Liubov A Osminkina

List of Publications by Year
in descending order

87 papers	2,011 citations	236925 25 h-index	265206 42 g-index
90 all docs	90 docs citations	90 times ranked	2053 citing authors

#	Article	IF	Citations
1	Nonresonant CARS Imaging of Porous and Solid Silicon Nanoparticles in Human Cells. ACS Biomaterials Science and Engineering, 2022, 8, 4185-4195.	5.2	2
2	Antiviral adsorption activity of porous silicon nanoparticles against different pathogenic human viruses. Bioactive Materials, 2022, 7, 39-46.	15.6	18
3	Surface-Enhanced Raman Scattering-Active Gold-Decorated Silicon Nanowire Substrates for Label-Free Detection of Bilirubin. ACS Biomaterials Science and Engineering, 2022, 8, 4175-4184.	5.2	14
4	Composition and electronic structure of porous silicon nanoparticles after oxidation under air- or freeze-drying conditions. Materials Letters, 2022, 312, 131608.	2.6	2
5	Quantum-Confinement Effect in Silicon Nanocrystals during Their Dissolution in Model Biological Fluids. Semiconductors, 2021, 55, 61-65.	0.5	2
6	Third optical harmonic generation reveals circular anisotropy in tilted silicon nanowire array. Optics Letters, 2021, 46, 1189.	3.3	0
7	Influence of H_2O_2 concentration on the structural and photoluminescent properties of porous silicon nanowires fabricated by metal-assisted chemical etching. Materials Science in Semiconductor Processing, 2021, 125, 105644.	4.0	14
8	Optical Monitoring of the Biodegradation of Porous and Solid Silicon Nanoparticles. Nanomaterials, 2021, 11, 2167.	4.1	5
9	Porous silicon in photodynamic and photothermal therapy. , 2021, , 517-544.		1
10	The effects of drying technique and surface pre-treatment on the cytotoxicity and dissolution rate of luminescent porous silicon quantum dots in model fluids and living cells. Faraday Discussions, 2020, 222, 318-331.	3.2	9
11	Gold nanoflowers grown in a porous Si/SiO_2 matrix: The fabrication process and plasmonic properties. Applied Surface Science, 2020, 507, 144989.	6.1	23
12	Raman Signal Enhancement Tunable by Gold-Covered Porous Silicon Films with Different Morphology. Sensors, 2020, 20, 5634.	3.8	11
13	Silicon nanostructures for sensing and bioimaging: general discussion. Faraday Discussions, 2020, 222, 384-389.	3.2	1
14	Biodegradation model of porous silicon nanoparticles. Colloids and Surfaces B: Biointerfaces, 2020, 190, 110946.	5.0	16
15	H1N1 influenza virus interaction with a porous layer of silicon nanowires. Materials Research Express, 2020, 7, 035002.	1.6	10
16	Double etched porous silicon nanowire arrays for impedance sensing of influenza viruses. Results in Materials, 2020, 6, 100084.	1.8	8
17	Radiofrequency Hyperthermia of Cancer Cells Enhanced by Silicic Acid Ions Released During the Biodegradation of Porous Silicon Nanowires. ACS Omega, 2019, 4, 10662-10669.	3.5	16
18	Biodegradable Porous Silicon Nanocontainers as an Effective Drug Carrier for Regulation of the Tumor Cell Death Pathways. ACS Biomaterials Science and Engineering, 2019, 5, 6063-6071.	5.2	13

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19	Rapid detection of the bacterial biomarker pyocyanin in artificial sputum using a SERS-active silicon nanowire matrix covered by bimetallic noble metal nanoparticles. Talanta, 2019, 202, 171-177.	5.5	44
20	Formation of Si/SiO2 Luminescent Quantum Dots From Mesoporous Silicon by Sodium Tetraborate/Citric Acid Oxidation Treatment. Frontiers in Chemistry, 2019, 7, 165.	3.6	22
21	Photoacoustic characterization of nanowire arrays formed by metal-assisted chemical etching of crystalline silicon substrates with different doping level. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 107, 131-136.	2.7	17
22	Silver nanostructures evolution in porous SiO2/p-Si matrices for wide wavelength surface-enhanced Raman scattering applications. MRS Communications, 2018, 8, 95-99.	1.8	33
23	Porous Silicon Nanowire Arrays for Reversible Optical Gas Sensing. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700565.	1.8	18
24	Structural and Optical Properties of Silicon Nanowire Arrays Fabricated by Metal Assisted Chemical Etching With Ammonium Fluoride. Frontiers in Chemistry, 2018, 6, 653.	3.6	13
25	Porous Silicon Suspensions and Colloids. , 2018, , 227-245.		5
26	Antimicrobial Effect of Biocompatible Silicon Nanoparticles Activated Using Therapeutic Ultrasound. Langmuir, 2017, 33, 2603-2609.	3.5	27
27	Cytotoxicity control of silicon nanoparticles by biopolymer coating and ultrasound irradiation for cancer theranostic applications. Nanotechnology, 2017, 28, 105102.	2.6	51
28	Electrolytic conductivity-related radiofrequency heating of aqueous suspensions of nanoparticles for biomedicine. Physical Chemistry Chemical Physics, 2017, 19, 11510-11517.	2.8	10
29	Effects of photon enhanced lifetime and form anisotropy in silicon nanowire arrays on efficiency of nonlinear-optical processes. AIP Conference Proceedings, 2017, , .	0.4	0
30	Recycling of silicon: from industrial waste to biocompatible nanoparticles for nanomedicine. Materials Research Express, 2017, 4, 095026.	1.6	20
31	Double Etched Porous Silicon Films for Improved Optical Sensing of Bacteria. Journal of the Electrochemical Society, 2017, 164, B581-B584.	2.9	8
32	Sonosensitizing properties of silicon nanoparticles. Series in Materials Science and Engineering, 2017, , 329-346.	0.1	0
33	Linear and Non-Linear Optical Imaging of Cancer Cells with Silicon Nanoparticles. International Journal of Molecular Sciences, 2016, 17, 1536.	4.1	32
34	Silicon Nanoparticles as Amplifiers of the Ultrasonic Effect in Sonodynamic Therapy. Bulletin of Experimental Biology and Medicine, 2016, 161, 296-299.	0.8	20
35	Porous Silicon as a Sensitizer for Biomedical Applications. Open Material Sciences, 2016, 3, .	0.8	6
36	Laser-synthesized oxide-passivated bright Si quantum dots for bioimaging. Scientific Reports, 2016, 6, 24732.	3.3	70

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37	Studies of silicon nanoparticles uptake and biodegradation in cancer cells by Raman spectroscopy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1931-1940.	3.3	70
38	Temperature responsive porous silicon nanoparticles for cancer therapy â€“ spatiotemporal triggering through infrared and radiofrequency electromagnetic heating. Journal of Controlled Release, 2016, 241, 220-228.	9.9	58
39	Optical Properties of Silicon Nanowires Fabricated by Environment-Friendly Chemistry. Nanoscale Research Letters, 2016, 11, 357.	5.7	27
40	Si nanoparticles as sensitizers for radio frequency-induced cancer hyperthermia. Proceedings of SPIE, 2016, , .	0.8	2
41	Optical Diagnostics of Porous Silicon Nanoparticles Biodegradation. ECS Meeting Abstracts, 2016, , .	0.0	0
42	Porous Silicon Suspensions and Colloids. , 2016, , 1-19.		1
43	Lowering of the cavitation threshold in aqueous suspensions of porous silicon nanoparticles for sonodynamic therapy applications. Applied Physics Letters, 2015, 107, .	3.3	42
44	Porous silicon nanoparticles as biocompatible contrast agents for magnetic resonance imaging. Applied Physics Letters, 2015, 107, .	3.3	52
45	Porous silicon nanoparticles as efficient sensitizers for sonodynamic therapy of cancer. Microporous and Mesoporous Materials, 2015, 210, 169-175.	4.4	89
46	Raman diagnostics of photoinduced heating of silicon nanowires prepared by metal-assisted chemical etching. Applied Physics B: Lasers and Optics, 2015, 121, 337-344.	2.2	20
47	Structural and photoluminescent properties of nanowires formed by the metal-assisted chemical etching of monocrystalline silicon with different doping level. Semiconductors, 2015, 49, 1025-1029.	0.5	16
48	Optical properties of nanowire structures produced by the metal-assisted chemical etching of lightly doped silicon crystal wafers. Semiconductors, 2014, 48, 1613-1618.	0.5	11
49	Nanoparticles prepared from porous silicon nanowires for bio-imaging and sonodynamic therapy. Nanoscale Research Letters, 2014, 9, 463.	5.7	62
50	Porous silicon nanoparticles as scavengers of hazardous viruses. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	51
51	Radio frequency radiation-induced hyperthermia using Si nanoparticle-based sensitizers for mild cancer therapy. Scientific Reports, 2014, 4, 7034.	3.3	150
52	Porous silicon nanoparticles as sensitizers for ultrasonic hyperthermia. Applied Physics Letters, 2013, 103, .	3.3	82
53	Optical properties of serum albumin water solutions, containing mesoporous silicon particles. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2013, 115, 166-170.	0.6	3
54	Enhanced photoluminescence of porous silicon nanoparticles coated by bioresorbable polymers. Nanoscale Research Letters, 2012, 7, 446.	5.7	42

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55	Optical properties of silicon nanowire arrays formed by metal-assisted chemical etching: evidences for light localization effect. Nanoscale Research Letters, 2012, 7, 524.	5.7	58
56	Coherent anti-Stokes Raman scattering in silicon nanowire ensembles. Laser Physics Letters, 2012, 9, 145-150.	1.4	23
57	Photoluminescent biocompatible silicon nanoparticles for cancer theranostic applications. Journal of Biophotonics, 2012, 5, 529-535.	2.3	74
58	Growth, Structure and Optical Properties of Silicon Nanowires Formed by Metal-Assisted Chemical Etching. Journal of Nanoelectronics and Optoelectronics, 2012, 7, 602-606.	0.5	27
59	Interaction of silicon nanoparticles with the molecules of bovine serum albumin in aqueous solutions. Quantum Electronics, 2011, 41, 393-395.	1.0	0
60	Photosensitized generation of singlet oxygen in porous silicon studied by simultaneous measurements of luminescence of nanocrystals and oxygen molecules. Journal of Applied Physics, 2011, 110, 013707.	2.5	16
61	Photosensitized generation of singlet oxygen in powders and aqueous suspensions of silicon nanocrystals. Semiconductors, 2011, 45, 1059-1063.	0.5	17
62	Effects of Nanostructurized Silicon on Proliferation of Stem and Cancer Cell. Bulletin of Experimental Biology and Medicine, 2011, 151, 79-83.	0.8	15
63	Silicon nanocrystals as photo- and sono-sensitizers for biomedical applications. Applied Physics B: Lasers and Optics, 2011, 105, 665-668.	2.2	60
64	Detection of singlet oxygen in photoexcited porous silicon nanocrystals by photoluminescence measurements. Semiconductors, 2010, 44, 89-92.	0.5	14
65	Evaluation of Genotoxicity and Reproductive Toxicity of Silicon Nanocrystals. Bulletin of Experimental Biology and Medicine, 2010, 149, 445-449.	0.8	37
66	<title>Silicon nanocrystals as efficient photosensitizer of singlet oxygen for biomedical applications</title>. , 2007, , .		7
67	Influence of iodine molecule adsorption on electronic properties of porous silicon studied by FTIR and EPR spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2121-2125.	0.8	1
68	Effect of ammonia adsorption on charge carriers in mesoporous silicon of n- and p-type conductivity. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2126-2130.	0.8	1
69	Dependence of the singlet oxygen photosensitization efficiency on morphology of porous silicon. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1271-1275.	1.8	26
70	Control of charge carrier density in mesoporous silicon by adsorption of active molecules. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1404-1407.	1.8	3
71	Modification of the properties of porous silicon on adsorption of iodine molecules. Semiconductors, 2007, 41, 953-957.	0.5	12
72	Electron-paramagnetic resonance and photoluminescence study of Si nanocrystals-photosensitizers of singlet oxygen molecules. Journal of Non-Crystalline Solids, 2006, 352, 1156-1159.	3.1	24

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73	Silicon nanocrystals as photosensitizers of active oxygen for biomedical applications. JETP Letters, 2006, 83, 423-426.	1.4	95
74	The role of boron impurity in the activation of free charge carriers in layers of porous silicon during the adsorption of acceptor molecules. Semiconductors, 2005, 39, 347-350.	0.5	9
75	Influence of Pyridine Molecule Adsorption on Concentrations of Free Carriers and Paramagnetic Centers in Porous Silicon Layers. Semiconductors, 2005, 39, 458.	0.5	1
76	Effect of the Initial Doping Level on Changes in the Free-Carrier Concentration in Porous Silicon during Ammonia Adsorption. Semiconductors, 2005, 39, 1338.	0.5	3
77	Strong anisotropy of lateral electrical transport in (110) porous silicon films. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3404-3408.	0.8	9
78	Anisotropy of infrared absorption in (110) porous silicon layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3461-3465.	0.8	9
79	Optical study of equilibrium charge carriers in mesoporous silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3495-3499.	0.8	0
80	Influence of NO2molecule adsorption on free charge carriers and spin centers in porous silicon. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 1592-1596.	1.8	13
81	Chemical Modification of a Porous Silicon Surface Induced by Nitrogen Dioxide Adsorption. Journal of Physical Chemistry B, 2005, 109, 4684-4693.	2.6	12
82	Interaction of infrared radiation with free carriers in mesoporous silicon. Semiconductors, 2004, 38, 581-587.	0.5	6
83	Specific features of electrical transport in anisotropically nanostructured silicon. Semiconductors, 2004, 38, 603-606.	0.5	9
84	Effect of adsorption of the donor and acceptor molecules at the surface of porous silicon on the recombination properties of silicon nanocrystals. Semiconductors, 2004, 38, 1344-1349.	0.5	9
85	Interaction of nitrogen dioxide molecules with the surface of silicon nanocrystals in porous silicon layers. Journal of Experimental and Theoretical Physics, 2004, 99, 741-748.	0.9	7
86	Anisotropy of optical absorption in birefringent porous silicon. Physical Review B, 2003, 67, .	3.2	60
87	Study of birefringence in porous silicon layers by IR Fourier spectroscopy. Physics of the Solid State, 2002, 44, 811-815.	0.6	15