Aleksey Arsenin

List of Publications by Year
in descending order

81	1,572	448610 19	355658 38
papers	citations	h-index	g-index

86	86	86	1950
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis of highly sensitive nanomaterial for ultra-fast photocatalytic activity: A detailed study on photocatalytic capabilities of rod-shaped TiS3 nanostructures. Catalysis Communications, 2022, 162, 106381.	1.6	8
2	Peculiarities and evolution of Raman spectra of multilayer Ge/Si(001) heterostructures containing arrays of lowâ€temperature MBEâ€grown Ge quantum dots of different size and number density: Experimental studies and numerical simulations. Journal of Raman Spectroscopy, 2022, 53, 853-862.	1.2	7
3	Detection of Hypertension-Induced Changes in Erythrocytes by SERS Nanosensors. Biosensors, 2022, 12, 32.	2.3	10
4	Investigation of structural and optical properties of MAPbBr₃monocrystals under fast electron irradiation. Journal of Materials Chemistry C, 2022, 10, 5821-5828.	2.7	11
5	Nonlinear Excitonâ€Mie Coupling in Transition Metal Dichalcogenide Nanoresonators. Laser and Photonics Reviews, 2022, 16, .	4.4	29
6	Broadband Optical Constants and Nonlinear Properties of SnS2 and SnSe2. Nanomaterials, 2022, 12, 141.	1.9	11
7	Topological phase singularities in atomically thin high-refractive-index materials. Nature Communications, 2022, 13, 2049.	5.8	43
8	Nanoscale Gallium Phosphide Epilayers on Sapphire for Low-Loss Visible Nanophotonics. ACS Applied Nano Materials, 2022, 5, 8846-8858.	2.4	7
9	Gas-Aggregated Copper Nanoparticles with Long-term Plasmon Resonance Stability. Plasmonics, 2021, 16, 333-340.	1.8	19
10	Spectroscopic ellipsometry of large area monolayer WS2 and WSe2 films. AIP Conference Proceedings, 2021, , .	0.3	4
11	Comparative analysis of optical properties of CVD graphene and graphite via spectroscopic ellipsometry. AIP Conference Proceedings, 2021, , .	0.3	0
12	Optical light confinement in terahertz antennas. AIP Conference Proceedings, 2021, , .	0.3	0
13	Plasmonic metasurfaces for probing two-dimensional materials. AIP Conference Proceedings, 2021, , .	0.3	0
14	Giant optical anisotropy in transition metal dichalcogenides for next-generation photonics. Nature Communications, 2021, 12, 854.	5.8	154
15	Biocompatible, Electroconductive, and Highly Stretchable Hybrid Silicone Composites Based on Few-Layer Graphene and CNTs. Nanomaterials, 2021, 11, 1143.	1.9	6
16	Directly grown crystalline gallium phosphide on sapphire for nonlinear all-dielectric nanophotonics. Applied Physics Letters, 2021, 118, .	1.5	37
17	Silicone Composites with CNT/Graphene Hybrid Fillers: A Review. Materials, 2021, 14, 2418.	1.3	8
18	Optical Constants and Structural Properties of Epitaxial MoS2 Monolayers. Nanomaterials, 2021, 11, 1411.	1.9	17

#	Article	IF	Citations
19	Halloysite Nanotubes with Immobilized Plasmonic Nanoparticles for Biophotonic Applications. Applied Sciences (Switzerland), 2021, 11, 4565.	1.3	7
20	Optical Constants of Chemical Vapor Deposited Graphene for Photonic Applications. Nanomaterials, 2021, 11, 1230.	1.9	26
21	Development of ultra-sensitive broadband photodetector: a detailed study on hidden photodetection-properties of TiS2 nanosheets. Journal of Materials Research and Technology, 2021, 14, 1243-1254.	2.6	16
22	Surface-enhanced raman spectroscopy on ultrathin gold/graphene substrates near the percolation threshold. AIP Conference Proceedings, 2021, , .	0.3	0
23	Photogating in graphene field-effect phototransistors: Theory and observations. AIP Conference Proceedings, 2021, , .	0.3	2
24	Comparison of CVD-grown and exfoliated graphene for biosensing applications. AIP Conference Proceedings, 2021, , .	0.3	5
25	Long-Term Stable Structures Formed by Ion-Beam Modification of Silver Film for SERS Applications. Journal of Physics: Conference Series, 2021, 2015, 012099.	0.3	3
26	UV/Ozone Treatment and Open-Air Copper Plasmonics. Journal of Physics: Conference Series, 2021, 2015, 012148.	0.3	2
27	Hybrid Metal-Dielectric-Metal Sandwiches for SERS Applications. Nanomaterials, 2021, 11, 3205.	1.9	8
28	Tungsten disulfide nanoparticles produced by femtosecond laser ablation in water for nanophotonic applications. Journal of Physics: Conference Series, 2021, 2015, 012155.	0.3	0
29	Broadband Optical Properties of Atomically Thin PtS2 and PtSe2. Nanomaterials, 2021, 11, 3269.	1.9	13
30	Vertically Coupled Plasmonic Racetrack Ring Resonator for Biosensor Applications. Sensors, 2020, 20, 203.	2.1	23
31	Spectral ellipsometry of monolayer transition metal dichalcogenides: Analysis of excitonic peaks in dispersion. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, .	0.6	51
32	Near-field characterization of ultra-thin metal films. Journal of Physics: Conference Series, 2020, 1461, 012193.	0.3	2
33	Optical properties of thin graphene oxide films and their biosensing applications. Journal of Physics: Conference Series, 2020, 1461, 012068.	0.3	3
34	Plasmonic properties of nanostructured graphene with silver nanoparticles. Journal of Physics: Conference Series, 2020, 1461, 012119.	0.3	2
35	Ultra-thin gold films: towards 2D metals for photonic and optoelectronic applications. Journal of Physics: Conference Series, 2020, 1461, 012184.	0.3	0
36	Excitonic nature of dispersion of two-dimensional transition metal dichalcogenides and effect of annealing on excitons. Journal of Physics: Conference Series, 2020, 1461, 012036.	0.3	0

#	Article	IF	Citations
37	Fractal Shaped Periodic Metal Nanostructures Atop Dielectric-Metal Substrates for SERS Applications. ACS Photonics, 2020, 7, 1708-1715.	3.2	25
38	Substrate effects in graphene field-effect transistor photodetectors. Journal of Physics: Conference Series, 2020, 1461, 012188.	0.3	1
39	Broadband optical properties of monolayer and bulk MoS2. Npj 2D Materials and Applications, 2020, 4, .	3.9	112
40	Surface-Enhanced Raman Spectroscopy on Hybrid Graphene/Gold Substrates near the Percolation Threshold. Nanomaterials, 2020, 10, 164.	1.9	17
41	Plasmonic nanojet: an experimental demonstration. Optics Letters, 2020, 45, 3244.	1.7	23
42	Plasmonic nanojet: an experimental demonstration: publisherâ€™s note. Optics Letters, 2020, 45, 3418.	1.7	3
43	Lasing at the nanoscale: coherent emission of surface plasmons by an electrically driven nanolaser. Nanophotonics, 2020, 9, 3965-3975.	2.9	12
44	Ultrathin and Ultrasmooth Gold Films on Monolayer MoS₂. Advanced Materials Interfaces, 2019, 6, 1900196.	1.9	45
45	Superior Sensitivity of Copper-Based Plasmonic Biosensors. Langmuir, 2018, 34, 4681-4687.	1.6	60
46	Morphology and effective dielectric functions of ultra-thin gold films. Journal of Physics: Conference Series, 2018, 1092, 012167.	0.3	5
47	Graphene oxide linking layers for highly sensitive SPR biosensing of small molecules. Materials Today: Proceedings, 2018, 5, 17437-17441.	0.9	4
48	SPR analysis of antibody-antigen interactions using graphene oxide linking layers. Materials Today: Proceedings, 2018, 5, 17442-17446.	0.9	4
49	Integrated plasmonic biosensors based on microring resonators. Journal of Physics: Conference Series, 2018, 1092, 012162.	0.3	1
50	Hybrid graphene-nanometallic structures. Journal of Physics: Conference Series, 2018, 1092, 012161.	0.3	7
51	Graphene-Supported Thin Metal Films for Nanophotonics and Optoelectronics. Nanomaterials, 2018, 8, 1058.	1.9	16
52	Influence of the crystalline structure of metal films on the performance of plasmonic biosensors. Journal of Physics: Conference Series, 2018, 1092, 012143.	0.3	1
53	CHAPTER 12. Chemically Derived Graphene for Surface Plasmon Resonance Biosensing. RSC Nanoscience and Nanotechnology, 2018, , 328-353.	0.2	3
54	Optical constant of thin gold films: Structural morphology determined optical response. AIP Conference Proceedings, 2017, , .	0.3	17

#	Article	IF	Citations
55	Novel graphene-oxide-coated SPR interfaces for biosensing applications. AIP Conference Proceedings, 2017, , .	0.3	7
56	Optical constants and structural properties of thin gold films. Optics Express, 2017, 25, 25574.	1.7	265
57	Full loss compensation in hybrid plasmonic waveguides under electrical pumping. Optics Express, 2015, 23, 19358.	1.7	27
58	Highly Sensitive and Selective Sensor Chips with Graphene-Oxide Linking Layer. ACS Applied Materials & Interfaces, 2015, 7, 21727-21734.	4.0	140
59	Self-consistent surface charges and electric field in p-i-n tunneling transit-time diodes based on single- and multiple-layer graphene structures. Journal of Physics: Conference Series, 2014, 486, 012011.	0.3	0
60	Effect of self-consistent electric field on characteristics of graphene p-i-n tunneling transit-time diodes. Journal of Applied Physics, 2013, 113, .	1.1	10
61	GRAPHENE TUNNELING TRANSIT-TIME DIODES: CONCEPT, CHARACTERISTICS, AND ULTIMATE PERFORMANCE. , 2013, , .		0
62	Surface Plasmon Polariton Amplification upon Electrical Injection in Highly Integrated Plasmonic Circuits. Nano Letters, 2012, 12, 2459-2463.	4.5	86
63	Excitation of mechanical oscillations in double-carbon-nanotube system by terahertz radiation. , 2012, , .		0
64	Graphene nanoribbon based AM demodulator of terahertz radiation. , 2012, , .		0
65	Carbon nanotube based resonant detector of modulated terahertz radiation. Technical Physics, 2012, 57, 63-68.	0.2	2
66	Detection of Modulated Terahertz Radiation Using Combined Plasma and Mechanical Resonances in Double-Carbon-Nanotube Device. Applied Physics Express, 2011, 4, 075101.	1.1	5
67	Auâ^•InAs Surface Plasmon Polariton Amplifier and SPASER. , 2011, , .		0
68	Surface plasmon polariton amplification in metal-semiconductor structures. Optics Express, 2011, 19, 12524.	1.7	45
69	Parametric instability in the resonance detector of terahertz radiation based on FET with cylindrical gate electrode. Journal of Communications Technology and Electronics, 2011, 56, 1242-1248.	0.2	1
70	Plasma oscillations of the two-dimensional electron gas in the field-effect transistor with a cylindrical gate electrode. Journal of Communications Technology and Electronics, 2010, 55, 1285-1294.	0.2	6
71	Backward waves in planar insulatorâ€“metalâ€“insulator waveguide structures. Journal of Optics (United Kingdom), 2010, 12, 015002.	1.0	20
72	Stored light in a plasmonic nanocavity based on extremely-small-energy-velocity modes. Photonics and Nanostructures - Fundamentals and Applications, 2010, 8, 264-272.	1.0	4

#	Article	IF	Citations
73	Semiconductor Surface Plasmon Amplifier Based on a Schottky Barrier Diode. , 2010, , .		7
74	Transmission of surface plasmon polaritons through a nanowire array: mechano-optical modulation and motion sensing. Optics Express, 2010, 18, 20115.	1.7	9
75	Detection of ultrashort pulses with a plasmonic nanocavity based on the insulator-insulator-metal waveguide. , 2010, , .		1
76	Surface plasmonâ€"polaritons with negative and zero group velocities propagating in thin metal films. Quantum Electronics, 2009, 39, 745-750.	0.3	27
77	Stored Light in a Plasmonic Nanocavity Based on Extremely-Small-Energy-Velocity Mode. , 2009, , .		2
78	Parametric instability in a nanoelectromechanical detector of modulated terahertz radiation on the basis of a high electron mobility transistor with a mobile elastic gate. Journal of Communications Technology and Electronics, 2009, 54, 1322-1330.	0.2	5
79	Local Electron Cyclotron Resonance in a Very High Frequency Neutral Loop Discharge. , 2007, , .		0
80	On the mechanism of generation of terahertz electromagnetic radiation upon irradiation of a nanostructured metal surface by femtosecond laser pulses. Quantum Electronics, 2007, 37, 1166-1168.	0.3	3
81	Heating of electrons in a high-frequency inductive neutral-loop discharge. Journal of Communications Technology and Electronics, 2007, 52, 906-909.	0.2	0