

Yuri Hovhannesi Avetisyan

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Institute of Physics

Chair of Radiophysics and Telecommunications

Professor

Education

Institution	Yerevan State University
Faculty	Physics/Radiophysics and electronics
Date	1966 - 1972
Degree name	Qualified specialist

Scientific Rank/degree

Institution	Yerevan State University
Date	2009
Degree name	Professor
Specialty	Physico-mathematical sciences

Institution	Yerevan State University
Date	2006
Degree name	Doctor
Specialty	Physico-mathematical sciences
Research Topic	Terahertz wave generation in nonlinear optical materials with periodical structure

Institution	Institute Radiophysics of NAS Armenia
Date	1979
Degree name	Candidate
Specialty	Physico-mathematical sciences
Scientific Supervisor	Poghosyan P.S.
Research Topic	Difference Frequency Generation in the Millimeter Range in Nonlinear Crystals

Language skills

Հայերեն Русский English

Work experience

Institution	Yerevan State University
Period of time	2010 till now

Rank/degree

Professor

Scientific interests

- Terahertz generation in nonlinear crystals
 - Design and investigation power GaN HEMT in microwave
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Participation in international conferences and seminars

28/08/2022 - 02/09/2022 - 47th International Conference on Infrared, Millimeter and Terahertz Waves
Delf University
Netherlands (the)

Membership

Institution Society of Photo-Optical Instrumentation Engineers
Period of time 2023 - 2023

Institution Optica (formerly Optical Society of America)
Period of time 1999 - 2023

Other information

04:2001 - 03:2002 visiting Professor, Tohoku University, Japan 04:2011 - 09:2011 and 04:2012 - 09:2012
visiting Professor, Osaka University, Japan

Publications

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: Optical Physics 2024 873-878

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

Increasing bandwidth of Cherenkov-type terahertz emitters by free carrier generation

Y. Avetisyan, N. A. Abramovsky, S. B. Bodrov, E. S. Efimenko, M. I. Bakunov

Optics Letters 2023 4921-4924

Article

Генерация узкополосного терагерцового импульса в кристалле ниобата лития с помощью фазовой маски

Ю.О. АВETИСЯН, А.О. МАКАРЯН

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

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

Terahertz generation in artificial two-dimensional periodically poled lithium niobate

Yuri H. Avetisyan

Journal of the Optical Society of America B: Optical Physics 2021 1084 -1089

Article

Nearly Single-Cycle Terahertz Pulse Generation in Aperiodically Poled Lithium Niobate

Yuri Avetisyan, Masayoshi Tonouchi

Photonics 2019 1-8

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>

Article

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

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

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2016 46-52

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

Conference

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

Semiconductor Surface

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

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

Conference

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

Yuri H. Avetisyan, Armen Makaryan, Vahe Tadevosyan

Conference

Noncollinear THz generation by optical rectification in periodically poled lithium niobate crystals

Y. Avetisyan, R. Miroyan, V. Tadevosyan

Conference

Pulse Sequence for Nearly Single-Cycle Terahertz Pulse Generation in Aperiodically Poled Lithium Niobate

Y. Avetisyan, R. Miroyan, M. Tonouchi
