Stanislav Y Emelianov

List of Publications by Citations

223 papers	10,591 citations	52 h-index	97 g-index
257 ext. papers	12,419 ext. citations	5.2 avg, IF	6.47 L-index

#	Paper	IF	Citations
223	Shear wave elasticity imaging: a new ultrasonic technology of medical diagnostics. *Ultrasound in Medicine and Biology*, **1998**, 24, 1419-35	3.5	1174
222	Photoacoustic imaging in cancer detection, diagnosis, and treatment guidance. *Trends in Biotechnology*, **2011**, 29, 213-21	15.1	412
221	Silica-coated gold nanorods as photoacoustic signal nanoamplifiers. *Nano Letters*, **2011**, 11, 348-54	11.5	388
220	Multiwavelength photoacoustic imaging and plasmon resonance coupling of gold nanoparticles for selective detection of cancer. *Nano Letters*, **2009**, 9, 2825-31	11.5	370
219	Biomedical photoacoustics beyond thermal expansion using triggered nanodroplet vaporization for contrast-enhanced imaging. *Nature Communications*, **2012**, 3, 618	17.4	301
218	Enhanced thermal stability of silica-coated gold nanorods for photoacoustic imaging and image-guided therapy. *Optics Express*, **2010**, 18, 8867-78	3.3	297
217	Biomedical applications of photoacoustic imaging with exogenous contrast agents. *Annals of Biomedical Engineering*, **2012**, 40, 422-37	4.7	276
216	Miniature gold nanorods for photoacoustic molecular imaging in the second near-infrared optical window. *Nature Nanotechnology*, **2019**, 14, 465-472	28.7	226
215	Photoacoustic imaging and temperature measurement for photothermal cancer therapy. *Journal of Biomedical Optics*, **2008**, 13, 034024	3.5	225
214	Silver nanoplate contrast agents for in vivo molecular photoacoustic imaging. *ACS Nano*, **2012**, 6, 641-50	16.7	186
213	Indocyanine green-loaded photoacoustic nanodroplets: dual contrast nanoconstructs for enhanced photoacoustic and ultrasound imaging. *ACS Nano*, **2014**, 8, 250-9	16.7	174
212	Spectroscopic intravascular photoacoustic imaging to differentiate atherosclerotic plaques. *Optics Express*, **2008**, 16, 3362-7	3.3	171
211	Photoacoustics for molecular imaging and therapy. *Physics Today*, **2009**, 62, 34-39	0.9	170
210	Plasmonic intravascular photoacoustic imaging for detection of macrophages in atherosclerotic plaques. *Nano Letters*, **2009**, 9, 2212-7	11.5	169
209	Tissue-mimicking phantoms for photoacoustic and ultrasonic imaging. *Biomedical Optics Express*, **2011**, 2, 3193-206	3.5	160
208	Molecular specific optoacoustic imaging with plasmonic nanoparticles. *Optics Express*, **2007**, 15, 6583-8	3.3	153
207	Detection of magnetic nanoparticles in tissue using magneto-motive ultrasound. *Nanotechnology*, **2006**, 17, 4183-90	3.4	143

206	Photoacoustic Imaging for Cancer Detection and Staging. *Current Molecular Imaging*, **2013**, 2, 89-105		139
205	In vivo ultrasound and photoacoustic monitoring of mesenchymal stem cells labeled with gold nanotracers. *PLoS ONE*, **2012**, 7, e37267	3.7	137
204	Detection of lipid in atherosclerotic vessels using ultrasound-guided spectroscopic intravascular photoacoustic imaging. *Optics Express*, **2010**, 18, 4889-97	3.3	135
203	Elasticity reconstructive imaging by means of stimulated echo MRI. *Magnetic Resonance in Medicine*, **1998**, 39, 482-90	4.4	128
202	Intravascular photoacoustic imaging using an IVUS imaging catheter. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2007**, 54, 978-86	3.2	119
201	Hybrid intravascular imaging: recent advances, technical considerations, and current applications in the study of plaque pathophysiology. *European Heart Journal*, **2017**, 38, 400-412	9.5	114
200	Intravascular photoacoustic imaging of lipid in atherosclerotic plaques in the presence of luminal blood. *Optics Letters*, **2012**, 37, 1244-6	3	108
199	Development of a catheter for combined intravascular ultrasound and photoacoustic imaging. *Review of Scientific Instruments*, **2010**, 81, 014901	1.7	95
198	In vivo three-dimensional spectroscopic photoacoustic imaging for monitoring nanoparticle delivery. *Biomedical Optics Express*, **2011**, 2, 2540-50	3.5	90
197	In vivo intravascular ultrasound-guided photoacoustic imaging of lipid in plaques using an animal model of atherosclerosis. *Ultrasound in Medicine and Biology*, **2012**, 38, 2098-103	3.5	89
196	Imaging strategies for tissue engineering applications. *Tissue Engineering - Part B: Reviews*, **2015**, 21, 88-102	7.9	85
195	Prospects of molecular photoacoustic imaging at 1064 nm wavelength. *Optics Letters*, **2010**, 35, 2663-5	3	83
194	Intravascular Photoacoustic Imaging. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 588-599	3.8	83
193	Super-Resolution Ultrasound Imaging in Vivo with Transient Laser-Activated Nanodroplets. *Nano Letters*, **2016**, 16, 2556-9	11.5	79
192	Environment-dependent generation of photoacoustic waves from plasmonic nanoparticles. *Small*, **2012**, 8, 47-52	11	78
191	Function of mesenchymal stem cells following loading of gold nanotracers. *International Journal of Nanomedicine*, **2011**, 6, 407-16	7.3	78
190	Conjugation of antibodies to gold nanorods through Fc portion: synthesis and molecular specific imaging. *Bioconjugate Chemistry*, **2013**, 24, 878-88	6.3	77
189	Strain imaging of corneal tissue with an ultrasound elasticity microscope. *Cornea*, **2002**, 21, 68-73	3.1	77

188	Sentinel lymph node biopsy revisited: ultrasound-guided photoacoustic detection of micrometastases using molecularly targeted plasmonic nanosensors. *Cancer Research*, **2014**, 74, 5397-408	10.1	74
187	Photoacoustic imaging of clinical metal needles in tissue. *Journal of Biomedical Optics*, **2010**, 15, 021309	3.5	71
186	Three-dimensional static displacement, stimulated echo NMR elasticity imaging. *Physics in Medicine and Biology*, **2000**, 45, 1633-48	3.8	67
185	Optical wavelength selection for improved spectroscopic photoacoustic imaging. *Photoacoustics*, **2013**, 1, 36-42	9	66
184	Assessing age-related changes in the biomechanical properties of rabbit lens using a coaligned ultrasound and optical coherence elastography system. *Investigative Ophthalmology and Visual Science*, **2015**, 56, 1292-300		66
183	Dynamic contrast-enhanced photoacoustic imaging using photothermal stimuli-responsive composite nanomodulators. *Nature Communications*, **2017**, 8, 15782	17.4	62
182	Sonographic elasticity imaging of acute and chronic deep venous thrombosis in humans. *Journal of Ultrasound in Medicine*, **2006**, 25, 1179-86	2.9	62
181	Ultrasound-guided photoacoustic imaging: current state and future development. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2014**, 61, 450-66	3.2	60
180	Copper Sulfide Perfluorocarbon Nanodroplets as Clinically Relevant Photoacoustic/Ultrasound Imaging Agents. *Nano Letters*, **2017**, 17, 5984-5989	11.5	58
179	Multiplex photoacoustic molecular imaging using targeted silica-coated gold nanorods. *Biomedical Optics Express*, **2011**, 2, 1828-35	3.5	58
178	Silica-coated gold nanoplates as stable photoacoustic contrast agents for sentinel lymph node imaging. *Nanotechnology*, **2013**, 24, 455101	3.4	57
177	Poly(lactic-co-glycolic) acid as a carrier for imaging contrast agents. *Pharmaceutical Research*, **2009**, 26, 674-82	4.5	57
176	Combined ultrasound and photoacoustic imaging to detect and stage deep vein thrombosis: phantom and ex vivo studies. *Journal of Biomedical Optics*, **2008**, 13, 054061	3.5	57
175	Spatial characterization of corneal biomechanical properties with optical coherence elastography after UV cross-linking. *Biomedical Optics Express*, **2014**, 5, 1419-27	3.5	56
174	Adaptive beamforming for photoacoustic imaging. *Optics Letters*, **2008**, 33, 1291-3	3	56
173	Advances in Clinical and Biomedical Applications of Photoacoustic Imaging. *Expert Opinion on Medical Diagnostics*, **2010**, 4, 497-510		54
172	Motion of a solid sphere in a viscoelastic medium in response to applied acoustic radiation force: Theoretical analysis and experimental verification. *Journal of the Acoustical Society of America*, **2007**, 122, 1927-36	2.2	53
171	Photoacoustic signal amplification through plasmonic nanoparticle aggregation. *Journal of Biomedical Optics*, **2013**, 18, 16001	3.5	51

170	Magneto-photo-acoustic imaging. *Biomedical Optics Express*, **2011**, 2, 385	3.5	51
169	Ex vivo Characterization of Atherosclerosis using Intravascular Photoacoustic Imaging. *Optics Express*, **2007**, 15, 16657-66	3.3	51
168	Correspondence of ultrasound elasticity imaging to direct mechanical measurement in aging DVT in rats. *Ultrasound in Medicine and Biology*, **2005**, 31, 1351-9	3.5	51
167	In vitro photoacoustic visualization of myocardial ablation lesions. *Heart Rhythm*, **2014**, 11, 150-7	6.7	49
166	Nonlinear photoacoustic signal increase from endocytosis of gold nanoparticles. *Optics Letters*, **2012**, 37, 4708-10	3	49
165	Quantitative photoacoustic imaging of nanoparticles in cells and tissues. *ACS Nano*, **2013**, 7, 1272-80	16.7	47
164	Photoacoustic imaging of prostate brachytherapy seeds. *Biomedical Optics Express*, **2011**, 2, 2243-54	3.5	47
163	Label-free Detection of Lymph Node Metastases with US-guided Functional Photoacoustic Imaging. *Radiology*, **2015**, 277, 435-42	20.5	46
162	Gas bubble and solid sphere motion in elastic media in response to acoustic radiation force. *Journal of the Acoustical Society of America*, **2005**, 117, 2338-46	2.2	46
161	Photoacoustic and ultrasound imaging using dual contrast perfluorocarbon nanodroplets triggered by laser pulses at 1064 nm. *Biomedical Optics Express*, **2014**, 5, 3042-52	3.5	45
160	Silver nanosystems for photoacoustic imaging and image-guided therapy. *Journal of Biomedical Optics*, **2010**, 15, 021316	3.5	45
159	Utility of biodegradable plasmonic nanoclusters in photoacoustic imaging. *Optics Letters*, **2010**, 35, 3751-3	3	45
158	Staging deep venous thrombosis using ultrasound elasticity imaging: animal model. *Ultrasound in Medicine and Biology*, **2004**, 30, 1385-96	3.5	45
157	Dynamic optical coherence tomography measurements of elastic wave propagation in tissue-mimicking phantoms and mouse cornea in vivo. *Journal of Biomedical Optics*, **2013**, 18, 121503	3.5	43
156	Pulsed Magneto-motive Ultrasound Imaging Using Ultrasmall Magnetic Nanoprobes. *Molecular Imaging*, **2011**, 10, 7290.2010.00037	3.7	43
155	Photoacoustic imaging of coronary artery stents. *Optics Express*, **2009**, 17, 19894-901	3.3	42
154	Intravascular photoacoustics for image-guidance and temperature monitoring during plasmonic photothermal therapy of atherosclerotic plaques: a feasibility study. *Theranostics*, **2013**, 4, 36-46	12.1	41
153	Evaluation of gold nanotracers to track adipose-derived stem cells in a PEGylated fibrin gel for dermal tissue engineering applications. *International Journal of Nanomedicine*, **2013**, 8, 325-36	7.3	41

152	Silver-Polymer Composite Stars: Synthesis and Applications. *Advanced Functional Materials*, **2011**, 21, 1673-1680	15.6	41
151	In vivo estimation of elastic wave parameters using phase-stabilized swept source optical coherence elastography. *Journal of Biomedical Optics*, **2012**, 17, 100501	3.5	41
150	In vivo pulsed magneto-motive ultrasound imaging using high-performance magnetoactive contrast nanoagents. *Nanoscale*, **2013**, 5, 11179-86	7.7	40
149	Assessment of shear modulus of tissue using ultrasound radiation force acting on a spherical acoustic inhomogeneity. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2009**, 56, 2380-7	3.2	40
148	Clinical application of sonographic elasticity imaging for aging of deep venous thrombosis: preliminary findings. *Journal of Ultrasound in Medicine*, **2003**, 22, 443-8	2.9	39
147	Photoacoustic Image-Guided Delivery of Plasmonic-Nanoparticle-Labeled Mesenchymal Stem Cells to the Spinal Cord. *Nano Letters*, **2018**, 18, 6625-6632	11.5	39
146	Visualization of molecular composition and functionality of cancer cells using nanoparticle-augmented ultrasound-guided photoacoustics. *Photoacoustics*, **2015**, 3, 26-34	9	36
145	Intravascular photoacoustic imaging of exogenously labeled atherosclerotic plaque through luminal blood. *Journal of Biomedical Optics*, **2012**, 17, 106016	3.5	36
144	Ultrasound imaging to monitor photothermal therapy - feasibility study. *Optics Express*, **2008**, 16, 3776-85	3.3	36
143	Blinking Phase-Change Nanocapsules Enable Background-Free Ultrasound Imaging. *Theranostics*, **2016**, 6, 1866-76	12.1	36
142	Multimodal Magneto-Plasmonic Nanoclusters for Biomedical Applications. *Advanced Functional Materials*, **2014**, 24, 6862-6871	15.6	35
141	Feasibility of in vivo intravascular photoacoustic imaging using integrated ultrasound and photoacoustic imaging catheter. *Journal of Biomedical Optics*, **2012**, 17, 96008-1	3.5	35
140	Combined ultrasound, optoacoustic, and elasticity imaging **2004**,		31
139	Feasibility of applying ultrasound strain imaging to detect renal transplant chronic allograft nephropathy. *Kidney International*, **2004**, 65, 733-6	9.9	31
138	Nonlinear dynamics of a gas bubble in an incompressible elastic medium. *Journal of the Acoustical Society of America*, **2004**, 115, 581-8	2.2	30
137	Combined ultrasound and photoacoustic imaging to noninvasively assess burn injury and selectively monitor a regenerative tissue-engineered construct. *Tissue Engineering - Part C: Methods*, **2015**, 21, 557-66	2.9	29
136	Tunable aggregation of gold-silica janus nanoparticles to enable contrast-enhanced multiwavelength photoacoustic imaging in vivo. *Nanoscale*, **2018**, 10, 15365-15370	7.7	29
135	Pulsed magneto-acoustic imaging. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 4771-4	0.9	28

134	Real-Time Intravascular Ultrasound and Photoacoustic Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 141-149	3.2	26
133	Ligand-mediated self-assembly of hybrid plasmonic and superparamagnetic nanostructures. *Langmuir*, **2013**, 29, 2465-70	4	26
132	Ultrasound measurements of cavitation bubble radius for femtosecond laser-induced breakdown in water. *Optics Letters*, **2008**, 33, 1357-9	3	26
131	Remote temperature estimation in intravascular photoacoustic imaging. *Ultrasound in Medicine and Biology*, **2008**, 34, 299-308	3.5	26
130	Elasticity imaging using conventional and high-frame rate ultrasound imaging: experimental study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2007**, 54, 2246-56	3.2	26
129	Magneto-photo-acoustic imaging. *Biomedical Optics Express*, **2011**, 2, 385-96	3.5	26
128	Photoacoustic imaging of cancer cells with glycol-chitosan-coated gold nanoparticles as contrast agents. *Journal of Biomedical Optics*, **2019**, 24, 1-5	3.5	25
127	Contrast-enhanced ultrasound imaging in vivo with laser-activated nanodroplets. *Medical Physics*, **2017**, 44, 3444-3449	4.4	24
126	PHOTOACOUSTIC IMAGING FOR MEDICAL DIAGNOSTICS. *Acoustics Today*, **2012**, 8, 15-23	0	24
125	The mechanical properties of ex vivo bovine and porcine crystalline lenses: age-related changes and location-dependent variations. *Ultrasound in Medicine and Biology*, **2013**, 39, 1120-7	3.5	23
124	Sensitivity enhanced nanothermal sensors for photoacoustic temperature mapping. *Journal of Biophotonics*, **2013**, 6, 534-42	3.1	22
123	Thermal intravascular photoacoustic imaging. *Biomedical Optics Express*, **2011**, 2, 3072-8	3.5	22
122	In-vivo ultrasound and photoacoustic image- guided photothermal cancer therapy using silica-coated gold nanorods. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2014**, 61, 891-897	3.2	21
121	Strain imaging using conventional and ultrafast ultrasound imaging: numerical analysis. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2007**, 54, 987-95	3.2	21
120	Pulsed magneto-motive ultrasound imaging using ultrasmall magnetic nanoprobes. *Molecular Imaging*, **2011**, 10, 102-10	3.7	21
119	Photothermal transformation of Au-Ag nanocages under pulsed laser irradiation. *Nanoscale*, **2019**, 11, 3013-3020	7.7	20
118	Development of a stem cell tracking platform for ophthalmic applications using ultrasound and photoacoustic imaging. *Theranostics*, **2019**, 9, 3812-3824	12.1	20
117	Detection of nanoparticle endocytosis using magneto-photoacoustic imaging. *Small*, **2011**, 7, 2858-62	11	20

116	Ultrasound-guided spectral photoacoustic imaging of hemoglobin oxygenation during development. *Biomedical Optics Express*, **2017**, 8, 757-763	3.5	19
115	Acoustic detection of microbubble formation induced by enhanced optical breakdown of silver/dendrimer nanocomposites. *Applied Physics Letters*, **2003**, 82, 994-996	3.4	19
114	Super-Resolution Imaging With Ultrafast Ultrasound Imaging of Optically Triggered Perfluorohexane Nanodroplets. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 2277-2285	3.2	18
113	Contrast-enhanced magneto-photo-acoustic imaging using dual-contrast nanoparticles. *Photoacoustics*, **2014**, 2, 55-62	9	18
112	Photoacoustic imaging: a´potential tool to detect early indicators of metastasis. *Expert Review of Medical Devices*, **2013**, 10, 125-34	3.5	18
111	Development and optimization of near-IR contrast agents for immune cell tracking. *Biomedical Optics Express*, **2013**, 4, 2609-18	3.5	18
110	Monitoring/Imaging and Regenerative Agents for Enhancing Tissue Engineering Characterization and Therapies. *Annals of Biomedical Engineering*, **2016**, 44, 750-72	4.7	17
109	Multifunctional nanoscale strategies for enhancing and monitoring blood vessel regeneration. *Nano Today*, **2012**, 7, 514-531	17.9	17
108	Pulsed magneto-motive ultrasound imaging to detect intracellular trafficking of magnetic nanoparticles. *Nanotechnology*, **2011**, 22, 415105	3.4	17
107	Thermal stability of biodegradable plasmonic nanoclusters in photoacoustic imaging. *Optics Express* , **2012**, 20, 29479-87	3.3	17
106	The dynamic deformation of a layered viscoelastic medium under surface excitation. *Physics in Medicine and Biology*, **2015**, 60, 4295-312	3.8	16
105	Assessing the mechanical properties of tissue-mimicking phantoms at different depths as an approach to measure biomechanical gradient of crystalline lens. *Biomedical Optics Express*, **2013**, 4, 2769-80	3.5	16
104	Model-based reconstructive elasticity imaging using ultrasound. *International Journal of Biomedical Imaging*, **2007**, 2007, 35830	5.2	16
103	Photoacoustic imaging of gold nanorods in the brain delivered via microbubble-assisted focused ultrasound: a tool for molecular neuroimaging. *Laser Physics Letters*, **2019**, 16,	1.5	15
102	Ultrasound-guided immunofunctional photoacoustic imaging for diagnosis of lymph node metastases. *Nanoscale*, **2019**, 11, 11649-11659	7.7	15
101	Photoacoustics of core□shell nanospheres using comprehensive modeling and analytical solution approach. *Communications Physics*, **2019**, 2,	5.4	15
100	Estimation of mechanical properties of a viscoelastic medium using a laser-induced microbubble interrogated by an acoustic radiation force. *Journal of the Acoustical Society of America*, **2011**, 130, 2241-8	2.2	15
99	Array-Based Real-Time Ultrasound and Photoacoustic Ocular Imaging. *Journal of the Optical Society of Korea*, **2014**, 18, 151-155		15

98	Prussian blue nanocubes as a multimodal contrast agent for image-guided stem cell therapy of the spinal cord. *Photoacoustics*, **2020**, 18, 100166	9	14
97	Adaptive beamforming for photoacoustic imaging using linear array transducer **2008**,		14
96	The impact of intraocular pressure on elastic wave velocity estimates in the crystalline lens. *Physics in Medicine and Biology*, **2017**, 62, N45-N57	3.8	13
95	Muscle as a molecular machine for protecting joints and bones by absorbing mechanical impacts. *Medical Hypotheses*, **2014**, 83, 6-10	3.8	13
94	Optimization of in vivo spectroscopic photoacoustic imaging by smart optical wavelength selection. *Optics Letters*, **2014**, 39, 2214-7	3	13
93	An autocorrelation-based method for improvement of sub-pixel displacement estimation in ultrasound strain imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2011**, 58, 838-43	3.2	13
92	Quantitative ultrasound method to detect and monitor laser-induced cavitation bubbles. *Journal of Biomedical Optics*, **2008**, 13, 034011	3.5	13
91	Laser-activated perfluorocarbon nanodroplets: a new tool for blood brain barrier opening. *Biomedical Optics Express*, **2018**, 9, 4527-4538	3.5	13
90	Exogenous imaging contrast and therapeutic agents for intravascular photoacoustic imaging and image-guided therapy. *Physics in Medicine and Biology*, **2018**, 63, 22TR01	3.8	13
89	Color-coded perfluorocarbon nanodroplets for multiplexed ultrasound and Photoacoustic imaging. *Nano Research*, **2019**, 12, 741-747	10	12
88	A high pulse repetition frequency ultrasound system for the ex vivo measurement of mechanical properties of crystalline lenses with laser-induced microbubbles interrogated by acoustic radiation force. *Physics in Medicine and Biology*, **2012**, 57, 4871-84	3.8	12
87	Modulation of photoacoustic signal generation from metallic surfaces. *Journal of Biomedical Optics*, **2013**, 18, 56008	3.5	11
86	Photomagnetic Prussian blue nanocubes: Synthesis, characterization, and biomedical applications. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2020**, 24, 102138	6	11
85	Combined ultrasound and photoacoustic imaging of pancreatic cancer using nanocage contrast agents **2009**,		10
84	photoacoustic sensing of calcium dynamics with Arsenazo III. *Laser Physics Letters*, **2016**, 13,	1.5	10
83	Clinically translatable quantitative molecular photoacoustic imaging with liposome-encapsulated ICG J-aggregates. *Nature Communications*, **2021**, 12, 5410	17.4	10
82	In-vivo ultrasound and photoacoustic image- guided photothermal cancer therapy using silica-coated gold nanorods. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2014**, 61, 891-7	3.2	9
81	Investigation of light delivery geometries for photoacoustic applications using Monte Carlo simulations with multiple wavelengths, tissue types, and species characteristics. *Journal of Biomedical Optics*, **2020**, 25, 1-16	3.5	9

80	photoacoustic guidance of stem cell injection and delivery for regenerative spinal cord therapies. *Neurophotonics*, **2020**, 7, 030501	3.9	9
79	Quantitative contrast-enhanced ultrasound measurement of cerebrospinal fluid flow for the diagnosis of ventricular shunt malfunction. *Journal of Neurosurgery*, **2015**, 123, 1420-6	3.2	8
78	Ultrasound-guided photoacoustic imaging-directed re-endothelialization of acellular vasculature leads to improved vascular performance. *Acta Biomaterialia*, **2016**, 32, 35-45	10.8	8
77	Combined Multiwavelength Photoacoustic and Plane-Wave Ultrasound Imaging for Probing Dynamic Phase-Change Contrast Agents. *IEEE Transactions on Biomedical Engineering*, **2019**, 66, 595-598	5	8
76	Influence of nanosecond pulsed laser irradiance on the viability of nanoparticle-loaded cells: implications for safety of contrast-enhanced photoacoustic imaging. *Nanotechnology*, **2013**, 24, 465101	3.4	8
75	Methodical study on plaque characterization using integrated vascular ultrasound, strain and spectroscopic photoacoustic imaging **2011**,		8
74	Intravascular photoacoustic imaging of macrophages using molecularly targeted gold nanoparticles **2010**,		8
73	Combined photoacoustic and magneto-acoustic imaging. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 4763-6	0.9	8
72	Elasticity Imaging and Sensing Using Targeted Motion: From Macro to Nano. *Current Medical Imaging*, **2012**, 8, 3-15	1.2	8
71	Model-based reconstructive elasticity imaging of deep venous thrombosis. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2004**, 51, 521-31	3.2	8
70	Lipid Shell Composition Plays a Critical Role in the Stable Size Reduction of Perfluorocarbon Nanodroplets. *Ultrasound in Medicine and Biology*, **2019**, 45, 1489-1499	3.5	7
69	Noninvasive detection of intimal xanthoma using combined ultrasound, strain rate and photoacoustic imaging. *Ultrasonics*, **2012**, 52, 435-41	3.5	7
68	Photoacoustic and ultrasound imaging contrast enhancement using a dual contrast agent **2010**,		7
67	Design of a Volumetric Imaging Sequence Using a Vantage-256 Ultrasound Research Platform Multiplexed With a 1024-Element Fully Sampled Matrix Array. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 248-257	3.2	7
66	Gas-generating nanoparticles for contrast-enhanced ultrasound imaging. *Nanoscale*, **2019**, 11, 16235-16240	7.7	6
65	Synthesis of Iron Oxide Nanoclusters with Enhanced Magnetization and Their Applications in Pulsed Magneto-Motive Ultrasound Imaging. *Nano*, **2015**, 10, 1550073	1.1	6
64	Photoacoustic Characterization of Radiofrequency Ablation Lesions. *Proceedings of SPIE*, **2012**, 8223,	1.7	6
63	Intravascular ultrasound and photoacoustic imaging. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 2-5	0.9	6

62	Effects of Freezing on Mesenchymal Stem Cells Labeled with Gold Nanoparticles. *Tissue Engineering - Part C: Methods*, **2020**, 26, 1-10	2.9	6
61	Bifunctional Janus Particles as Multivalent Synthetic Nanoparticle Antibodies (SNAbs) for Selective Depletion of Target Cells. *Nano Letters*, **2021**, 21, 875-886	11.5	6
60	Impact of depth-dependent optical attenuation on wavelength selection for spectroscopic photoacoustic imaging. *Photoacoustics*, **2018**, 12, 46-54	9	6
59	Correspondence: Spatial variations of viscoelastic properties of porcine vitreous humors. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2013**, 60, 2453-60	3.2	5
58	Ultrasound and photoacoustic image-guided photothermal therapy using silica-coated gold nanorods: In-vivo study **2010**,		5
57	Synthesis of a dual contrast agent for ultrasound and photoacoustic imaging **2010**,		5
56	On sensitivity of molecular specific photoacoustic imaging using plasmonic gold nanoparticles. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 6338-40	0.9	5
55	Cancer imaging and therapy with metal nanoparticles. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 2005-7	0.9	5
54	Optimization of dual-wavelength intravascular photoacoustic imaging of atherosclerotic plaques using Monte Carlo optical modeling. *Journal of Biomedical Optics*, **2017**, 22, 1-12	3.5	5
53	Photoacoustic speckle tracking for motion estimation and flow analysis. *Journal of Biomedical Optics*, **2018**, 23, 1-9	3.5	5
52	Photoacoustic properties of anterior ocular tissues. *Journal of Biomedical Optics*, **2019**, 24, 1-11	3.5	5
51	Design and Demonstration of a Configurable Imaging Platform for Combined Laser, Ultrasound, and Elasticity Imaging. *IEEE Transactions on Medical Imaging*, **2019**, 38, 1622-1632	11.7	5
50	Photoacoustic Imaging for Cancer Diagnosis and Therapy Guidance **2014**, 139-158		4
49	Ultrasound and photoacoustic imaging to monitor mesenchymal stem cells labeled with gold nanoparticles **2011**,		4
48	On stability of molecular therapeutic agents for noninvasive photoacoustic and ultrasound image-guided photothermal therapy **2010**,		4
47	Combined photoacoustic and magneto-motive ultrasound imaging **2010**,		4
46	Ultrasound and photoacoustic imaging to monitor vascular growth in tissue engineered constructs **2009**,		4
45	Molecular therapeutic agents for noninvasive photoacoustic image-guided photothermal therapy. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 4106-9	0.9	4

44	Integrated optical coherence tomography and multielement ultrasound transducer probe for shear wave elasticity imaging of moving tissues. *Journal of Biomedical Optics*, **2018**, 23, 1-7	3.5	4
43	A Trimodal Ultrasound, Photoacoustic and Magnetic Resonance Imaging Approach for Longitudinal Post-operative Monitoring of Stem Cells in the Spinal Cord. *Ultrasound in Medicine and Biology*, **2020**, 46, 3468-3474	3.5	4
42	Gold nanoparticles conjugated with DNA aptamer for photoacoustic detection of human matrix metalloproteinase-9. *Photoacoustics*, **2022**, 25, 100307	9	4
41	Leveraging the Imaging Transmit Pulse to Manipulate Phase-Change Nanodroplets for Contrast-Enhanced Ultrasound. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2019**, 66, 692-700	3.2	3
40	Fluid flow measurement for diagnosis of ventricular shunt malfunction using nonlinear responses of microbubbles in the contrast-enhanced ultrasound imaging. *Japanese Journal of Applied Physics*, **2017**, 56,	1.4	3
39	Biodegradable plasmonic nanoclusters as contrast agent for photoacoustic imaging **2010**,		3
38	Integrated catheter for intravascular ultrasound and photoacoustic imaging **2010**,		3
37	Magneto-photo-acoustic imaging using dual-contrast agent **2010**,		3
36	Design of catheter for combined intravascular photoacoustic and ultrasound imaging **2008**,		3
35	Ultrasound guidance and monitoring of laser-based fat removal. *Lasers in Surgery and Medicine*, **2008**, 40, 680-7	3.6	3
34	Feasibility of Contrast-Enhanced Photoacoustic Liver Imaging at a Wavelength of 1064 nm **2012**,		3
33	Toward optimization of blood brain barrier opening induced by laser-activated perfluorocarbon nanodroplets. *Biomedical Optics Express*, **2019**, 10, 3139-3151	3.5	3
32	Ultrafast ultrasound imaging of surface acoustic waves induced by laser excitation compared with acoustic radiation force. *Optics Letters*, **2020**, 45, 1810-1813	3	3
31	Synchronously Amplified Photoacoustic Image Recovery (SAPhIRe). *Photoacoustics*, **2020**, 20, 100198	9	3
30	Theragnostic Glycol Chitosan-Conjugated Gold Nanoparticles for Photoacoustic Imaging of Regional Lymph Nodes and Delivering Tumor Antigen to Lymph Nodes. *Nanomaterials*, **2021**, 11,	5.4	3
29	Assessment of plaque vulnerability in atherosclerosis via intravascular photoacoustic imaging of targeted liposomal ICG J-aggregates (Conference Presentation) **2017**,		2
28	Biodegradable Plasmonic Nanoparticles: Overcoming Clinical Translation Barriers **2015**,		2
27	Dual-Phase Transmit Focusing for Multiangle Compound Shear-Wave Elasticity Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 1439-1449	3.2	2

26	Air-puff OCE for assessment of mouse corneain vivo **2014**,		2
25	System and integrated catheter for real-time intravascular ultrasound and photoacoustic imaging **2014**,		2
24	On the possibility to detect lipid in atherosclerotic plaques using intravascular photoacoustic imaging. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 4767-70	0.9	2
23	High sensitivity intravascular photoacoustic imaging of macrophages **2009**,		2
22	Intravascular photoacoustic imaging of gold nanorod-labeled atherosclerotic plaques **2012**,		2
21	Selective detection of cancer using spectroscopic photoacoustic imaging and bioconjugated gold nanoparticles **2008**,		2
20	Molecular specific photoacoustic imaging with plasmonic nanosensors **2008**,		2
19	Co-registered photoacoustic and fluorescent imaging of a switchable nanoprobe based on J-aggregates of indocyanine green **2018**,		2
18	Laser threshold and cell damage mechanism for intravascular photoacoustic imaging. *Lasers in Surgery and Medicine*, **2018**, 51, 466	3.6	2
17	Dual-Illumination Ultrasound/ Photoacoustic System for Cervical Cancer imaging. *IEEE Photonics Journal*, **2021**, 13,	1.8	2
16	In vivo photoacoustic detection of lymph node metastasis using glycol-chitosan-coated gold nanoparticles **2017**,		1
15	Ultrasound-induced cellular uptake of plasmonic gold nanorods **2011**,		1
14	Ultrasound-Based Molecular Imaging Using Nanoagents **2011**, 263-278		1
13	Remotely triggered contrast nanoagent for ultrasound and photoacoustic imaging **2010**,		1
12	Molecular diagnosis of cancer using multiplex photoacoustic imaging with targeted nanorods **2010**,		1
11	Staging atherosclerosis using ultrasound, strain and photoacoustic imaging **2010**,		1
10	Measurements of youngŀs modulus of viscoelastic medium using a laser-induced microbubble under acoustic radiation force **2010**,		1
9	On application of magnetic nanoclusters to improve the sensitivity of pulsed magnetomotive ultrasound imaging **2010**,		1

8	Design and development of multifunctional contrast agents for photoacoustic imaging **2009**,		1
7	Intravascular Photoacoustic and Ultrasound Imaging: From Tissue Characterization to Molecular Imaging to Image-Guided Therapy **2011**, 787-816		1
6	Formulation and Acoustic Modulation of Optically Vaporized Perfluorocarbon Nanodroplets. *Journal of Visualized Experiments*, **2021**,	1.6	1
5	Temperature Measurements **2010**, 399-453		
4	Clinical benefits of integrating cardiac and vascular models. *Expert Opinion on Medical Diagnostics*, **2011**, 5, 501-15		
3	Introduction to the BIOMED 2012 Feature Issue. *Biomedical Optics Express*, **2012**, 3, 2771	3.5	
2	Im□genes fotoac□sticas para diagn□sticos m□dicos. *Ingenierias*, **2020**, 23, 28-41	0.3	
1	Speed-of-sound Estimation of Dual-acoustic Waves using Laser-activated Nanodroplets. *Journal of the Korean Physical Society*, **2018**, 73, 586-591	0.6	