

# Акоп Левонович Маргарян

✉ marhakob@ysu.am

ℝ<sup>6</sup> 

## Научно-исследовательский институт физики

Центр полупроводниковых приборов и нанотехнологий

Ведущий научный сотрудник

## Знание языков

Հայերեն Русский English

## Публикации

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### **Fabry-Perot enhancement of liquid crystals birefringence effects in terahertz range**

K.G. Batrakov, N.I. Valynets, M.M. Dubinetski, A.G. Paddubskaya, H.L. Margaryan, N.H. Hakobyan,

V.K. Abrahamyan

Physica Scripta 2025 015510

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### **Switchable anisotropic diffraction mode filter based on fork-like liquid crystal gratings**

P. K. Gasparyan, H. L. Margaryan, V. K. Abrahamyan, T. K. Sargsyan, N. H. Hakobyan

Applied Optics 2024 8712 - 8716

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### **Multilayered liquid crystal systems for discrete and continuous light beam steering**

Hakob L. Margaryan, Valery K. Abrahamyan, Nune H. Hakobyan, Hakob S. Chilingaryan,

Gnel M. Stepanyan, Victor V. Belyaev, Andrey D. Latipov

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### **Modeling electron mobility in organic optoelectronic materials (Моделирование подвижности электронов в органических материалах оптоэлектроники)**

Victor V. Belyaev, Denis N. Chausov, Alexey S. Solomatin, Roman N. Kucherov, Sandeep Kumar,

Hakob L. Margaryan, Nune G. Hakobyan, Marina V. Ermakova, Andrey A. Belyaev, George M. Hanna,

Artyom R. Vechkanov, Anton V. Andreev

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### **Pyrolytic carbon/liquid crystal structure based platform for tunable THz components**

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Petros K. Gasparyan, Pilip Y. Misiyuk, Alesia G. Paddubskaya, Nadzeya I. Valynets,

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Vladimir G. Chigrinov, Victor V. Belyaev, Vladimir M. Kozenkov, Denis N. Chausov, Hakob L. Margaryan,

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**Diffraction gratings made from optically anisotropic material with surface microrelief**

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Н. Г. Акопян, А.Л. Маргарян, В.В. Беляев, А.С. Соломатин, S. Kumar, Д. Н. Чаусов, А.А. Беляев

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H. L. MARGARYAN, N. H. HAKOBYAN, V. K. Abrahamyan, V. V. BELYAEV, D. N. CHAUSOV, A. S. SPAKHOV

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**Device for real-time measuring of circular dichroism at a specific wavelength**

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**Radiation control in the mid IR wavelength range using the liquid crystal phase grating**

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**Zn Ions Change Binding Mode of TOEPyP4 with DNA and Cause DNA Transition from B to C and Zn-Like Conformations**

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**Features of Polarization Diffraction Gratings Switching under the Influence of Bipolar Electric Pulses**

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**Optimizing of Control Signal Shape for Improving of Time Characteristics of Liquid Crystal Based Devices**

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**Influence of the voltage applied to the semiconductor substrate on birefringence of nematic liquid crystal**

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**Improvement of Turn-on Time of Liquid-Crystal Phase Retarder by Using an Additional Control Voltage**

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**Investigation of Characteristics of Electrically-Controlled Liquid-Crystal Retarders**

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**Investigation of Transient Processes in Nematic Liquid Crystal Cells with Semiconductor Substrate, Caused by the Electric Field Applied to Semiconductor**

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**Light Diffraction on Gratings with Periodic Microrelief with Negative Optical Anisotropy**

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**Recording of dynamic diffraction gratings in spatial light modulators of semiconductor-liquid crystal structure**

V.K. Abrahamyan, N.H. Hakobyan, H.L. Margaryan, M.V. Isaev, N.L. Ivanova, N.A. Feoktistov

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*Конференция*

**NI-SbRIO Based Platform for Real Time Spectroscopy**

D. Pokhsranyan, H. Margaryan, N. Hakobyan, T. Sargsyan, P. Gasparyan, D. Hovhannisyan,

H. Chilingaryan

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*Конференция*

**Optical Tweezers Based on Radial Symmetric Phase Retarder and Circular Diffraction Waveplate**

H. Margaryan, V. Abrahamyan, D. Hovhannisyan, N. Hakobyan, T. Sargsyan, P. Gasparyan, A. Movsesyan

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*Конференция*

**Circular Dichroism Meter Based on Polarization Diffractive Waveplate**

Nune Hakobyan, Hakob Margaryan, Hakob Chilingaryan, Nelson Tabiryan, Victor Belyaev,

Aleksey Solomatin

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*Конференция*

**Some electro-optical characteristics of liquid crystal cell with graphene electrodes**

Nune H. Hakobyan, Hakob L. Margaryan, Valeri K. Abrahamyan, Vladimir M. Aroutiounian,  
Arpi S. Dilanchian Gharghani, Amalya B. Kostanyan, Timothy D. Wilkinson, Nelson V. Tabirian

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*Конференция*

**Obtaining of Graphene by Chemical Vapor Deposition**

H.L. Margaryan, V.M. Aroutiounian, N.H. Hakobyan, V.K. Abrahamyan, H.S. Chilingaryan,

Arpi S. Dilanchian Gharghani

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*Конференция*

**Features of Polarization Diffraction Gratings Switching under the Influence of Bipolar Electric Pulses**

H.L. Margaryan, D.L. Hovhannisyan, N.H. Hakobyan, V.K. Abrahamyan, T.K. Sargsyan, A.M. Movsisyan

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*Конференция*

**ДИФРАКЦИЯ НА ОПТИЧЕСКИ АНИЗОТРОПНЫХ РЕШЕТКАХ С РАЗНЫМ ЗНАКОМ  
ДВУЛУЧЕПРЕЛОМЛЕНИЯ**

МАРГАРЯН А.Л., АКОПЯН Н.Г., БЕЛЯЕВ В.В., СОЛОМАТИН А.С., БЕЛЯЕВ А.А.

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*Конференция*

**Apparatuses for preparing and investigation of liquid crystal devices**

Hakob L. Margaryan, Nune H. Hakobyan, Hakob S. Chilingaryan, Valery K. Abrahamyan,

Nelson V. Tabirian

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*Конференция*

**Azodyes for liquid crystal photoalignment in displays and diffraction optical elements**

Hakob L. Margaryan, Nune H. Hakobyan, Vladimir G. Chigrinov, Victor V. Belyaev, Vladimir M. Kozenkov,  
Denis N. Chausov, Nelson V. Tabirian

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*Конференция*

**Effect of Air Bubble on Liquid Crystal Alignment**

N.H. Hakobyan, H.L. Margaryan, V.K. Abrahamyan, G.M. Stepanyan, V.V. Belyaev, M.V. Ermakova,  
V.I. Mashchenko, V.A. Zhachkin

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*Патент*

**The method for registration of changes of polarization state of monochromatic light radiation**

Margaryan H., Aroutiounian V.M., Tabirian N., Hakobyan N., Hovhannisyan D., Movsisyan A.,

Gasparyan P.

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*Патент*

**Device for non-invasive determination of glucose concentration in human organism**

Margaryan H., Hakobyan N., Hovhannisyan D., Aroutiounian V., Tabirian N., Rohatgi U., Abrahamyan V.,  
Sargsyan T., Movsisyan A., Gasparyan P.

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*Патент*

**Մարդու օրգանիզմում գյուկոզայի պարունակության ոչ ինվազիվ որոշման սարք**  
Հակոբ Մարգարյան, Նելսոն Թաբիրյան, Ուպենդրա Ռոհաջի, Վլադիմիր Հարությունյան,  
Նունե Հակոբյան, Վալերի Աբրահամյան, Դավիթ Հովհաննիսյան, Տիգրան Սարգսյան,  
Արտաշես Մովսիսյան, Պետրոս Գասպարյան

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Патент

**Հեղուկ բյուրեղային բջջի փոխարկման և փուլային մոդուլման կառավարման եղանակ և դրա իրականացման սարք**  
Հ. Մարգարյան, Վ. Հարությունյան, Ն. Հակոբյան, Դ. Հարությունյան, Վ. Աբրահամյան

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Патент

**Method and device for controlling of switching and phase modulation of a liquid crystal cell**  
Margaryan Hakob, Aroutiounian Vladimir, Hakobyan Nune, Abrahamyan Valery, Hovhannisyan David

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Патент

**Մոնոխրոմատիկ լուսային ճառագայթի բևեռացման փոփոխության գրանցման եղանակ**  
Հակոբ Մարգարյան, Վլադիմիր Հարությունյան, Նելսոն Թաբիրյան, Նունե Հակոբյան,  
Վալերի Աբրահամյան, Դավիթ Հովհաննիսյան, Տիգրան Սարգսյան, Արտաշես Մովսիսյան,  
Պետրոս Գասպարյան

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Патент

**Շրջանային դիքրոիզմի սպեկտրի չափման սարք**  
Հակոբ Մարգարյան, Նելսոն Թաբիրյան, Ուպենդրա Ռոհաջի, Վլադիմիր Հարությունյան,  
Նունե Հակոբյան, Դավիթ Հովհաննիսյան, Տիգրան Սարգսյան, Պետրոս Գասպարյան

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Патент

**Device and Method for measuring circular dichroism**  
Margaryan Hakob, Hakobyan Nune, Hovhannisyan David, Aroutiounian Vladimir, Tabirian Nelson,  
Rohatgi Upendra, Jo Jae, Goushcha Oleksandr, Sargsyan Tigran, Gasparyan Petros

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Патент

**Հեղուկ բյուրեղային բևեռային դիֆրակցիոն ալիքային թիթեղ**  
Հակոբ Մարգարյան, Դավիթ Հովհաննիսյան, Նունե Հակոբյան, Վալերի Աբրահամյան,  
Վլադիմիր Հարությունյան, Նելսոն Թաբիրյան

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Патент

**Centrally symmetric liquid crystal polarization diffractive waveplate and its fabrication**  
Margaryan Hakob, Hakobyan Nune, Hovhannisyan David, Abrahamyan Valeri, Aroutiounian Vladimir,  
Tabirian Nelson

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Патент

**Device for non-invasive determination of glucose concentration in human organism**  
Margaryan, Hakob, Hakobyan, Nune, Hovhabbisyanyan, David, Aroutiounian, Vladimir, Tabirian, Nelson,  
Rohatgi, Upendra, Abrahamyan, Valeri, Sargsyan, Tigran, Movsissyan, Artashes, Gasparyan, Petros

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Патент

**Հեղուկ բյուրեղային սարքը հեղուկ բյուրեղային նյութով լցման սարքավորում**  
Հակոբ Լևոնի Մարգարյան, Նունե Հրանտի Հակոբյան, Հակոբ Զիլինգարյան, Վալերի Աբրահամյան,

*Патент*

**«Apparatus for filling liquid crystal device with liquid crystal substance»**

H.L. Margaryan, N.H. Hakobyan, V.K. Abrahamyan, H.S. Chilingaryan, P.K. Gasparyan, Nelson Tabirian,

Oleksandr Goushcha

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*Конференция*

**Bragg-Berry cavities: orbital angular momentum manipulation of broadband light beams**

Sergey Shvetsov, Vahram Grigoryan, Valeri Abrahamyan, Nune Hakobyan, Hakob Margaryan,

Mushegh Rafayelyan

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*Конференция*

**Analyses of the Characteristics of a Spherical Quantum Dot by Wavelet Transform Methods**

E. Kozhanova, S. Danilov, V.Belyaev, H. Margaryan, N. Hakobyan, V. Abrahamyan, P. Gasparyan

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*Конференция*

**Platform for real time spectroscopy based on NI-sbRIO system for optimal control of materials properties**

Margaryan H., Pokhsraryan D., Hakobyan N., Gasparyan P., Hovhannisyanyan D., Chilingaryan H.,

Belyaev V., Kuznetsov M.

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*Конференция*

**МОДЕЛИРОВАНИЕ ПОДВИЖНОСТИ ЭЛЕКТРОНОВ В ОРГАНИЧЕСКИХ МАТЕРИАЛАХ ОПТОЭЛЕКТРОНИКИ**

Акопян Нуне Грантовна, Маргарян Акоп Левонович, Беляев Виктор Васильевич,

Чаусов Денис Николаевич, Соломатин Алексей Сергеевич, Кучеров Роман Николаевич,

Сандип Кумар (Sandeep Kumar), Ермакова Мария Вадимовна, Царева Елена Владимировна,

Беляев Андрей Андреевич, Ханна Георгий Михайлович, Коршаков Никита Алексеевич

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*Конференция*

**Light beam steering by a sequence of polarization diffraction gratings**

H. Margaryan, V. Abrahamyan, N. Hakobyan, H.Chilingaryan, G. Stepanyan, V. Belyaev, A. Latipov

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