

# Vahe Razmik Tadevosyan

## Institute of Physics

Chair of Radiophysics and Electronics

Associate professor

☎ 23-01

✉ vahetad@ysu.am

## Education

---

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of radiophysics
<b>Date</b>	2002 - 2005
<b>Degree name</b>	PhD student

---

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Radiophysics
<b>Date</b>	2000 - 2002
<b>Degree name</b>	Masters

---

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Radiophysics
<b>Date</b>	1996 - 2000
<b>Degree name</b>	Bachelor

---

## Scientific Rank/degree

---

<b>Institution</b>	Yerevan State University
<b>Date</b>	2012
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Physico-mathematical sciences

---

<b>Institution</b>	Yerevan State University
<b>Date</b>	2005
<b>Degree name</b>	Candidate
<b>Specialty</b>	Physico-mathematical sciences

---

## Language skills

Հայերեն Русский English

---

## Work experience

---

**Institution** Yerevan State University  
**Period of time** 2023 till now  
**Rank/degree** Deputy director of Institute of Physics YSU, head of office

---

**Institution** Yerevan State University  
**Period of time** 2012 till now  
**Rank/degree** Associate profesor of the department of Radiophysics and Electronics

---

**Institution** Yerevan State University  
**Period of time** 2005 - 2012  
**Rank/degree** Assistant Professor of the Department of Microwave Radiophysics and Telecommunications

---

## Publications

---

*Article*

**Исследование оптического детектирования наносекундных лазерных импульсов в ферромагнитных кристаллах  $\text{Y}_3\text{Fe}_5\text{O}_{12}$  и  $\text{YFeO}_3$**

Д.А. Багдасарян, Г.С. Геворкян, А.О. Макарян, Ю.С. Саакян, В.Р. Татевосян

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 250-254

---

*Article*

**Investigation of Nanosecond Laser Pulses Optical Detection in Ferrimagnetic Crystals  $\text{Y}_3\text{Fe}_5\text{O}_{12}$  and  $\text{YFeO}_3$**

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*

**Broadband TeraHertz waveguide partially filled with a nonlinear crystal**

A.S. Nikoghosyan, V.R. Tadevosyan

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)  
2023 22987026/ 56-59

---

*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*

**Features of a THz pulse generated in the metallic waveguides partially filled with nonlinear crystals**

A.S. Nikoghosyan, V.R. Tadevosyan, G.N. Goltsman, S.V. Antipov

Journal of Physics: Conference Series 2023 012013

---

Article

**Broadband TeraHertz waveguide partially filled with a nonlinear crystal**

A. S. Nikoghosyan, V. R. Tadevosyan

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)  
2023 Pages 56 - 59

---

Manual

**ԽՆԴԻՐՆԵՐ ՈԱԴԻՈՏԵԽՆԻԿԱՅԻ ՏԵՍԱԿԱՆ ՀԻՄՈՒԼՔՆԵՐԻՑ (գծային շղթաներ)**

Կարեն Մովսիսյան, Վահե Թադևոսյան, Դավիթ Բաղդասարյան

2022 186

---

Article

**Critical Wavelength in the Metal Waveguide Partially Filled with Nonlinear Crystal**

A. S. Nikoghosyan, V. R. Tadevosyana, G. N. Goltsman, S. V. Antipov

Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 366-370

---

Article

**КРИТИЧЕСКАЯ ДЛИНА ВОЛНЫ В ВОЛНОВОДЕ, ЧАСТИЧНО ЗАПОЛНЕННОМ НЕЛИНЕЙНЫМ КРИСТАЛЛОМ**

А.С. НИКОГОСЯН, В.Р. ТАТЕВОСЯН, Г.Н. ГОЛЬЦМАН, С.В. АНТИПОВ

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2021  
с.543-549

---

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

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

---

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>

---

Article

**ИССЛЕДОВАНИЕ ПАРАМЕТРОВ ТЕРАГЕРЦОВЫХ ИМПУЛЬСОВ, ГЕНЕРИРУЕМЫХ В ОДНОДОМЕННОМ КРИСТАЛЛЕ LiNbO<sub>3</sub> С ПОМОЩЬЮ СТУПЕНЧАТОЙ ФАЗОВОЙ МАСКИ**

Г.К. АБГАРЯН, Ю.О. АВЕТИСЯН, 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>

---

Article

**Detection of CO<sub>2</sub> 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](http://elibrary.ru/title_about.asp?id=37911)

---

Article

**High Gain Broadband Plasmonic Slot Nano-Antenna**

H. S. Haroyan, V. R. Tadevosyan

International Journal of Computer, Electrical, Automation, Control and Information Engineering 2015

1070-1073

<https://www.waset.org/journal/Electrical>

---

Manual

**«Վիճակագրական ռադիոֆիզիկա» լաբորատոր աշխատանքների ձեռնարկ**

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

2012 86

---

Conference

**Ferromagnetic detector of infrared radiation**

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

---

Conference

**Terahertz pulses generation via optical rectification in LiNbO<sub>3</sub> 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*

**Frequency conversion in the ferromagnet at low magnetic bias fields**

T. Yezekyan, A. Makaryan, V. Tadevosyan

---

*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

---

*Conference*

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

Y. Avetisyan, R. Miroyan, V. Tadevosyan

---