

# Volodymyr M Dzhagan

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/6147276/volodymyr-m-dzhagan-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

156  
papers

2,853  
citations

32  
h-index

46  
g-index

164  
ext. papers

3,340  
ext. citations

3.7  
avg, IF

5.06  
L-index

#	Paper	IF	Citations
156	A Fine Size Selection of Brightly Luminescent Water-Soluble AgInS and AgInS/ZnS Quantum Dots. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 9032-9042	3.8	94
155	Copper-surface-mediated synthesis of acetylenic carbon-rich nanofibers for active metal-free photocathodes. <i>Nature Communications</i> , <b>2018</b> , 9, 1140	17.4	84
154	Non-stoichiometry effect and disorder in Cu <sub>2</sub> ZnSnS <sub>4</sub> thin films obtained by flash evaporation: Raman scattering investigation. <i>Acta Materialia</i> , <b>2014</b> , 65, 412-417	8.4	83
153	Resonant Raman scattering study of CdSe nanocrystals passivated with CdS and ZnS. <i>Nanotechnology</i> , <b>2007</b> , 18, 285701	3.4	83
152	Size effects on Raman spectra of small CdSe nanoparticles in polymer films. <i>Nanotechnology</i> , <b>2008</b> , 19, 305707	3.4	71
151	Nonresonant surface-enhanced Raman scattering of ZnO quantum dots with Au and Ag nanoparticles. <i>ACS Nano</i> , <b>2013</b> , 7, 3420-6	16.7	69
150	Origin and Dynamics of Highly Efficient Broadband Photoluminescence of Aqueous Glutathione-Capped Size-Selected AgInS Quantum Dots. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 13648-13658	3.8	67
149	Size-Dependent Optical Properties of Colloidal ZnO Nanoparticles Charged by Photoexcitation. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 220-225	3.8	65
148	Spectral features above LO phonon frequency in resonant Raman scattering spectra of small CdSe nanoparticles. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 084318	2.5	58
147	Optically induced structural transformation in disordered kesterite Cu <sub>2</sub> ZnSnS <sub>4</sub> . <i>JETP Letters</i> , <b>2013</b> , 98, 255-258	1.2	56
146	Phonon Raman spectra of colloidal CdTe nanocrystals: effect of size, non-stoichiometry and ligand exchange. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 79	5	56
145	Growth and spectroscopic characterization of CdSe nanoparticles synthesized from CdCl <sub>2</sub> and Na <sub>2</sub> SeSO <sub>3</sub> in aqueous gelatine solutions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2006</b> , 290, 304-309	5.1	56
144	Raman- and IR-Active Phonons in CdSe/CdS Core/Shell Nanocrystals in the Presence of Interface Alloying and Strain. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 18225-18233	3.8	55
143	Synthesis and Characterization of White-Emitting CdS Quantum Dots Stabilized with Polyethylenimine. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 22478-22486	3.8	55
142	Giant gap-plasmon tip-enhanced Raman scattering of MoS monolayers on Au nanocluster arrays. <i>Nanoscale</i> , <b>2018</b> , 10, 2755-2763	7.7	53
141	Stable Dispersion of Iodide-Capped PbSe Quantum Dots for High-Performance Low-Temperature Processed Electronics and Optoelectronics. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 4328-4337	9.6	52
140	The influence of shell parameters on phonons in core-shell nanoparticles: a resonant Raman study. <i>Nanotechnology</i> , <b>2009</b> , 20, 365704	3.4	45

139	Raman and Infrared Phonon Spectra of Ultrasmall Colloidal CdS Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 19492-19497	3.8	43
138	Spectral and luminescent properties of ZnO@SiO <sub>2</sub> core-shell nanoparticles with size-selected ZnO cores. <i>RSC Advances</i> , <b>2014</b> , 4, 63393-63401	3.7	42
137	Raman Scattering Study of Cu <sub>3</sub> SnS <sub>4</sub> Colloidal Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 27554-27558	3.8	41
136	Luminescence and photoelectrochemical properties of size-selected aqueous copper-doped Ag-In-S quantum dots.. <i>RSC Advances</i> , <b>2018</b> , 8, 7550-7557	3.7	40
135	Vibrational spectroscopy of compound semiconductor nanocrystals. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 503001	3	40
134	Non-stoichiometric CuInS <sub>2</sub> @ZnS nanoparticles produced in aqueous solutions as light harvesters for liquid-junction photoelectrochemical solar cells. <i>RSC Advances</i> , <b>2016</b> , 6, 100145-100157	3.7	39
133	Resonant Raman study of phonons in high-quality colloidal CdTe nanoparticles. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 243101	3.4	38
132	Hybrid N-Butylamine-Based Ligands for Switching the Colloidal Solubility and Regimentation of Inorganic-Capped Nanocrystals. <i>ACS Nano</i> , <b>2017</b> , 11, 1559-1571	16.7	37
131	Chloride and Indium-Chloride-Complex Inorganic Ligands for Efficient Stabilization of Nanocrystals in Solution and Doping of Nanocrystal Solids. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2163-2175	15.6	37
130	Near-Infrared CuInSe <sub>2</sub> -Based Colloidal Nanocrystals via Cation Exchange. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 2607-2617	9.6	36
129	Raman spectroscopy of Cu-Sn-S ternary compound thin films prepared by the low-cost spray-pyrolysis technique. <i>Applied Optics</i> , <b>2016</b> , 55, B158-62	1.7	36
128	Optimization of porous silicon preparation technology for SERS applications. <i>Applied Surface Science</i> , <b>2010</b> , 256, 3369-3373	6.7	35
127	Surface- and tip-enhanced resonant Raman scattering from CdSe nanocrystals. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 21198-203	3.6	34
126	Morphology-induced phonon spectra of CdSe/CdS nanoplatelets: core/shell vs. core-crown. <i>Nanoscale</i> , <b>2016</b> , 8, 17204-17212	7.7	33
125	Electrochemical Tuning of Localized Surface Plasmon Resonance in Copper Chalcogenide Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 18244-18253	3.8	32
124	The influence of pyridine ligand onto the structure and phonon spectra of CdSe nanocrystals. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 084334	2.5	32
123	Nanostructured Silver Substrates With Stable and Universal SERS Properties: Application to Organic Molecules and Semiconductor Nanoparticles. <i>Nanoscale Research Letters</i> , <b>2009</b> , 5, 403-9	5	30
122	Optical phonons in the kesterite Cu <sub>2</sub> ZnGeS <sub>4</sub> semiconductor: polarized Raman spectroscopy and first-principle calculations. <i>RSC Advances</i> , <b>2016</b> , 6, 13278-13285	3.7	29

121	Electronic structure, optical properties, and lattice dynamics of orthorhombic Cu <sub>2</sub> CdGeS <sub>4</sub> and Cu <sub>2</sub> CdSiS <sub>4</sub> semiconductors. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	28
120	Annealing-induced structural transformation of gelatin-capped Se nanoparticles. <i>Solid State Communications</i> , <b>2008</b> , 145, 288-292	1.6	28
119	Tuning the reduction and conductivity of solution-processed graphene oxide by intense pulsed light. <i>Carbon</i> , <b>2016</b> , 102, 236-244	10.4	27
118	Alloyed CuInS <sub>2</sub> /ZnS nanorods: synthesis, structure and optical properties. <i>CrystEngComm</i> , <b>2015</b> , 17, 5634-5643	3.9	26
117	Photochemical formation and photoelectrochemical properties of TiO <sub>2</sub> /Sb <sub>2</sub> S <sub>3</sub> heterostructures. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2015</b> , 303-304, 8-16	4.7	26
116	Raman characterization of CuZnSnS nanocrystals: phonon confinement effect and formation of Cu S phases.. <i>RSC Advances</i> , <b>2018</b> , 8, 30736-30746	3.7	25
115	"Green" Aqueous Synthesis and Advanced Spectral Characterization of Size-Selected CuZnSnS Nanocrystal Inks. <i>Scientific Reports</i> , <b>2018</b> , 8, 13677	4.9	25
114	Origin of the Broadband Photoluminescence of Pristine and Cu <sup>+</sup> /Ag <sup>+</sup> -Doped Ultrasmall CdS and CdSe/CdS Quantum Dots. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 10267-10277	3.8	23
113	Fermi resonance in the phonon spectra of quaternary chalcogenides of the type Cu <sub>2</sub> ZnGeS <sub>4</sub> . <i>Journal of Physics Condensed Matter</i> , <b>2016</b> , 28, 065401	1.8	23
112	Structural and optical characterization of colloidal Se nanoparticles prepared via the acidic decomposition of sodium selenosulfate. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2008</b> , 320, 169-174	5.1	23
111	Brightly Luminescent Core/Shell Nanoplatelets with Continuously Tunable Optical Properties. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1801478	8.1	22
110	Probing the structure of CuInS <sub>2</sub> -ZnS core-shell and similar nanocrystals by Raman spectroscopy. <i>Applied Surface Science</i> , <b>2017</b> , 395, 24-28	6.7	22
109	Structure of Biocompatible Coatings Produced from Hydroxyapatite Nanoparticles by Detonation Spraying. <i>Nanoscale Research Letters</i> , <b>2015</b> , 10, 464	5	22
108	Phonon Spectra of Small Colloidal II-VI Semiconductor Nanocrystals. <i>International Journal of Spectroscopy</i> , <b>2012</b> , 2012, 1-6		22
107	A spectroscopic and photochemical study of Ag <sup>(+)</sup> -, Cu <sup>(2+)</sup> -, Hg <sup>(2+)</sup> -, and Bi <sup>(3+)</sup> -doped Cd(x)Zn(1-x)S nanoparticles. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 345, 515-23	9.3	22
106	Raman study of self-assembled SiGe nanoislands grown at low temperatures. <i>Nanotechnology</i> , <b>2005</b> , 16, 1464-1468	3.4	22
105	Nature of some features in Raman spectra of hydroxyapatite-containing materials. <i>Journal of Raman Spectroscopy</i> , <b>2016</b> , 47, 726-730	2.3	22
104	Optical study of CdS- and ZnS-passivated CdSe nanocrystals in gelatin films. <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 386237	1.8	21

103	Enhanced Raman scattering of ZnO nanocrystals in the vicinity of gold and silver nanostructured surfaces. <i>Optics Express</i> , <b>2016</b> , 24, A168-73	3.3	20
102	Optical properties of quaternary kesterite-type Cu <sub>2</sub> Zn(Sn <sub>1-x</sub> Gex) <sub>4</sub> crystalline alloys: Raman scattering, photoluminescence and first-principle calculations. <i>RSC Advances</i> , <b>2016</b> , 6, 67756-67763	3.7	19
101	Raman scattering in orthorhombic CuInS <sub>2</sub> nanocrystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 195-199	1.6	18
100	Synthesis and luminescent properties of ultrasmall colloidal CdS nanoparticles stabilized by Cd(II) complexes with ammonia and mercaptoacetate. <i>Journal of Nanoparticle Research</i> , <b>2014</b> , 16, 1	2.3	18
99	A new route to very stable water-soluble ultra-small core/shell CdSe/CdS quantum dots. <i>Nano Structures Nano Objects</i> , <b>2018</b> , 13, 146-154	5.6	17
98	Colloidal ZnO nanocrystals in dimethylsulfoxide: a new synthesis, optical, photo- and electroluminescent properties. <i>Nanotechnology</i> , <b>2014</b> , 25, 075601	3.4	17
97	Crystal structure and vibrational properties of Cu <sub>2</sub> ZnSiSe <sub>4</sub> quaternary semiconductor. <i>Physica Status Solidi (B): Basic Research</i> , <b>2016</b> , 253, 1808-1815	1.3	17
96	Nanosecond and microsecond decay of photogenerated charges in Cd <sub>x</sub> Zn <sub>1-x</sub> S nanoparticles. <i>Theoretical and Experimental Chemistry</i> , <b>2007</b> , 43, 297-305	1.3	16
95	The role of a plasmonic substrate on the enhancement and spatial resolution of tip-enhanced Raman scattering. <i>Faraday Discussions</i> , <b>2019</b> , 214, 309-323	3.6	15
94	Tuning the adhesion between polyimide substrate and MWCNTs/epoxy nanocomposite by surface treatment. <i>Applied Surface Science</i> , <b>2017</b> , 422, 420-429	6.7	15
93	Nanocrystalline TiO <sub>2</sub> /Au films: Photocatalytic deposition of gold nanocrystals and plasmonic enhancement of Raman scattering from titania. <i>Materials Science in Semiconductor Processing</i> , <b>2015</b> , 37, 3-8	4.3	15
92	Resonant Raman spectroscopy of confined and surface phonons in CdSe-capped CdS nanoparticles. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 2043-2046		15
91	Improved Electrochemical Behavior of Amorphous Carbon-Coated Copper/CNT Composites as Negative Electrode Material and Their Energy Storage Mechanism. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, A1247-A1253	3.9	15
90	Characterization of semiconductor core-shell nanoparticles by resonant Raman scattering and photoluminescence spectroscopy. <i>Applied Surface Science</i> , <b>2008</b> , 255, 725-727	6.7	14
89	Theoretical and experimental investigations of single- and multilayer structures with SiGe nanoislands. <i>Materials Science and Engineering C</i> , <b>2003</b> , 23, 1027-1031	8.3	14
88	Photocatalytic H <sub>2</sub> production from aqueous solutions of hydrazine and its derivatives in the presence of nitric-acid-activated graphitic carbon nitride. <i>Catalysis Today</i> , <b>2017</b> , 284, 229-235	5.3	13
87	Morphology, optical, and photoelectrochemical properties of electrodeposited nanocrystalline ZnO films sensitized with Cd <sub>x</sub> Zn <sub>1-x</sub> S nanoparticles. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 7764-7773	4.3	13
86	CdZnS quantum dots formed by the Langmuir-Blodgett technique. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2013</b> , 31, 04D109	1.3	13

85	Many particle approach to resonance Raman scattering in crystals: Strong electron-phonon interaction and multi-phonon processes. <i>Chemical Physics</i> , <b>2011</b> , 388, 57-68	2.3	13
84	Synthesis, optical properties, and photochemical activity of zinc-indium-sulfide nanoplates. <i>RSC Advances</i> , <b>2015</b> , 5, 89577-89585	3.7	12
83	Raman and X-ray Photoemission Identification of Colloidal Metal Sulfides as Potential Secondary Phases in Nanocrystalline Cu <sub>2</sub> ZnSnS <sub>4</sub> Photovoltaic Absorbers. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 5706-5717	5.6	12
82	Resonant surface-enhanced Raman scattering by optical phonons in a monolayer of CdSe nanocrystals on Au nanocluster arrays. <i>Applied Surface Science</i> , <b>2016</b> , 370, 410-417	6.7	11
81	Thin films of Cu <sub>2</sub> ZnSnS <sub>4</sub> for solar cells: optical and structural properties. <i>Functional Materials</i> , <b>2013</b> , 20, 186-191	0.6	11
80	Heterostructured Bismuth Telluride Selenide Nanosheets for Enhanced Thermoelectric Performance. <i>Small Science</i> , <b>2021</b> , 1, 2000021		11
79	Surface-Enhanced Infrared Absorption by Optical Phonons in Nanocrystal Monolayers on Au Nanoantenna Arrays. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 5779-5786	3.8	10
78	Vibrational Raman spectra of CdS <sub>x</sub> Se <sub>1-x</sub> magic-size nanocrystals. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2011</b> , 5, 250-252	2.5	10
77	Optical studies of CdSe/HgSe and CdSe/Ag <sub>2</sub> Se core/shell nanoparticles embedded in gelatin. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 455203	1.8	10
76	Flexible plasmonic graphene oxide/heterostructures for dual-channel detection. <i>Analyst</i> , <b>2019</b> , 144, 3297-3306	5	9
75	Work Function and Conductivity of Inkjet-Printed Silver Layers: Effect of Inks and Post-treatments. <i>Journal of Electronic Materials</i> , <b>2018</b> , 47, 2135-2142	1.9	9
74	Insights into different photoluminescence mechanisms of binary and ternary aqueous nanocrystals from the temperature dependence: A case study of CdSe and Ag-In-S. <i>Journal of Luminescence</i> , <b>2019</b> , 215, 116630	3.8	9
73	Photoelectrochemical and Raman characterization of nanocrystalline CdS grown on ZnO by successive ionic layer adsorption and reaction method. <i>Thin Solid Films</i> , <b>2014</b> , 562, 56-62	2.2	9
72	Anharmonic interactions and temperature effects in Raman spectra of Si nanostructures. <i>Solid State Communications</i> , <b>2014</b> , 195, 39-42	1.6	9
71	Optical and photoelectrical properties of GeSi nanoislands. <i>Semiconductor Science and Technology</i> , <b>2007</b> , 22, 326-329	1.8	9
70	Temperature-dependent resonant Raman scattering study of core/shell nanocrystals. <i>Journal of Physics: Conference Series</i> , <b>2007</b> , 92, 012045	0.3	9
69	In-doped As <sub>2</sub> Se <sub>3</sub> thin films studied by Raman and X-ray photoelectron spectroscopies. <i>Applied Surface Science</i> , <b>2019</b> , 471, 943-949	6.7	9
68	Iron(III) Ediketonates: CVD precursors for iron oxide film formation. <i>Inorganica Chimica Acta</i> , <b>2019</b> , 487, 1-8	2.7	9




67	Preparation and optical properties of polyethyleneimine-stabilized colloidal CdSe and CdS x Se <sub>1-x</sub> quantum dots. <i>Theoretical and Experimental Chemistry</i> , <b>2011</b> , 46, 416-421	1.3	8
66	Preparation and spectral properties of high-efficiency luminescent polyethylenimine-stabilized CdS quantum dots. <i>Theoretical and Experimental Chemistry</i> , <b>2010</b> , 46, 233-238	1.3	8
65	Dynamics of the radiative recombination of charge carriers in CdS nanoparticles stabilized with polyethyleneimine. <i>Theoretical and Experimental Chemistry</i> , <b>2010</b> , 46, 273-278	1.3	8
64	Laser-Induced Formation of CdS Crystallites in Cd-Doped Amorphous Arsenic Sulfide Thin Films. <i>Physica Status Solidi (B): Basic Research</i> , <b>2019</b> , 256, 1800298	1.3	8
63	Spectral and photophysical properties of size-selected ZnO nanocrystals coupled to single-layer carbon nitride sheets. <i>FlatChem</i> , <b>2017</b> , 2, 38-48	5.1	7
62	Raman study of flash-lamp annealed aqueous CuZnSnS nanocrystals. <i>Beilstein Journal of Nanotechnology</i> , <b>2019</b> , 10, 222-227	3	7
61	Structural and optical study of Zn-doped As <sub>2</sub> Se <sub>3</sub> thin films: Evidence for photoinduced formation of ZnSe nanocrystallites. <i>AIP Advances</i> , <b>2019</b> , 9, 065212	1.5	7
60	Surface-enhanced Raman scattering by colloidal CdSe nanocrystal submonolayers fabricated by the Langmuir-Blodgett technique. <i>Beilstein Journal of Nanotechnology</i> , <b>2015</b> , 6, 2388-95	3	7
59	Ultra-small aqueous glutathione-capped Ag-In-Se quantum dots: luminescence and vibrational properties.. <i>RSC Advances</i> , <b>2020</b> , 10, 42178-42193	3.7	7
58	Atomic Layer Deposition of Titanium Phosphate from Titanium Tetrachloride and Triethyl Phosphate onto Carbon Fibers. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1800423	4.6	7
57	Experimental and theoretical study of Raman scattering spectra of ternary chalcogenides Tl <sub>4</sub> HgI <sub>6</sub> , Tl <sub>4</sub> HgBr <sub>6</sub> , and TlHgCl <sub>3</sub> . <i>Journal of Raman Spectroscopy</i> , <b>2018</b> , 49, 1840-1848	2.3	6
56	Mercury-indium-sulfide nanocrystals: A new member of the family of ternary in based chalcogenides. <i>Journal of Chemical Physics</i> , <b>2019</b> , 151, 144701	3.9	6
55	Magnesium Eketoiminates as CVD precursors for MgO formation.. <i>RSC Advances</i> , <b>2018</b> , 8, 19668-19678	3.7	6
54	Phonon Spectra of Strongly Luminescent Nonstoichiometric Ag <sub>1-x</sub> Hg <sub>x</sub> , Cu <sub>1-x</sub> Hg <sub>x</sub> , and Hg <sub>1-x</sub> Nanocrystals of Small Size. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 15511-15522	3.8	5
53	Chemical vapor deposition of ruthenium-based layers by a single-source approach. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 2319-2328	7.1	5
52	Charge Carrier Transport, Trapping, and Recombination in PEDOT:PSS/n-Si Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 5983-5991	6.1	5
51	Hydrogen-induced sp <sup>2</sup> →sp <sup>3</sup> rehybridization in epitaxial silicene. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	5
50	Multifunctional Magneto-Plasmonic FeO/Au Nanocomposites: Approaching Magnetophoretically-Enhanced Photothermal Therapy. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	5

49	Experimental Studies and Modeling of Starlike Plasmonic Nanostructures for SERS Application. <i>Physica Status Solidi (B): Basic Research</i> , <b>2019</b> , 256, 1800280	1.3	5
48	Free-standing graphene monolayers in carbon-based composite obtained from SiC: Raman diagnostics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 1674-1678	1.6	4
47	In situ photoluminescence/Raman study of reversible photo-induced structural transformation of nc-Si. <i>Materials Research Express</i> , <b>2014</b> , 1, 045905	1.7	4
46	Modification by thermal annealing of the luminescent characteristics of CdSe quantum dots in gelatin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 1779-1782		4
45	Voltage-Controlled Dielectric Function of Bilayer Graphene. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2000868	1.1	4
44	Colloidal Cu <sub>2</sub> ZnSnS <sub>4</sub> -based and Ag-doped Nanocrystals: Synthesis and Raman Spectroscopy Study. <i>Physics and Chemistry of Solid State</i> , <b>2021</b> , 22, 260-268	1.9	4
43	Nanoantenna structures for the detection of phonons in nanocrystals. <i>Beilstein Journal of Nanotechnology</i> , <b>2018</b> , 9, 2646-2656	3	4
42	Deposition of an organic/inorganic hybrid material onto carbon fibers via the introduction of furfuryl alcohol into the atomic layer deposition process of titania and subsequent pyrolysis. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2017</b> , 35, 01B107	2.9	3
41	Raman study of laser-induced formation of II-VI nanocrystals in zinc-doped As <sub>2</sub> (Se) films. <i>Applied Nanoscience (Switzerland)</i> , <b>2020</b> , 10, 4831-4837	3.3	3
40	Many particle approach to excitons in crystals: Electron-electron and electron-phonon interactions. <i>Journal of Molecular Structure</i> , <b>2010</b> , 976, 205-214	3.4	3
39	Green synthesis of silver nanoparticles using aqueous extract of hot chili pepper fruits and its antimicrobial activity against <i>Pseudomonas aeruginosa</i> . <i>Ukrainian Biochemical Journal</i> , <b>2021</b> , 93, 102-110	0.7	3
38	Resonant tip-enhanced Raman scattering by CdSe nanocrystals on plasmonic substrates. <i>Nanoscale Advances</i> , <b>2020</b> , 2, 5441-5449	5.1	3
37	Resonant plasmon enhancement of light emission from CdSe/CdS nanoplatelets on Au nanodisk arrays. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 164708	3.9	3
36	Temperature Driven Plasmon-Exciton Coupling in Thermoresponsive Dextran-Graft-PNIPAM/Au Nanoparticle/CdTe Quantum Dots Hybrid Nanosystem. <i>Plasmonics</i> , <b>2021</b> , 16, 1137-1150	2.4	3
35	Raman Scattering Study of Mixed Quaternary Ag <sub>x</sub> GaxGe <sub>1-x</sub> Se <sub>2</sub> (0.167 ≤ x ≤ 0.333) Crystals. <i>Physica Status Solidi (B): Basic Research</i> , <b>2018</b> , 255, 1700230	1.3	3
34	Structure and vibrational spectra of ReSe <sub>2</sub> nanoplates. <i>Journal of Raman Spectroscopy</i> , <b>2020</b> , 51, 1305-1314	1.4	2
33	B <sub>2</sub> O <sub>3</sub> /SiO <sub>2</sub> /Phenolic Resin Hybrid Materials Produced by Simultaneous Twin Polymerization of Spiromonomers. <i>Macromolecular Chemistry and Physics</i> , <b>2018</b> , 219, 1700487	2.6	2
32	Photoelectrochemical Properties of Titanium Dioxide Nanoheterostructures with Low-Dimensional Cadmium Selenide Particles. <i>Theoretical and Experimental Chemistry</i> , <b>2016</b> , 52, 152-162	1.3	2



31	Transformation of epitaxial NiMnGa/InGaAs nanomembranes grown on GaAs substrates into freestanding microtubes. <i>RSC Advances</i> , <b>2016</b> , 6, 72568-72574	3.7	2
30	Resonant Raman scattering in ultrafine CdSxSe1-x colloidal particles. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2011</b> , 38, 48-51	0.5	2
29	Theoretical and experimental Raman study of superlattices with GeSi quantum dots. <i>European Physical Journal B</i> , <b>2010</b> , 74, 409-413	1.2	2
28	Exciton-phonon interaction in crystals and quantum size structures. <i>Journal of Physics: Conference Series</i> , <b>2007</b> , 92, 012061	0.3	2
27	Experimental and theoretical study of the influence of growth temperature on composition in self-assembled SiGe QD's. <i>Materials Science and Engineering C</i> , <b>2005</b> , 25, 565-569	8.3	2
26	Photoinduced Enhancement of Photoluminescence of Colloidal II-VI Nanocrystals in Polymer Matrices. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	2
25	Colloidal Cu-Zn-Sn-Te Nanocrystals: Aqueous Synthesis and Raman Spectroscopy Study. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	2
24	Raman and X-ray Photoelectron Spectroscopic Study of Aqueous Thiol-Capped Ag-Zn-Sn-S Nanocrystals. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
23	Long-Term Stability of Optical Properties of Colloidal CdSe Nanocrystals in Polymer Matrices. <i>International Journal of Nanoscience</i> , <b>2019</b> , 18, 1940052	0.6	1
22	Raman and Infrared Phonon Spectra of Novel Nonlinear Optical Materials PbGa2GeS6 and PbGa2GeSe6: Experiment and Theory. <i>Physica Status Solidi (B): Basic Research</i> , <b>2020</b> , 257, 1900700	1.3	1
21	Raman scattering in crystal multilayer structures with quantum dots: Theoretical and experimental study. <i>Superlattices and Microstructures</i> , <b>2010</b> , 48, 85-105	2.8	1
20	Structure and spectral-optical characteristics of Se, Se/CdS, and Se/Cd0.5Zn0.5S nanoparticles, stabilized in polymer-containing media. <i>Theoretical and Experimental Chemistry</i> , <b>2007</b> , 43, 28-34	1.3	1
19	Effect of surface energy minima on the shape of self-induced SiGe nanoislands. <i>Physica Status Solidi (B): Basic Research</i> , <b>2005</b> , 242, 2833-2837	1.3	1
18	Synthesis, Characterization, and Electrochemistry of Diferrocenyl Diketones, -Diketonates, and Pyrazoles. <i>Molecules</i> , <b>2020</b> , 25,	4.8	1
17	Room-Temperature Electron Paramagnetic Resonance Study of a Copper-Related Defect in Cu2ZnSnS4 Colloidal Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 9923-9929	3.8	1
16	Plasmon-Enhanced Near-Field Optical Spectroscopy of Multicomponent Semiconductor Nanostructures. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2019</b> , 55, 488-494	0.6	1
15	Self-assembly of semiconductor quantum dots with porphyrin chromophores: Energy relaxation processes and biomedical applications. <i>Journal of Molecular Structure</i> , <b>2021</b> , 1244, 131239	3.4	1
14	Ternary CdS1-xSex nanocrystals formed in Cd-doped AsBeS films due to photoenhanced diffusion during micro-Raman measurement. <i>Journal of Raman Spectroscopy</i> , <b>2021</b> , 52, 821-832	2.3	1

13	Spectroscopic Study of Phytosynthesized Ag Nanoparticles and Their Activity as SERS Substrate. <i>Chemosensors</i> , <b>2022</b> , 10, 129	4	1
12	Improved rectification and transport properties of hybrid PEDOT:PSS/Ge/Si heterojunctions with Ge nanoclusters. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 085503	2.5	0
11	Copper-Content Dependent Structural and Electrical Properties of CZTS Films Formed by Green Colloidal Nanocrystals. <i>Electronic Materials</i> , <b>2022</b> , 3, 136-153	0.8	0
10	Surfaces, Interfaces, and Nanostructures: Spectroscopic Characterization and Applications. <i>Physica Status Solidi (B): Basic Research</i> , <b>2019</b> , 256, 1900027	1.3	
9	Optical studies of the evolution of the core/shell interface in CdSe- and CdS-based core/shell nanostructures with a narrow-gap shell. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 402-406		
8	Strain relaxation in thin SiGe epilayers doped with carbon. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 253, 27-30	1.2	
7	The correlation between the surface-energy minima and the shape of self-induced SiGe nanoislands. <i>Semiconductors</i> , <b>2006</b> , 40, 385-390	0.7	
6	Spectral and photochemical characteristics of CdSe nanoparticles stabilized in polymer-containing media. <i>Theoretical and Experimental Chemistry</i> , <b>2006</b> , 42, 162-168	1.3	
5	Raman Scattering in Superlattices with Ge Quantum Dots. <i>Ukrainian Journal of Physics</i> , <b>2015</b> , 60, 1224-1233		
4	Analysis of scarlet elf cup ( <i>Sarcoscypha coccinea</i> ) carotenoids in vivo by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , <b>2021</b> , 52, 600-607	2.3	
3	Fermi resonance in a molecule adsorbed on plasmonic metal film. <i>Journal of Raman Spectroscopy</i> , <b>2021</b> , 52, 815-820	2.3	
2	 Allium cepa L.. <i>Reports National Academy of Science of Ukraine</i> , <b>2022</b> , 99-106	0.2	
1	Optical Properties and Lattice Dynamics of Pure and S-Alloyed Cu <sub>2</sub> SnS <sub>3</sub> Semiconductors: First-Principles Calculations and Raman Scattering. <i>Physica Status Solidi (B): Basic Research</i> , <b>2021</b> , 2100618	1.3	