

Article

Investigation of Nanosecond Laser Pulses Optical Detection in Ferrimagnetic Crystals Y3Fe5O12 and YFeO3
D. H. Baghdasaryan, G. S. Gevorkyan, A. H. Makaryan, Y. S. Sahakyan, V. R. Tadevosyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 184-187

Article

Detection of amplitude-modulated laser radiation in transparent orthoferrite
D. H. Baghdasaryan, A. H. Makaryan, Y. S. Sahakyan, V.R. Tadevosyan

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)
2023 22987027/ 60-62

Article

Biosignal processing using machine learning methods
T. Hovhannisyan, A. Makaryan, B. Hovhannisyan, S. Khachunts, A. Mkoyan, A. Manasyan

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)
2023 3

Article

Генерация узкополосного терагерцового импульса в кристалле ниобата лития с помощью фазовой маски
Ю.О. АВЕТИСЯН, А.О. МАКАРЯН

Proceedings of NAS RA Physics 2023 555-563

Article

Narrow-band terahertz pulse generation in lithium niobate crystal using phase mask
Y. H. Avetisyan, A.H. Makaryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 362–368

Article

High-energy multicycle THz pulse generation in artificial PPLN crystal
Y. H. Avetisyan, A. H. Makaryan, M. I. Bakunov

Proceedings of SPIE - The International Society for Optical Engineering 2023 194067

Article

Registration of Brain Radio Signals and Their Bispectral Analysis
B. A. Hovhannisyan, H.L. Ayvazyan, S.V. Antonyan, A. H. Makaryan, E. R. Sivolenko, G. A. Tsaturyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 87-90

Article

Extracting Human Brain Signals from the EEG Records Using LabVIEW and Advanced Signal Processing
Babken Hovhannisyan, Eduard Sivolenko, Armen Makaryan, Hamlet Ayvazyan, Andrei Medvedev,

Valentina Temkina

Springer proceedings in physics 2022 183-190

Article

РЕГИСТРАЦИЯ РАДИОСИГНАЛОВ МОЗГА И ИХ БИСПЕКТРАЛЬНЫЙ АНАЛИЗ
Г.Л. АЙВАЗЯН, С.В. АНТОНЯН, А.О. МАКАРЯН, Б.А. ОГАНЕСЯН, Э.Р. СИВОЛЕНКО, Г.А. ЦАТУРЯН

Proceedings of NAS RA Physics 2022 125-130

Article

Laterally Emitting Nearly Single-Cycle THz Pulse Generation in Two-Dimensional Aperiodically Poled Lithium Niobate Crystal
Y. Avetisyan, A. Makaryan, G. Arabajyan, M. Tonouchi

IEEE Xplore 2022 183280

Article

Միկրոալիքային խոցող զենք. տեսության և կառուցվածքի որոշ հարցեր
Հ. Ս. Հարոյան, Խ. Վ. Ներկարարյան, Ա. Ա. Հախումյան, Ա. Հ. Մակարյան, Կ. Ռ. Միրզոյան

Հայկական բանակ / Armenian Army 2021 67-82

Article

ЧАСТОТНО-ВРЕМЕННОЙ АНАЛИЗ ЭЛЕКТРОКАРДИОГРАММ
Б.А. ОГАНИСЯН, А.О. МАКАРЯН, Т.Н. ОГАНЕСЯН

Proceedings of NAS RA Physics 2020 575-581

Article

ВЛИЯНИЕ ПОГЛОЩЕНИЯ НА ЭФФЕКТИВНОСТЬ ГЕНЕРАЦИИ ТЕРАГЕРЦОВОГО ИЗЛУЧЕНИЯ В

МЕТАЛЛИЧЕСКОМ ВОЛНОВОДЕ, ЧАСТИЧНО ЗАПОЛНЕННОМ НЕЛИНЕЙНЫМ КРИСТАЛЛОМ LiNbO3, DAST ИЛИ ZnTe
А.С. НИКОГОСЯН, Р.М. МАРТИРОСЯН, А.А. АХУМЯН, А.О. МАКАРЯН, В.Р. ТАТЕВОСЯН, Г.Н. ГОЛЬЦМАН, С.В. АНТИПОВ
Proceedings of NAS RA Physics 2019 128–137

Article

Optical detection of femtosecond laser pulses in a ferromagnet as a result of its magnetization by the magnetic field of the laser pulse
A. H. Makaryan, V. R. Tadevosyan, A. S. Nikoghosyan, T. S. Yezekyan, M. A. Kazaryan

Proceedings of SPIE - The International Society for Optical Engineering 2019 113222E(1-4)

Article

Frequency Conversion in The Ferromagnet at Low Magnetic Bias Fields
T. Yezekyan, A. Makaryan, V. Tadevosyan

Armenian Journal of Physics 2018 191-195

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

Conference

Frequency conversion in the ferromagnet at low magnetic bias fields
T. Yezekyan, A. Makaryan, V. Tadevosyan

2018 MW_5

http://www.irphe.am/?q=irphe_2018

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
2018 TH-P-7

http://www.irphe.am/?q=irphe_2018

Article

Investigation of Detection of Microwave Radiation in Ferromagnetic YIG
H. Julfayan, A. Makaryan, V.R. Tadevosyan

Armenian Journal of Physics 2017 9-13

http://ajp.asj-oa.am/

Article

Design of a Multistep Phase Mask for High-Energy Terahertz Pulse Generation by Optical Rectification
Y. Avetisyan, A. Makaryan, V. Tadevosyan, M. Tonouchi

Journal of Infrared Millimeter and Terahertz Waves 2017 1439–1447

https://www.springer.com/engineering/electronics/journal/10762

Conference

High Efficient Terahertz Generation Using Tilted-Pulse- Front Photoexcitation of Semiconductor Surface

Yu. Avetisyan,, A. Makaryan, M. Tonouchi

2017 JW2A.109

https://www.osapublishing.org/abstract.cfm?uri=CLEO_AT-2017-JW2A.109

Conference

Design of a multistep phase mask for high-energy THz pulse generation in ZnTe crystal

Yuri H. Avetisyan, Armen Makaryan, Vahe Tadevosyan

2017 103830A1-9

https://spie.org/Publications/Proceedings/Volume/10383?&origin_id=x4325&start_v...

Article

ИССЛЕДОВАНИЕ ПАРАМЕТРОВ ТЕРАГЕРЦОВЫХ ИМПУЛЬСОВ, ГЕНЕРИРУЕМЫХ В ОДНОДОМЕННОМ КРИСТАЛЛЕ LiNbO3 С ПОМОЩЬЮ СТУПЕНЧАТОЙ ФАЗОВОЙ МАСКИ

Г.К. АБГАРЯН, Ю.О. АВЕТИСЯН, А.О. МАКАРЯН, В.Р. ТАТЕВОСЯН

Proceedings of NAS RA Physics 2016 46-52

http://www.flib.sci.am/eng/Fizika/Frame.html

Article

Detection of CO2 laser radiation in a ferrite

H. Haroyan, A. Makaryan, K. Movsisyan, Farokh Nazari, V. Tadevosyan, H Julfayan

Journal of Physics Conference Series 2016 012007

http://iopscience.iop.org/journal/1742-6596

Article

Магнитно-нелинейные материалы для детектирования электромагнитного излучения

Джулфаян А., Мартиросян Р. М., Макарян А. О., Мыхитарян В. М., Назари Ф., Татевосян В. Р.

Физические Основы приборостроения 2016 88-97

http://elibrary.ru/title_about.asp?id=37911

Conference

Ferromagnetic detector of infrared radiation

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

2016 57-60

http://www.irphe.am

Conference

Terahertz pulses generation via optical rectification in LiNbO3 crystal by step-wise phase mask

G. Abgaryan, Yu. H. Avetisyan, A. H. Makaryan, V. R. Tadevosyan

2016 45-48

Study manual

«Վիճակագրական ռադիոֆիզիկա» լաբորատոր աշխատանքների ձեռնարկ

Ա. Ժ. Բաբաջանյան, Վ. Ռ. Թադևոսյան, Հ. Ս. Հարոյան, Ա. Հ. Մակարյան

2012 86
