Valeriy Gerasimov

List of Publications by Year
in descending order

47 papers	576 citations	686830 13 h-index	642321 23 g-index
49 all docs	49 docs citations	49 times ranked	477 citing authors

#	Article	IF	Citations
1	Refractive index sensing with optical bound states in the continuum. Optics Express, 2020, 28, 38907.	1.7	90
2	Electromagnetic density of states and absorption of radiation by aggregates of nanospheres with multipole interactions. Physical Review B, 2004, 70, .	1.1	49
3	Collective lattice resonances in arrays of dielectric nanoparticles: a matter of size. Optics Letters, 2019, 44, 5743.	1.7	47
4	Local anisotropy and giant enhancement of local electromagnetic fields in fractal aggregates of metal nanoparticles. Physical Review B, 2005, 72, .	1.1	43
5	Titanium nitride as light trapping plasmonic material in silicon solar cell. Optical Materials, 2017, 72, 397-402.	1.7	38
6	Refractory titanium nitride two-dimensional structures with extremely narrow surface lattice resonances at telecommunication wavelengths. Applied Physics Letters, 2017, 111, .	1.5	37
7	Engineering mode hybridization in regular arrays of plasmonic nanoparticles embedded in 1D photonic crystal. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 224, 303-308.	1.1	22
8	Collective Lattice Resonances in All-Dielectric Nanostructures under Oblique Incidence. Photonics, 2020, 7, 24.	0.9	19
9	Suppression of surface plasmon resonance in Au nanoparticles upon transition to the liquid state. Optics Express, 2016, 24, 26851.	1.7	18
10	Engineering novel tunable optical high-Q nanoparticle array filters for a wide range of wavelengths. Optics Express, 2020, 28, 1426.	1.7	18
11	Spectroscopic studies of fractal aggregates of silver nanospheres undergoing local restructuring. Journal of Chemical Physics, 2006, 125, 111101.	1.2	17
12	Thermal effects in systems of colloidal plasmonic nanoparticles in high-intensity pulsed laser fields [Invited]. Optical Materials Express, 2017, 7, 555.	1.6	16
13	Plasmonic lattice Kerker effect in ultraviolet-visible spectral range. Physical Review B, 2021, 103, .	1.1	16
14	Surface plasmon resonances in liquid metal nanoparticles. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	12
15	Super-efficient laser hyperthermia of malignant cells with core-shell nanoparticles based on alternative plasmonic materials. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 236, 106599.	1.1	10
16	Mode coupling in arrays of Al nanoparticles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 248, 106961.	1.1	10
17	Multipolar Lattice Resonances in Plasmonic Finite-Size Metasurfaces. Photonics, 2021, 8, 109.	0.9	10
18	The origin of anomalous enhancement of electromagnetic fields in fractal aggregates of metal nanoparticles. Colloid Journal, 2007, 69, 159-169.	0.5	9

#	Article	IF	Citations
19	Titanium nitride nanoparticles as an alternative platform for plasmonic waveguides in the visible and telecommunication wavelength ranges. Photonics and Nanostructures - Fundamentals and Applications, 2018, 30, 50-56.	1.0	9
20	General principles of the crystallization of nanostructured disperse systems. Colloid Journal, 2009, 71, 313-328.	0.5	8
21	Optimization of photothermal methods for laser hyperthermia of malignant cells using bioconjugates of gold nanoparticles. Colloid Journal, 2016, 78, 435-442.	0.5	7
22	Plasmonic Enhancement of Local Fields in Ultrafine Metal Nanoparticles. Journal of Physical Chemistry C, 2021, 125, 13900-13908.	1.5	6
23	Thermal degradation of optical resonances in plasmonic nanoparticles. Nanoscale, 2022, 14, 433-447.	2.8	6
24	Simulation of the growth of nanoparticle aggregates reproducing their natural structure in disperse systems. Colloid Journal, 2006, 68, 441-450.	0.5	5
25	Experimental manifestations of the correlation between the local structure of silver nanoparticle aggregates and their absorption spectra. Colloid Journal, 2007, 69, 170-179.	0.5	5
26	Thermal limiting effects in optical plasmonic waveguides. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 191, 1-6.	1.1	5
27	Substrate-mediated lattice Kerker effect in Al metasurfaces. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C78.	0.9	5
28	Defects of colloidal crystals. Colloid Journal, 2009, 71, 329-339.	0.5	4
29	Physical principles of the formation of a nanoparticle electric double layer in metal hydrosols. Colloid and Polymer Science, 2020, 298, 1-7.	1.0	4
30	Ring of bound states in the continuum in the reciprocal space of a monolayer of high-contrast dielectric spheres. Physical Review B, 2022, 105, .	1.1	4
31	Temperature dependent elastic repulsion of colloidal nanoparticles with a polymer adsorption layer. Colloid and Polymer Science, 2018, 296, 1689-1697.	1.0	3
32	Charge transfer plasmons in the arrays of nanoparticles connected by conductive linkers. Journal of Chemical Physics, 2021, 154, 084123.	1.2	3
33	Effect of defects of plasmon resonance colloidal crystals on their extinction spectra. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2010, 109, 372-378.	0.2	2
34	Thermal effects in systems of colloidal plasmonic nanoparticles in high-intensity pulsed laser fields [Invited]: publisherâ€™s note. Optical Materials Express, 2017, 7, 799.	1.6	2
35	Part I. Nanobubbles in pulsed laser fields for anticancer therapy: in search of adequate models and simulation approaches. Journal Physics D: Applied Physics, 2022, 55, 175401.	1.3	2
36	Part II. Nanobubbles around plasmonic nanoparticles in terms of modern simulation modeling: what makes them kill the malignant cells?. Journal Physics D: Applied Physics, 2022, 55, 175402.	1.3	2

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37	Problems of the formation of resource-saving and environmentally oriented system â€œAgricultural recyclingâ€•in the agro-industrial complex. IOP Conference Series: Earth and Environmental Science, 2022, 981, 032003.	0.2	2
38	Spontaneous crystallization of nanocolloids. Doklady Physics, 2009, 54, 51-54.	0.2	1
39	Synthesis and properties of cystaminium salts with d-metal acid and tetrahalide anions. Russian Journal of Inorganic Chemistry, 2013, 58, 559-562.	0.3	1
40	Processes underlying the laser photochromic effect in colloidal plasmonic nanoparticle aggregates. Chinese Physics B, 2020, 29, 037802.	0.7	1
41	THE CONCEPT OF RECYCLING OF AGRICULTURAL MACHINERY AND THE GENERAL PRINCIPLES OF ITS IMPLEMENTATION. TehniÄeskij Servis MaÅ¡in, 2021, 3, 72-81.	0.0	1
42	Kinetics of the crystallization of nanostructured disperse systems. Colloid Journal, 2009, 71, 340-344.	0.5	0
43	Effect of electron tunneling on the crystallization of nanostructured metal sols. Colloid Journal, 2009, 71, 345-352.	0.5	0
44	Variation of extinction spectra of plasmon resonance colloidal crystals upon structural transitions. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2010, 109, 379-382.	0.2	0
45	Evolution of extinction spectra of plasmon resonance nanocolloids in the process of their crystallization. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2010, 109, 383-391.	0.2	0
46	Variations arising in extinction spectra of nanoparticle aggregates upon deformation during deposition on planar dielectric substrate. Colloid Journal, 2011, 73, 206-215.	0.5	0
47	Collective resonances in hybrid photonic-plasmonic nanostructures. Journal of Physics: Conference Series, 2020, 1461, 012046.	0.3	0