Alexander G Milekhin

List of Publications by Year
in descending order

110	1,500	279487	377514
papers	citations	23 h-index	34 g-index

111	111	111	1777
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Giant gap-plasmon tip-enhanced Raman scattering of MoS₂monolayers on Au nanocluster arrays. Nanoscale, 2018, 10, 2755-2763.	2.8	70
2	Combination of surface- and interference-enhanced Raman scattering by CuS nanocrystals on nanopatterned Au structures. Beilstein Journal of Nanotechnology, 2015, 6, 749-754.	1.5	62
3	Raman- and IR-Active Phonons in CdSe/CdS Core/Shell Nanocrystals in the Presence of Interface Alloying and Strain. Journal of Physical Chemistry C, 2013, 117, 18225-18233.	1.5	60
4	Synthesis and Characterization of Cu_xS (x = 1â€“2) Nanocrystals Formed by the Langmuirâ€“Blodgett Technique. Journal of Physical Chemistry C, 2014, 118, 23409-23414.	1.5	57
5	Vibrational spectroscopy of compound semiconductor nanocrystals. Journal Physics D: Applied Physics, 2018, 51, 503001.	1.3	57
6	Resonant Raman studies of compositional and size dispersion of CdS1â^'xSexnanocrystals in a glass matrix. Journal of Physics Condensed Matter, 2004, 16, 9069-9082.	0.7	54
7	Spectral and luminescent properties of ZnOâ€“SiO₂ coreâ€“shell nanoparticles with size-selected ZnO cores. RSC Advances, 2014, 4, 63393-63401.	1.7	52
8	Raman and Infrared Phonon Spectra of Ultrasmall Colloidal CdS Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 19492-19497.	1.5	50
9	Morphology-induced phonon spectra of CdSe/CdS nanoplatelets: core/shell vs. coreâ€“crown. Nanoscale, 2016, 8, 17204-17212.	2.8	48
10	Surface- and tip-enhanced resonant Raman scattering from CdSe nanocrystals. Physical Chemistry Chemical Physics, 2015, 17, 21198-21203.	1.3	40
11	Surface enhanced Raman scattering of light by ZnO nanostructures. Journal of Experimental and Theoretical Physics, 2011, 113, 983-991.	0.2	38
12	Resonant Raman scattering of ZnS, ZnO, and ZnS/ZnO core/shell quantum dots. Applied Physics A: Materials Science and Processing, 2012, 107, 275-278.	1.1	38
13	Surface enhanced Raman scattering by CdS quantum dots. JETP Letters, 2008, 88, 799-801.	0.4	35
14	Optical vibrational modes in (Cd, Pb, Zn)S quantum dots embedded in Langmuirâ€“Blodgett matrices. Thin Solid Films, 2002, 422, 200-204.	0.8	34
15	Stark effect in type-II Ge/Si quantum dots. Physical Review B, 2003, 67, .	1.1	34
16	The role of a plasmonic substrate on the enhancement and spatial resolution of tip-enhanced Raman scattering. Faraday Discussions, 2019, 214, 309-323.	1.6	33
17	Interface phonons in InAs and AlAs quantum dot structures. Physical Review B, 2004, 70, .	1.1	32
18	FTIR-spectroscopy of (GaAS)n/(AlAs)m superlattices. Superlattices and Microstructures, 1993, 13, 115-123.	1.4	30

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19	Surface enhanced Raman scattering by organic and inorganic semiconductors formed on laterally ordered arrays of Au nanoclusters. Thin Solid Films, 2013, 543, 35-40.	0.8	26
20	Optical investigation of CdS quantum dots in Langmuir-Blodgett films. Applied Physics A: Materials Science and Processing, 1999, 69, 97-100.	1.1	25
21	Size-selective Raman scattering in self-assembled Ge/Si quantum dot superlattices. Nanotechnology, 2002, 13, 55-58.	1.3	25
22	Raman study of self-assembled SiGe nanoislands grown at low temperatures. Nanotechnology, 2005, 16, 1464-1468.	1.3	23
23	Raman Scattering for Probing Semiconductor Nanocrystal Arrays with a Low Areal Density. Journal of Physical Chemistry C, 2012, 116, 17164-17168.	1.5	23
24	Surface-enhanced Raman spectroscopy of semiconductor nanostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 75, 210-222.	1.3	22
25	Raman Spectroscopy and Electroreflectance Studies of Self-Assembled SiGe Nanoislands Grown at Various Temperatures. Physics of the Solid State, 2005, 47, 54.	0.2	21
26	A study of the vertical transport of electrons in (GaAs)n(AlAs)msuperlattices by Fourier transform infrared spectroscopy. Journal of Physics Condensed Matter, 1994, 6, 93-100.	0.7	19
27	Spectroscopy of the optical vibrational modes in GaAs/AlxGa1â^'xAs heterostructures with monolayer-wideAlxGa1â^'xAs barriers. Physical Review B, 1995, 52, 2610-2618.	1.1	19
28	Incorporation of zinc into CdS1?xSex nanocrystals in glass matrix studied by optical spectroscopies. Physica Status Solidi A, 2004, 201, 1578-1587.	1.7	19
29	Phonons in Ge/Si superlattices with Ge quantum dots. JETP Letters, 2001, 73, 461-464.	0.4	17
30	Vibrational spectroscopy of InAlAs epitaxial layers. Journal of Applied Physics, 2008, 104, .	1.1	17
31	Optical vibration modes in (Cd, Pb, Zn)S quantum dots in the Langmuir-Blodgett matrix. Physics of the Solid State, 2002, 44, 1976-1980.	0.2	16
32	Temperature-dependent Raman investigation of rolled up InGaAs/GaAs microtubes. Nanoscale Research Letters, 2012, 7, 594.	3.1	16
33	Phonon spectra of quaternary Cd_{1â€“y}Zn_y S_{1â€“x}Se_x semiconductor nanocrystals grown in a glass matrix. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2068-2071.	0.8	15
34	Surface-enhanced Raman scattering and gap-mode tip-enhanced Raman scattering investigations of phthalocyanine molecules on gold nanostructured substrates. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 04E110.	0.6	15
35	Interference-enhanced Raman scattering of F₁₆CuPc thin films. Journal Physics D: Applied Physics, 2016, 49, 115502.	1.3	15
36	Phonons in self-assembled Ge/Si structures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 982-985.	1.3	14

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37	Infrared spectroscopy of bonded silicon wafers. Semiconductors, 2006, 40, 1304-1313.	0.2	14
38	Interface phonons in semiconductor nanostructures with quantum dots. Journal of Experimental and Theoretical Physics, 2005, 101, 554-561.	0.2	13
39	CdZnS quantum dots formed by the Langmuirâ€“Blodgett technique. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, 04D109.	0.6	13
40	Resonant surface-enhanced Raman scattering by optical phonons in a monolayer of CdSe nanocrystals on Au nanocluster arrays. Applied Surface Science, 2016, 370, 410-417.	3.1	13
41	Localized Surface Plasmon Resonance in Gold Nanocluster Arrays on Opaque Substrates. Plasmonics, 2019, 14, 1527-1537.	1.8	13
42	Phonons in Ge/Si quantum dot structures: influence of growth temperature. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 464-468.	1.3	12
43	Raman scattering study of GaN nanostructures obtained by bottom-up and top-down approaches. Journal of Physics Condensed Matter, 2006, 18, 5825-5834.	0.7	12
44	IR spectroscopic study of SO 2 adsorption on polysiloxane layers containing tertiary amino groups. Thin Solid Films, 1995, 261, 296-298.	0.8	11
45	Resonant Raman scattering in nanostructures with InGaAs/AlAs quantum dots. JETP Letters, 2006, 83, 505-508.	0.4	11
46	Resonance effects in Raman scattering of quantum dots formed by the Langmuir-Blodgett method. Journal of Physics: Conference Series, 2010, 245, 012045.	0.3	11
47	Surface-Enhanced Infrared Absorption by Optical Phonons in Nanocrystal Monolayers on Au Nanoantenna Arrays. Journal of Physical Chemistry C, 2017, 121, 5779-5786.	1.5	11
48	Nanoantenna-assisted plasmonic enhancement of IR absorption of vibrational modes of organic molecules. Beilstein Journal of Nanotechnology, 2017, 8, 975-981.	1.5	11
49	Infrared light emission from GaAs MESFETs operating at avalanche breakdown conditions. Semiconductor Science and Technology, 2004, 19, S94-S95.	1.0	9
50	Resonant Raman scattering by strained and relaxed germanium quantum dots. Physics of the Solid State, 2004, 46, 92-96.	0.2	9
51	Resonant plasmon enhancement of light emission from CdSe/CdS nanoplatelets on Au nanodisk arrays. Journal of Chemical Physics, 2020, 153, 164708.	1.2	9
52	Growth of buried silicon oxide in Siâ€“Si bonded wafers upon annealing. Journal of Applied Physics, 2001, 89, 1992.	1.1	8
53	Resonant Raman scattering in GeSi/Si superlattices with GeSi quantum dots. JETP Letters, 2005, 81, 30-33.	0.4	8
54	Surface phonons in CdS1-xSexnanoparticles embedded in a dielectric medium. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2039-2042.	0.8	8

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55	Investigation of the properties of weakly reflective metamaterials with compensated chirality. Crystallography Reports, 2014, 59, 480-485.	0.1	8
56	Surface-enhanced Raman scattering by colloidal CdSe nanocrystal submonolayers fabricated by the Langmuirâ€“Blodgett technique. Beilstein Journal of Nanotechnology, 2015, 6, 2388-2395.	1.5	8
57	FTIR spectroscopy of longitudinal confined phonons and plasmon-phonon vibrational modes in GaAsn/AlAsm superlattices. Solid-State Electronics, 1994, 37, 613-616.	0.8	7
58	Optical phonon spectra of GaSb/AlSb superlattices: Influence of strain and interface roughnesses. Journal of Applied Physics, 1996, 80, 597-599.	1.1	7
59	Raman scattering of InAs/AlAs quantum dot superlattices grown on (001) and (311)B GaAs surfaces. Nanoscale Research Letters, 2012, 7, 476.	3.1	7
60	Localized surface plasmons in structures with linear Au nanoantennas on a SiO₂/Si surface. Beilstein Journal of Nanotechnology, 2016, 7, 1519-1526.	1.5	7
61	Nanoantenna structures for the detection of phonons in nanocrystals. Beilstein Journal of Nanotechnology, 2018, 9, 2646-2656.	1.5	7
62	Fourierâ€transform infrared and Raman spectroscopies of plasmon anisotropy in heavily doped GaAs/AlAs superlattices. Journal of Applied Physics, 1996, 79, 8024-8029.	1.1	6
63	Infrared study of Si surfaces and bonded Si wafers. Semiconductor Science and Technology, 1999, 14, 70-73.	1.0	6
64	Surface enhanced Raman scattering by GaN nanocolumns. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2065-2068.	0.8	6
65	Raman scattering on semiconductor microtubes. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2060-2063.	0.8	6
66	Resonant tip-enhanced Raman scattering by CdSe nanocrystals on plasmonic substrates. Nanoscale Advances, 2020, 2, 5441-5449.	2.2	6
67	Stretch Vibrations of CH2 as a Measure of Conformational and Lateral Orders in Fatty Acid and Phospholipid Layers. Optoelectronics, Instrumentation and Data Processing, 2018, 54, 538-545.	0.2	5
68	Anisotropy of zone-centre optical phonons in (GaAs)n/(AlAs)msuperlattices. Journal of Physics Condensed Matter, 1995, 7, 1493-1498.	0.7	4
69	Vibrational spectroscopy of InAs and AlAs quantum dot structures. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 241-246.	1.3	4
70	Localized optical vibrational modes in GaSb/AlSb superlattices. JETP Letters, 1996, 64, 393-397.	0.4	3
71	The formation of inas quantum dotsin an aluminum oxide matrix. Technical Physics Letters, 2002, 28, 554-556.	0.2	3
72	Optical phonons in InAs and AlAs quantum dot structures. Applied Surface Science, 2004, 234, 45-49.	3.1	3

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73	Surface-enhanced Raman scattering by semiconductor nanostructures. Optoelectronics, Instrumentation and Data Processing, 2013, 49, 504-513.	0.2	3
74	Phonons in Coreâ€“Shell CdSe/CdS Nanoplatelets Studied by Vibrational Spectroscopies. Journal of Physical Chemistry C, 2022, 126, 7107-7116.	1.5	3
75	Formation of Ge nanoislands on pure and oxidized Si surfaces by MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 360-363.	0.8	2
76	Raman study of interface phonons in InAs quantum dot structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2629-2633.	0.8	2
77	Resonant Raman scattering in InGaAs/AlAs quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3924-3927.	0.8	2
78	Plasmon-Enhanced Near-Field Optical Spectroscopy of Multicomponent Semiconductor Nanostructures. Optoelectronics, Instrumentation and Data Processing, 2019, 55, 488-494.	0.2	2
79	Fabrication of Au and Ag â€“ Coated AFM Probes for Tip-Enhanced Raman Spectroscopy. Journal of Physics: Conference Series, 2021, 2015, 012013.	0.3	2
80	Surface- and Tip-Enhanced Raman Scattering by CdSe Nanocrystals on Plasmonic Substrates. Nanomaterials, 2022, 12, 2197.	1.9	2
81	Atomic-scale characterization of interfaces in the GaAs/AlGaAs superlattices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1995, 35, 180-183.	1.7	1
82	Grating-coupler excited interface phonons in GaAs/AlAs superlattices. Solid State Communications, 1999, 112, 387-390.	0.9	1
83	IR reflection of optical phonons in GaN/AlGaN superlattices. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2733-2736.	0.8	1
84	Micro-Raman scattering by laser-modified structures with Ge/Si quantum dots. Physics of the Solid State, 2006, 48, 2183-2186.	0.2	1
85	Phonons in InAs quantum dot structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2033-2038.	0.8	1
86	Ge/Si Quantum Dots Superlattices Grown at Different Temperatures and Characterized by Raman Spectroscopy and Capacitance Measurements. Advances in Condensed Matter Physics, 2012, 2012, 1-7.	0.4	1
87	Low-frequency Raman scattering of light by silver nanoparticles. Optoelectronics, Instrumentation and Data Processing, 2013, 49, 287-292.	0.2	1
88	Study of phonons in self-assembled InAs quantum dots embedded in an InGaAlAs matrix. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 57, 1-5.	1.3	1
89	Effect of Post-Synthesis Heat Treatment of ZnO Nanoparticles in DMF on Their Size and Spectral and Luminescent Properties. Theoretical and Experimental Chemistry, 2016, 51, 358-365.	0.2	1
90	Brillouin Scattering From Langmuirâ€“Blodgett Films Doped With CdS and CuS Nanoclusters. Physica Status Solidi (B): Basic Research, 2019, 256, 1800328.	0.7	1

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91	Plasmon-Enhanced Vibrational Spectroscopy of Semiconductors Nanocrystals. Optoelectronics, Instrumentation and Data Processing, 2020, 56, 503-509.	0.2	1
92	Light Emission by Monolayers of Molybdenum Disulfide. Optoelectronics, Instrumentation and Data Processing, 2021, 57, 532-538.	0.2	1
93	IR characterization of thermal SiO2 layers. Thin Solid Films, 1992, 209, 174-175.	0.8	0
94	Real-time studies in mechanics, electronics, and medicine. Measurement Techniques, 1993, 36, 76-80.	0.2	0
95	Raman spectroscopy of self-assembled InAs quantum dots in wide-bandgap matrices of AlAs and aluminium oxide. Materials Research Society Symposia Proceedings, 2002, 737, 144.	0.1	0
96	STARK SPECTROSCOPY OF Ge/Si(001) SELF-ASSEMBLED QUANTUM DOTS. International Journal of Nanoscience, 2003, 02, 505-510.	0.4	0
97	Interface phonons of quantum dots in InAs/(Al,Ga)As heteroepitaxial system: a Raman study. AIP Conference Proceedings, 2005, , .	0.3	0
98	Electronic Raman Scattering in InAs/AlAs Quantum Dot Structures. AIP Conference Proceedings, 2007, , .	0.3	0
99	Raman scattering by porous structures with InAs quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 883-885.	0.8	0
100	Surface-enhanced Raman scattering by CdS quantum dots. , 2009, , .		0
101	Surface-enhanced Raman scattering by GaN and ZnO nanostructures. , 2010, , .		0
102	How to enhance Raman Scattering (RS) by nanoclusters: Desires and opportunities. , 2010, , .		0
103	Spectroscopic and Structural Insight into the Size-Dependent Behavior of the Nanophase. International Journal of Spectroscopy, 2012, 2012, 1-2.	1.4	0
104	Micro-Raman phonon scattering by InAs/AlAs quantum dot superlattices. Thin Solid Films, 2013, 543, 23-26.	0.8	0
105	Raman scattering for probing semiconductor nanostructures: From nanocrystal arrays towards a single nanocrystal. , 2013, , .		0
106	Application of surface-enhanced infrared spectroscopy for steroids analysis. , 2016, , .		0
107	Surface enhanced IR absorption by cortisol molecules. Journal of Physics: Conference Series, 2018, 1092, 012087.	0.3	0
108	Surface-enhanced infrared spectroscopy for cortisol analysis. , 2018, , .		0

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109	Plasmon Enhancement of Emission and Absorption by CdSe-based Nanocrystals. , 2021, , .		0
110	LIGHT EMISSION BY MONOLAYERS OF MOLYBDENUM DISULFIDE. Avtometriya, 2021, 57, 99-105.	0.0	0