

# Konstantin Sokolov

## List of Publications by Year in Descending Order

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

131 papers	8,025 citations	45 h-index	88 g-index
152 ext. papers	8,825 ext. citations	5.8 avg, IF	5.73 L-index

#	Paper	IF	Citations
131	Photoacoustic Imaging with Plasmonic Nanoparticles <b>2022</b> , 325-370		
130	Prospecting Cellular Gold Nanoparticle Biomineralization as a Viable Alternative to Prefabricated Gold Nanoparticles.. <i>Advanced Science</i> , <b>2022</b> , e2105957	13.6	1
129	Fate of Antibody-Targeted Ultrasmall Gold Nanoparticles in Cancer Cells after Receptor-Mediated Uptake. <i>ACS Nano</i> , <b>2021</b> , 15, 9495-9508	16.7	2
128	Clinically translatable quantitative molecular photoacoustic imaging with liposome-encapsulated ICG J-aggregates. <i>Nature Communications</i> , <b>2021</b> , 12, 5410	17.4	10
127	Roadmap for metal nanoparticles in radiation therapy: current status, translational challenges, and future directions. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 21RM02	3.8	45
126	Repetitive optical coherence elastography measurements with blinking nanobombs. <i>Biomedical Optics Express</i> , <b>2020</b> , 11, 6659-6673	3.5	2
125	Longitudinal elastic wave imaging using nanobomb optical coherence elastography: erratum. <i>Optics Letters</i> , <b>2020</b> , 45, 3296	3	1
124	Role of alkylated residues in the tetrapeptide self-assembly-A molecular dynamics study. <i>Journal of Computational Chemistry</i> , <b>2020</b> , 41, 2634-2640	3.5	1
123	Application of metasurface-enhanced infra-red spectroscopy to distinguish between normal and cancerous cell types. <i>Analyst, The</i> , <b>2019</b> , 144, 1115-1127	5	12
122	Spatiotemporally controlled nano-sized third harmonic generation agents. <i>Biomedical Optics Express</i> , <b>2019</b> , 10, 3301-3316	3.5	2
121	Molecular photoacoustic imaging with ultra-small gold nanoparticles. <i>Biomedical Optics Express</i> , <b>2019</b> , 10, 3472-3483	3.5	33
120	Longitudinal elastic wave imaging using nanobomb optical coherence elastography. <i>Optics Letters</i> , <b>2019</b> , 44, 3162-3165	3	11
119	Indocyanine Green J Aggregates in Polymersomes for Near-Infrared Photoacoustic Imaging. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 46437-46450	9.5	12
118	Improved Photoacoustic-Based Oxygen Saturation Estimation With SNR-Regularized Local Fluence Correction. <i>IEEE Transactions on Medical Imaging</i> , <b>2019</b> , 38, 561-571	11.7	20
117	Nanobomb optical coherence elastography. <i>Optics Letters</i> , <b>2018</b> , 43, 2006-2009	3	15
116	Control of Primary Particle Spacing in Gold Nanoparticle Clusters for Both High NIR Extinction and Full Reversibility. <i>Langmuir</i> , <b>2017</b> , 33, 3413-3426	4	5
115	Detection of precancerous lesions in the oral cavity using oblique polarized reflectance spectroscopy: a clinical feasibility study. <i>Journal of Biomedical Optics</i> , <b>2017</b> , 22, 65002	3.5	6

114	Synthesis of Stable Citrate-Capped Silver Nanoprisms. <i>Langmuir</i> , <b>2017</b> , 33, 10525-10530	4	33
113	Rapid real-time recirculating PCR using localized surface plasmon resonance (LSPR) and piezo-electric pumping. <i>Lab on A Chip</i> , <b>2017</b> , 17, 2821-2830	7.2	19
112	Depth-resolved measurements with elliptically polarized reflectance spectroscopy. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 2861-76	3.5	1
111	Feature issue introduction: biophotonic materials and applications. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 2078-81	3.5	1
110	Visualization of molecular composition and functionality of cancer cells using nanoparticle-augmented ultrasound-guided photoacoustics. <i>Photoacoustics</i> , <b>2015</b> , 3, 26-34	9	36
109	Biodegradable Plasmonic Nanoparticles: Overcoming Clinical Translation Barriers <b>2015</b> ,		2
108	Screening and Molecular Analysis of Single Circulating Tumor Cells Using Micromagnet Array. <i>Scientific Reports</i> , <b>2015</b> , 5, 16047	4.9	41
107	An Immunofluorescence-Assisted Microfluidic Single Cell Quantitative Reverse Transcription Polymerase Chain Reaction Analysis of Tumour Cells Separated from Blood. <i>Journal of Circulating Biomarkers</i> , <b>2015</b> , 4, 11	3.3	3
106	Multimodal Magneto-Plasmonic Nanoclusters for Biomedical Applications. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 6862-6871	15.6	35
105	Sentinel lymph node biopsy revisited: ultrasound-guided photoacoustic detection of micrometastases using molecularly targeted plasmonic nanosensors. <i>Cancer Research</i> , <b>2014</b> , 74, 5397-408	10.1	74
104	Quenched Assembly of NIR-Active Gold Nanoclusters Capped with Strongly Bound Ligands by Tuning Particle Charge via pH and Salinity. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 14291-14298	3.8	16
103	Synthesis of immunotargeted magneto-plasmonic nanoclusters. <i>Journal of Visualized Experiments</i> , <b>2014</b> ,	1.6	2
102	Plasmonic biodegradable gold nanoclusters with high NIR-absorbance for biomedical imaging <b>2014</b> ,		2
101	Depth sensitive oblique polarized reflectance spectroscopy of oral epithelial tissue <b>2014</b> ,		1
100	Use of colloidal quantum dots as a digitally switched swept light source for gold nanoparticle based hyperspectral microscopy. <i>Biomedical Optics Express</i> , <b>2014</b> , 5, 1610-5	3.5	3
99	EGFR-targeted plasmonic magnetic nanoparticles suppress lung tumor growth by abrogating G2/M cell-cycle arrest and inducing DNA damage. <i>International Journal of Nanomedicine</i> , <b>2014</b> , 9, 3825-39	7.3	23
98	Immunomagnetic nanoscreening of circulating tumor cells with a motion controlled microfluidic system. <i>Biomedical Microdevices</i> , <b>2013</b> , 15, 673-681	3.7	56
97	Versatile immunomagnetic nanocarrier platform for capturing cancer cells. <i>ACS Nano</i> , <b>2013</b> , 7, 8816-23	16.7	99

96	Excretion and toxicity of gold-iron nanoparticles. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2013</b> , 9, 356-65	6	41
95	Conjugation of antibodies to gold nanorods through Fc portion: synthesis and molecular specific imaging. <i>Bioconjugate Chemistry</i> , <b>2013</b> , 24, 878-88	6.3	77
94	Charged gold nanoparticles with essentially zero serum protein adsorption in undiluted fetal bovine serum. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 7799-802	16.4	73
93	Equilibrium gold nanoclusters quenched with biodegradable polymers. <i>ACS Nano</i> , <b>2013</b> , 7, 239-51	16.7	49
92	Development and optimization of near-IR contrast agents for immune cell tracking. <i>Biomedical Optics Express</i> , <b>2013</b> , 4, 2609-18	3.5	18
91	Multifunctional Tumor-Targeted Nanoparticles for Lung Cancer <b>2012</b> , 15-44		0
90	Preventing protein adsorption and macrophage uptake of gold nanoparticles via a hydrophobic shield. <i>ACS Nano</i> , <b>2012</b> , 6, 9182-90	16.7	165
89	Intravascular photoacoustic imaging of exogenously labeled atherosclerotic plaque through luminal blood. <i>Journal of Biomedical Optics</i> , <b>2012</b> , 17, 106016	3.5	36
88	Thermal stability of biodegradable plasmonic nanoclusters in photoacoustic imaging. <i>Optics Express</i> , <b>2012</b> , 20, 29479-87	3.3	17
87	Intravascular photoacoustic imaging of gold nanorod-labeled atherosclerotic plaques <b>2012</b> ,		2
86	Magneto-photo-acoustic imaging. <i>Biomedical Optics Express</i> , <b>2011</b> , 2, 385	3.5	51
85	Multiplex photoacoustic molecular imaging using targeted silica-coated gold nanorods. <i>Biomedical Optics Express</i> , <b>2011</b> , 2, 1828-35	3.5	58
84	Function of mesenchymal stem cells following loading of gold nanotracers. <i>International Journal of Nanomedicine</i> , <b>2011</b> , 6, 407-16	7.3	78
83	Ultrasound and photoacoustic imaging to monitor mesenchymal stem cells labeled with gold nanoparticles <b>2011</b> ,		4
82	Ultrasound-Based Molecular Imaging Using Nanoagents <b>2011</b> , 263-278		1
81	Selective targeting of antibody conjugated multifunctional nanoclusters (nanoroses) to epidermal growth factor receptors in cancer cells. <i>Langmuir</i> , <b>2011</b> , 27, 7681-90	4	36
80	Pulsed magneto-motive ultrasound imaging to detect intracellular trafficking of magnetic nanoparticles. <i>Nanotechnology</i> , <b>2011</b> , 22, 415105	3.4	17
79	Magneto-photo-acoustic imaging. <i>Biomedical Optics Express</i> , <b>2011</b> , 2, 385-96	3.5	26

78	EGFR-targeted hybrid plasmonic magnetic nanoparticles synergistically induce autophagy and apoptosis in non-small cell lung cancer cells. <i>PLoS ONE</i> , <b>2011</b> , 6, e25507	3.7	80
77	Intravascular photoacoustic imaging of macrophages using molecularly targeted gold nanoparticles <b>2010</b> ,		8
76	On stability of molecular therapeutic agents for noninvasive photoacoustic and ultrasound image-guided photothermal therapy <b>2010</b> ,		4
75	Adaptive spectral window sizes for extraction of diagnostic features from optical spectra. <i>Journal of Biomedical Optics</i> , <b>2010</b> , 15, 047012	3.5	1
74	Molecular diagnosis of cancer using multiplex photoacoustic imaging with targeted nanorods <b>2010</b> ,		1
73	Biodegradable plasmonic nanoclusters as contrast agent for photoacoustic imaging <b>2010</b> ,		3
72	Efficient mucosal delivery of optical contrast agents using imidazole-modified chitosan. <i>Journal of Biomedical Optics</i> , <b>2010</b> , 15, 015003	3.5	16
71	Kinetic assembly of near-IR-active gold nanoclusters using weakly adsorbing polymers to control the size. <i>Langmuir</i> , <b>2010</b> , 26, 8988-99	4	57
70	Depth resolved photothermal OCT detection of macrophages in tissue using nanorose. <i>Biomedical Optics Express</i> , <b>2010</b> , 1, 2-16	3.5	30
69	Gold nanorod light scattering labels for biomedical imaging. <i>Biomedical Optics Express</i> , <b>2010</b> , 1, 135-142	3.5	15
68	Enhanced thermal stability of silica-coated gold nanorods for photoacoustic imaging and image-guided therapy. <i>Optics Express</i> , <b>2010</b> , 18, 8867-78	3.3	297
67	Utility of biodegradable plasmonic nanoclusters in photoacoustic imaging. <i>Optics Letters</i> , <b>2010</b> , 35, 3751-3	3.3	45
66	Directed evolution of gold nanoparticle delivery to cells. <i>Chemical Communications</i> , <b>2010</b> , 46, 392-4	5.8	105
65	Controlled assembly of biodegradable plasmonic nanoclusters for near-infrared imaging and therapeutic applications. <i>ACS Nano</i> , <b>2010</b> , 4, 2178-84	16.7	149
64	Intravascular Photoacoustic Imaging. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2010</b> , 16, 588-599	3.8	83
63	On sensitivity of molecular specific photoacoustic imaging using plasmonic gold nanoparticles. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 6338-40	0.9	5
62	Ultrasound-based imaging of nanoparticles: From molecular and cellular imaging to therapy guidance <b>2009</b> ,		7
61	Combined photoacoustic and magneto-acoustic imaging. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 4763-6	0.9	8

60	High sensitivity intravascular photoacoustic imaging of macrophages <b>2009</b> ,		2
59	Molecular imaging and darkfield microspectroscopy of live cells using gold plasmonic nanoparticles. <i>Laser and Photonics Reviews</i> , <b>2009</b> , 3, 146-158	8.3	77
58	Limitations on the optical tunability of small diameter gold nanoshells. <i>Langmuir</i> , <b>2009</b> , 25, 11777-85	4	67
57	Compact beveled fiber optic probe design for enhanced depth discrimination in epithelial tissues. <i>Optics Express</i> , <b>2009</b> , 17, 2780-96	3.3	17
56	Multiwavelength photoacoustic imaging and plasmon resonance coupling of gold nanoparticles for selective detection of cancer. <i>Nano Letters</i> , <b>2009</b> , 9, 2825-31	11.5	370
55	Cancer imaging and therapy with metal nanoparticles. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 2005-7	0.9	5
54	Dynamic imaging of molecular assemblies in live cells based on nanoparticle plasmon resonance coupling. <i>Nano Letters</i> , <b>2009</b> , 9, 3612-8	11.5	142
53	Plasmonic intravascular photoacoustic imaging for detection of macrophages in atherosclerotic plaques. <i>Nano Letters</i> , <b>2009</b> , 9, 2212-7	11.5	169
52	Molecular therapeutic agents for noninvasive photoacoustic image-guided photothermal therapy. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 4106-9	0.9	4
51	Small multifunctional nanoclusters (nanoroses) for targeted cellular imaging and therapy. <i>ACS Nano</i> , <b>2009</b> , 3, 2686-96	16.7	174
50	Directional conjugation of antibodies to nanoparticles for synthesis of multiplexed optical contrast agents with both delivery and targeting moieties. <i>Nature Protocols</i> , <b>2008</b> , 3, 314-20	18.8	318
49	Observation of plasmon line broadening in single gold nanorods. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 153106	4	23
48	Polarization microscopy with stellated gold nanoparticles for robust monitoring of molecular assemblies and single biomolecules. <i>Optics Express</i> , <b>2008</b> , 16, 2153-67	3.3	68
47	Ultrasound imaging to monitor photothermal therapy - feasibility study. <i>Optics Express</i> , <b>2008</b> , 16, 3776-85	3.3	36
46	Photoacoustic and ultrasound imaging to guide photothermal therapy: ex vivo study <b>2008</b> ,		4
45	Selective detection of cancer using spectroscopic photoacoustic imaging and bioconjugated gold nanoparticles <b>2008</b> ,		2
44	Probing local tissue changes in the oral cavity for early detection of cancer using oblique polarized reflectance spectroscopy: a pilot clinical trial. <i>Journal of Biomedical Optics</i> , <b>2008</b> , 13, 024011	3.5	29
43	Multispectral optical imaging device for in vivo detection of oral neoplasia. <i>Journal of Biomedical Optics</i> , <b>2008</b> , 13, 024019	3.5	111

42	Photoacoustic imaging and temperature measurement for photothermal cancer therapy. <i>Journal of Biomedical Optics</i> , <b>2008</b> , 13, 034024	3.5	225
41	Simulation of a plasmonic tip-terminated scanning nanowire waveguide for molecular imaging. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 193101	3.4	9
40	Molecular specific photoacoustic imaging with plasmonic nanosensors <b>2008</b> ,		2
39	Phenomenology of optical scattering from plasmonic aggregates for application to biological imaging and clinical therapeutics <b>2008</b> ,		2
38	Two-photon luminescence imaging of cancer cells using molecularly targeted gold nanorods. <i>Nano Letters</i> , <b>2007</b> , 7, 941-5	11.5	769
37	Plasmon resonance coupling of metal nanoparticles for molecular imaging of carcinogenesis in vivo. <i>Journal of Biomedical Optics</i> , <b>2007</b> , 12, 034007	3.5	139
36	A far-red fluorescent contrast agent to image epidermal growth factor receptor expression. <i>Photochemistry and Photobiology</i> , <b>2007</b> , 79, 272-279	3.6	3
35	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2007</b> , 13, 1730-1738	3.8	23
34	Microanatomical and Biochemical Origins of Normal and Precancerous Cervical Autofluorescence Using Laser-scanning Fluorescence Confocal Microscopy. <i>Photochemistry and Photobiology</i> , <b>2007</b> , 77, 550-555	3.6	6
33	Molecular optical imaging of therapeutic targets of cancer. <i>Advances in Cancer Research</i> , <b>2007</b> , 96, 299-344	3.4	24
32	10A-3 Intravascular Photoacoustic Imaging with Gold Nanoparticles. <i>Proceedings IEEE Ultrasonics Symposium</i> , <b>2007</b> ,		3
31	8B-2 Imaging of Iron Oxide Nanoparticles Using Magneto-Motive Ultrasound <b>2007</b> ,		20
30	Molecular specific optoacoustic imaging with plasmonic nanoparticles. <i>Optics Express</i> , <b>2007</b> , 15, 6583-8	3.3	153
29	Hybrid plasmonic magnetic nanoparticles as molecular specific agents for MRI/optical imaging and photothermal therapy of cancer cells. <i>Nanotechnology</i> , <b>2007</b> , 18, 325101	3.4	154
28	Plasmonic nanosensors for imaging intracellular biomarkers in live cells. <i>Nano Letters</i> , <b>2007</b> , 7, 1338-43	11.5	198
27	4J-2 Ultrasound-Based Thermal and Elasticity Imaging to Assist Photothermal Cancer Therapy - Preliminary Study <b>2006</b> ,		4
26	Increased optical contrast in imaging of epidermal growth factor receptor using magnetically actuated hybrid gold/iron oxide nanoparticles. <i>Optics Express</i> , <b>2006</b> , 14, 12930-43	3.3	59
25	In vivo optical detection of intranuclear cancer biomarkers using gold nanoparticles <b>2006</b> , 6095, 7		2

24	Multispectral digital microscopy for in vivo monitoring of oral neoplasia in the hamster cheek pouch model of carcinogenesis. <i>Optics Express</i> , <b>2005</b> , 13, 749-62	3.3	10
23	Optical imaging of cervical pre-cancers with structured illumination: an integrated approach. <i>Gynecologic Oncology</i> , <b>2005</b> , 99, S112-5	4.9	26
22	A far-red fluorescent contrast agent to image epidermal growth factor receptor expression. <i>Photochemistry and Photobiology</i> , <b>2004</b> , 79, 272-9	3.6	31
21	Polarized reflectance spectroscopy for pre-cancer detection. <i>Technology in Cancer Research and Treatment</i> , <b>2004</b> , 3, 1-14	2.7	20
20	High resolution, molecular-specific, reflectance imaging in optically dense tissue phantoms with structured-illumination. <i>Optics Express</i> , <b>2004</b> , 12, 3745-58	3.3	23
19	Optical sectioning using a fiber probe with an angled illumination-collection geometry: evaluation in engineered tissue phantoms. <i>Applied Optics</i> , <b>2004</b> , 43, 1308-19	1.7	50
18	Multimodal miniature microscope (4M Device): novel methodology for multimodality tissue imaging in vivo <b>2003</b> ,		1
17	Imaging quality assessment of multi-modal miniature microscope. <i>Optics Express</i> , <b>2003</b> , 11, 1436-51	3.3	9
16	Optical systems for in vivo molecular imaging of cancer. <i>Technology in Cancer Research and Treatment</i> , <b>2003</b> , 2, 491-504	2.7	167
15	Microanatomical and biochemical origins of normal and precancerous cervical autofluorescence using laser-scanning fluorescence confocal microscopy. <i>Photochemistry and Photobiology</i> , <b>2003</b> , 77, 550-5	3.6	115
14	Real-time vital optical imaging of precancer using anti-epidermal growth factor receptor antibodies conjugated to gold nanoparticles. <i>Cancer Research</i> , <b>2003</b> , 63, 1999-2004	10.1	590
13	Endoscopic microscopy. <i>Disease Markers</i> , <b>2002</b> , 18, 269-91	3.2	21
12	Optical spectroscopy for detection of neoplasia. <i>Current Opinion in Chemical Biology</i> , <b>2002</b> , 6, 651-8	9.7	138
11	Fiber optic probe for polarized reflectance spectroscopy in vivo: design and performance. <i>Journal of Biomedical Optics</i> , <b>2002</b> , 7, 388-97	3.5	59
10	Realistic three-dimensional epithelial tissue phantoms for biomedical optics. <i>Journal of Biomedical Optics</i> , <b>2002</b> , 7, 148-56	3.5	87
9	Understanding the contributions of NADH and collagen to cervical tissue fluorescence spectra: modeling, measurements, and implications. <i>Journal of Biomedical Optics</i> , <b>2001</b> , 6, 385-96	3.5	233
8	Reflectance spectroscopy with polarized light: is it sensitive to cellular and nuclear morphology. <i>Optics Express</i> , <b>1999</b> , 5, 302-17	3.3	153
7	Enhancement of molecular fluorescence near the surface of colloidal metal films. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 3898-905	7.8	390

6	Scanning Force Microscopy Study of Methanol-Induced Changes in the Distribution of Silver Particles in Colloidal Metal Films. <i>Journal of Colloid and Interface Science</i> , <b>1997</b> , 185, 466-72	9.3	11
5	Unusual Extinction Spectra of Nanometer-Sized Silver Particles Arranged in Two-Dimensional Arrays. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 5166-5168		75
4	Trace analysis by surface-enhanced Raman scattering with the use of the track membrane technique. <i>Journal of Applied Spectroscopy</i> , <b>1993</b> , 59, 820-825	0.7	
3	Contributions of Short-Range and Classical Electromagnetic Mechanisms to Surface-Enhanced Raman Scattering from Several Types of Biomolecules Adsorbed on Cold-Deposited Island Films. <i>Applied Spectroscopy</i> , <b>1993</b> , 47, 515-522	3.1	38
2	Detection of Sialic Acid Residues and Studies of Their Organization in Normal and Tumor $\alpha$ -Acid Glycoproteins as Probed by Surface-Enhanced Raman Spectroscopy. <i>Applied Spectroscopy</i> , <b>1993</b> , 47, 535-538	3.1	13
1	Surface-enhanced Raman spectroscopy of biomolecules. Part III. Determination of the local destabilization regions in the double helix. <i>Journal of Raman Spectroscopy</i> , <b>1990</b> , 21, 333-336	2.3	33