

Publications

Article

Terahertz Radiation in a Parallel Metal Plate Waveguide Partially Filled with a Nonlinear Optical Crystal [Терагерцовое излучение в волноводе с параллельными металлическими пластинами, частично заполненном нелинейно-оптическим кристаллом]

A. S. Nikoghosyan, V. R. Tadevosyan

Radiophysics and Quantum Electronics (Известия вузов. Радиофизика) 2025 823-832

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

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

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

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
Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2019
128-137

*Article***Optical Properties of Human Jawbone, Spongy Bone, and Human Bone Substitute Cerabone® in the Spectral Range 0.2 to 2.5 THz**

A.S. Nikoghosyan, J. Shen

AIP Conference Proceedings 2019 080001(1-3)

*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***Terahertz nonlinear waveguide-antenna driven by a femtosecond laser**

A.S. Nikoghosyan, M.A. Kazaryan

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

*Article***Simulation of the THz radiation in the tapered waveguide**

A.S. Nikoghosyan, Sh. Kh. Arakelyan, M. A. Kazaryan

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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

*Article***Efficient Ultrashort THz Pulse Generation in LiNbO₃, ZnTe, GaSe and DAST Crystals**

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

Armenian Journal of Physics 2018 263-268

*Article***Dielectric Anisotropy of Human Bone and CERABONE® in the Terahertz Spectral Range 0.2 to 2.5 THz**

A.S. Nikoghosyan, H. Ting, J. Shen, R.M.Martirosyan, M.A. Kazaryan, M.Yu.Tunyan, A.V. Papikyan,

A.A. Papikyan

Journal of Physics: Conference Series 2017 012005 pp.1 - 8

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

*Article***THz Spectroscopic Properties of Human Spongy Bone and Collagen in the Terahertz Spectral**

Range 0.2 to 2.5 THz

A.S. Nikoghosyan, H. Ting, J. Shen

SEMICONDUCTOR MICRO- AND NANO-ELECTRONICS. PROCEEDINGS OF THE ELEVENTH INTERNATIONAL CONFERENCE
2017 173-175

<http://icsmn.yzu.am/11th%20ICSMN-Proceedings.pdf>

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Optical Properties of Human Jawbone and Human Bone Substitute Cerabone® in the Terahertz Range

A.S. Nikoghosyan, R.M. Martirosyan, H. Ting, J. Shen, M. Yu. Tunyan, A. V. Papikyan, A. A. Papikyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2016 pp. 256-264

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Dielectric anisotropy of human bone in spectral range 0.2 to 2.5 THz

A.S. Nikoghosyan, T. He, J. Shen, R.M. Martirosyan

PROCEEDINGS of the International Conference on "Microwave and THz Technologies, Photonics and Wireless Communications"
2016 pp. 41 - 44

<http://irphe.asj-oa.am/93/1/Proceedings-IRPhE-2016.pdf>

Article

Terahertz Waves Propagation in a LiNbO₃ Wedge Antenna

A.S. Nikoghosyan, Sh. Kh. Arakelyan

PROCEEDINGS of the International Conference on "Microwave and THz Technologies, Photonics and Wireless Communications"
2016 53 - 56

<http://irphe.asj-oa.am/93/1/Proceedings-IRPhE-2016.pdf>

Article

ОПТИЧЕСКИЕ СВОЙСТВА КОСТНОЙ ТКАНИ ЧЕЛЮСТИ ЧЕЛОВЕКА И ЗАМЕНИТЕЛЯ КОСТНОЙ ТКАНИ СЕРАБОН (CERABONE®) В ТЕРАГЕРЦОВОМ ДИАПАЗОНЕ

А.С. НИКОГОСЯН, Р.М. МАРТИРОСЯН, J. SHEN, H. TING, М.Ю. ТУНЯН, А.В. ПАПИКЯН, А.А. ПАПИКЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2016
с.346-356

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Article

Dielectric Anisotropy of Human Bone in THz Range

A.S. Nikoghosyan, T. He, J. Shen, R.M. Martirosyan, M.A. Kazaryan, I.N. Feofanov, V.I. Sachkov

ЛАЗЕРНО-ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В МЕДИЦИНЕ, БИОЛОГИИ, ГЕОЭКОЛОГИИ И ТРАНСПОРТЕ
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Article

Optical Properties of Human Jawbone and CERABONE® in the Terahertz Range

A.S. Nikoghosyan, T. He, J. Shen, R.M. Martirosyan, M.Yu. Tunyan, A.V. Papikyan, A.A. Papikyan

Article

LiNbO₃ КЛИНООБРАЗНАЯ ТГц АНТЕННА, ЧАСТИЧНО ЗАПОЛНЯЮЩАЯ МЕТАЛЛИЧЕСКИЙ ВОЛНОВОД

A.C. НИКОГОСЯН

International Scientific Journal for Alternative Energy and Ecology 2015 87-91

<http://www.isjaee.com/jour/article/view/31>

Article

Conversion of short optical pulses to terahertz radiation in a nonlinear medium: Experiment and theory

A.S. Nikoghosyan, R.A. Dudley, N. N. Zinov'ev, J. M. Chamberlain

Physical Review B 2007 235114-16

<http://journals.aps.org/prb/>

Conference

Optical properties of human jawbone, spongy bone and human bone substitute CERABONE in spectral range from 0.2 to 2.5 THz

A.S. Nikoghosyan, J. Shen

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

High Conversion Efficiency in a System "Nonlinear-Optical Crystal Partially Filling the Cross Section of a Rectangular Waveguide

A.S. Nikoghosyan

Conference

Physical Properties of Human Jawbone, Spongy Bone, Collagen and Cerabone® Bone Transplantation Material in Range of 0.2 to 2.5 THz

A.S. Nikoghosyan, J. Shen, H. Ting
