

Publications

Article

l-Carrageenan Manganese Oxide Bionanocomposites as a Promising Solution to Agricultural Challenges

Spartak S Khutsishvili, Nino Gagelidze, Astghik S Tsokolakyan, Mkrtich A Yeranosyan, Eteri Tkesheliadze, Vardan A Sargsyan, Darejan Dughashvili, Natela Dzebisashvili, Keso Aronia, Archil Benashvili, Dali Dzanashvili, Irine Gurgenidze, Grigor Tatishvili, Paula Fraga-García

MATERIALS 2025 495

Article

Urea Detection in Phosphate Buffer and Artificial Urine: A Simplified Kinetic Model of a pH-Sensitive EISCAP Urea Biosensor

Karen Simonyan, Astghik Tsokolakyan, Vahe Buniatyan, Artem Badasyan, Mkrtich Yeranosyan

Sensors 2025 6596

Article

PEGylated Albumin-Based Drug Carriers for the Treatment of Experimental Stroke

Nazeli Zaqaryan, Rita Khallouf, Arpi Manukyan, Vahe Atoyan, Astghik Tsokolakyan,

Mkrtich A Yeranosyan, Samvel G Chailyan, Kristine E Danielyan

Open Biotechnology Journal 2025 e18740707379038

Article

Effect of Pyrolysis Temperature on the Performance of Malt Biochar in Cement Mortars

Roza Shainova, Nelli Muradyan, Avetik Arzumanyan, Marine Kalantaryan, Rafayel Sukiasyan,

Mkrtich Yeranosyan, Yeghvard Melikyan, Avetis Simonyan, David Laroze, Elisabetta Zendri,

Manuk Barseghyan

Mathematics MDPI 2025 5105

Article

Proline-rich peptide-linked albumin particles in an experimental oxidative brain damage model

Kristine Edgar Danielyan, Nazeli Zaqaryan, Rita Khallouf, Maria Kojoyan, Kristine Tspnetsyan,

Arpi Manukyan, Astghik Tsokolakyan, Mkrtich Alexan Yeranosyan, Samvel G. Chailyan

Bioactive Compounds in Health and Disease 2025 527-544

Article

Urea Biosensor Based on a Field-Effect Capacitor Modified With a Stacked Weak Polyelectrolyte/Enzyme Bilayer

Astghik S. Tsokolakyan, Vardan A. Hayrapetyan, Derenik K. Petrosyan, Melanie Welden, Heiko Iken,

Michael J. Schöning, Mkrtich A. Yeranosyan, Arshak Poghossian

Electrochemical Science Advances 2025 e70013

Article

Formation of zinc oxide composites of doxycycline with high antibacterial activity based on DC-magnetron deposition of ZnO nanoscale particles on the drug surface

Ashkhen L. Zatikyan, Armen I. Martiryan, Emma R. Arakelova, Ashot M. Khachatryan, Anait A. Mirzoian, Susanna L. Grigoryan, Rafayel E. Muradyan, Hrachik R. Stepanyan, Stepan G. Grigoryan,

Mkrtich A. Yeranosyan

Applied Physics A: Materials Science and Processing 2024 152

Article

E-beam induced micropattern generation and amorphization of L-cysteine-functionalized graphene oxide nano-composites

Y. Melikyan, H. Gharagulyan, A. Vasil'ev, V. Hayrapetyan, M. Zhezhu, A. Simonyan, D.A. Ghazaryan, M.S. Torosyan, A. Kharatyan, J. Michalicka, M. Yeranosyan

Colloids and Interface Science Communications 2024 100766-7

Article

Effect of Silica Fume Concentration and Water-Cement Ratio on the Compressive Strength of Cement-Based Mortars

Maria M. Badalyan, Nelli G. Muradyan, Roza S. Shainova, Avetik A. Arzumanyan, Marine A. Kalantaryan, Rafayel R. Sukiasyan, Mkrtich Yeranosyan, David Laroze, Yeghiazar V. Vardanyan, Manuk G. Barseghyan

Buildings 2024 757

Article

Improving the electro-optical properties of MoS₂/rGO hybrid nanocomposites using liquid crystals

A. Vasil'ev, Y. Melikyan, M. Zhezhu, V. Hayrapetyan, M.S. Torosyan, D.A. Ghazaryan, M. Yeranosyan, H. Gharagulyan

Materials Research Bulletin 2024 113036

Article

Broadband THz metasurface bandpass filter/antireflection coating based on metalized Si cylindrical rings

Karen Simonyan, Hermine Gharagulyan, Henrik Parsamyan, Ashot Khachatryan, Mkrtich Yeranosyan

Semiconductor Science and Technology 2024 095012

Article

Essential L-Amino Acid-Functionalized Graphene Oxide for Liquid Crystalline Phase Formation

H. Gharagulyan, Y. Melikyan, V. Hayrapetyan, Kh. Kirakosyan, D.A. Ghazaryan, M. Yeranosyan

Materials Science and Engineering: B 2023 116564

Article

Նանոտեխնոլոգիաներն արմատապես փոխում են երկրների ռազմավարական առաջնահերթությունները

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Գիտության աշխարհում 2023 34-41

Article

The Use of Biosilica to Increase the Compressive Strength of Cement Mortar: The Effect of the Mixing Method

Nelli G. Muradyan, Avetik A. Arzumanyan, Marine A. Kalantaryan, Yeghiazar V. Vardanyan, Mkrtich Yeranosyan, Malgorzata Ulewicz, David Laroze, Manuk G. Barseghyan

MATERIALS 2023 5516

Article

Antibacterial activity of royal jelly-mediated green synthesized silver nanoparticles

Susanna Gevorgyan, Robin Schubert, Mkrtich Yeranosyan, Lilit Gabrielyan, Armen Trchounian,

Kristina Lorenzen, Karen Trchounian

AMB Express 2021 51

Article

Zinc Oxide Composites of Doxorubicin in the Form of Coating, Composite Films and Gels with a High Antitumor Activity and Low Toxicity

Emma R. Arakelova, Stepan G. Grigoryan, Ashot M. Khachatryan, Anahit A. Mirzoian, Zoya M. Farmazyan,

Susanna L. Grigoryan, Mkrtich A. Yeranosyan, Flora G. Arsenyan, Rafayel E. Muradyan,

Hrachik V. Gasparyan

Electronic Journal of Natural Sciences of NAS RA 2019 61-73

Article

Energy loss rate of hot electrons due to polar-optical phonon modes in a semiconductor nanowire under transverse electric field

A. Stepanyan, A. Asatryan, M. Yeranosyan, K. Vardanyan, A. Kirakosyan, A. Vartanian

Physica B: Condensed Matter 2018 340-346

Article

Energy-loss rate of hot electrons due to confined acoustic phonon modes in a semiconductor quantum wire under transverse electric field.

A. Stepanyan, M. Yeranosyan, L. Vardanyan, A. Asatryan, A. Kirakosyan, A. Vartanian

Physica B: Condensed Matter 2017 102-107

<http://www.journals.elsevier.com/physica-b-condensed-matter>

Article

Influence of spin-orbit interactions on the polaron properties in wurtzite semiconductor quantum well

Mkrtich A. Yeranosyan, Arshak L. Vartanian, Karen A. Vardanyan

Physica E: Low-dimensional Systems and Nanostructures 2016 330-335

<http://www.journals.elsevier.com/physica-e-low-dimensional-systems-and-nanostru...>

Article

Phonon confinement effect on the polaron states in a double quantum ring structure in the presence of electric and magnetic fields

Mkrtich A. Yeranosyan, Arshak L. Vartanian, Abbas Shahbandari, Albert A. Kirakosyan

Physica B: Condensed Matter 2015 365-370

<http://www.journals.elsevier.com/physica-b-condensed-matter>

Conference

Spin-orbit interaction enhanced polaron effect in wurtzite semiconductor quantum well.

M.A. Yeranosyan, K.A. Vardanyan, A.L. Vartanian, A.A. Kirakosyan

Conference

Effect of Rashba and Dresselhaus spin-orbit interactions on the polaron properties in wurtzite semiconductor quantum dot in the presence of external fields.

M.A. Yeranosyan, K.A. Vardanyan, A.L. Vartanian, A.A. Kirakosyan

Conference

The influence of the transverse electric field on the hot electron energy loss rate via polar-optical phonons in nanowires

A.Asatryan, A.Stepanyan, M.Yeranosyan, A.Kirakosyan, A.Vartanian

Conference

Investigation of Antibacterial Properties of Green Synthesized Silver Nanoparticles

S. Gevorgyan, M. Yeranosyan, R. Schubert, A. Trchounian

Conference

Filtering of terahertz radiation by a metasurface structure

Simonyan Karen, Parsamyan Henrik, Gharagalyan Hermine, Khachatryan Ashot, Yeranosyan Mkrtych

Conference

Stability Controlling of L-arginine- and L-nitroarginine-Functionalized Graphene Oxide

Yeghvard MELIKYAN, Alexey VASIL'EV, Marina ZHEZHU, Elen MNATSAKANYAN, Deren PETROSYAN,

Mkrtych YERANOSYAN, Ruben APREYAN, Hermine GHARAGULYAN

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Royal Jelly in the Development of Nano-strategies against Pathogenic Bacteria

S. Gevorgyan, M. Yeranosyan, R. Schubert, A. Trchounian
