

# Fei Gao

## List of Publications by Year in descending order

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Version: 2024-02-01

98  
papers

2,052  
citations

236925  
25  
h-index

265206  
42  
g-index

98  
all docs

98  
docs citations

98  
times ranked

1816  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-performance piezoelectric nanogenerators composed of formamidinium lead halide perovskite nanoparticles and poly(vinylidene fluoride). <i>Nano Energy</i> , 2017, 37, 126-135.	16.0	164
2	Flexible Piezoelectric Nanocomposite Generators Based on Formamidinium Lead Halide Perovskite Nanoparticles. <i>Advanced Functional Materials</i> , 2016, 26, 7708-7716.	14.9	163
3	Review of deep learning for photoacoustic imaging. <i>Photoacoustics</i> , 2021, 21, 100215.	7.8	86
4	Review of Low-Cost Photoacoustic Sensing and Imaging Based on Laser Diode and Light-Emitting Diode. <i>Sensors</i> , 2018, 18, 2264.	3.8	85
5	Single laser pulse generates dual photoacoustic signals for differential contrast photoacoustic imaging. <i>Scientific Reports</i> , 2017, 7, 626.	3.3	71
6	Y-Net: Hybrid deep learning image reconstruction for photoacoustic tomography in vivo. <i>Photoacoustics</i> , 2020, 20, 100197.	7.8	64
7	Thermoacoustic resonance effect and circuit modelling of biological tissue. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	62
8	Advanced photoacoustic and thermoacoustic sensing and imaging beyond pulsed absorption contrast. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 074006.	2.2	60
9	Noninvasive Electromagnetic Wave Sensing of Glucose. <i>Sensors</i> , 2019, 19, 1151.	3.8	59
10	Coherent Photoacoustic-Ultrasound Correlation and Imaging. <i>IEEE Transactions on Biomedical Engineering</i> , 2014, 61, 2507-2512.	4.2	56
11	Photoacoustic Image Classification and Segmentation of Breast Cancer: A Feasibility Study. <i>IEEE Access</i> , 2019, 7, 5457-5466.	4.2	56
12	Macro fiber composite-based energy harvester for human knee. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	51
13	Photoacoustic resonance spectroscopy for biological tissue characterization. <i>Journal of Biomedical Optics</i> , 2014, 19, 067006.	2.6	45
14	Single-Wavelength Blood Oxygen Saturation Sensing With Combined Optical Absorption and Scattering. <i>IEEE Sensors Journal</i> , 2016, 16, 1943-1948.	4.7	41
15	Rationally encapsulated gold nanorods improving both linear and nonlinear photoacoustic imaging contrast in vivo. <i>Nanoscale</i> , 2017, 9, 79-86.	5.6	41
16	Photoacoustic elastic oscillation and characterization. <i>Optics Express</i> , 2015, 23, 20617.	3.4	40
17	Photoacoustic phasoscopy super-contrast imaging. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	38
18	Modulatable magnetically mediated thermoacoustic imaging with magnetic nanoparticles. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	36

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19	An analytical study of photoacoustic and thermoacoustic generation efficiency towards contrast agent and film design optimization. Photoacoustics, 2017, 7, 1-11.	7.8	35
20	Handheld Photoacoustic Imager for Theranostics in 3D. IEEE Transactions on Medical Imaging, 2019, 38, 2037-2046.	8.9	32
21	Remarkable In Vivo Nonlinear Photoacoustic Imaging Based on Near-Infrared Organic Dyes. Small, 2016, 12, 5239-5244.	10.0	31
22	Thermally modulated photoacoustic imaging with super-paramagnetic iron oxide nanoparticles. Optics Letters, 2014, 39, 3414.	3.3	28
23	Coexisting and mixing phenomena of thermoacoustic and magnetoacoustic waves in water. Scientific Reports, 2015, 5, 11489.	3.3	27
24	Noninvasive photoacoustic measurement of glucose by data fusion. Analyst, The, 2017, 142, 2892-2896.	3.5	26
25	Hybrid multi-wavelength nonlinear photoacoustic sensing and imaging. Optics Letters, 2018, 43, 5611.	3.3	26
26	Electrical circuit modeling and analysis of microwave acoustic interaction with biological tissues. Medical Physics, 2014, 41, 053302.	3.0	25
27	Self temperature regulation of photothermal therapy by laser-shared photoacoustic feedback. Optics Letters, 2015, 40, 4492.	3.3	25
28	Early Sales of Seasonal Products with Weather-Conditional Rebates. Production and Operations Management, 2012, 21, 778-794.	3.8	23
29	Fast photoacoustic-guided depth-resolved Raman spectroscopy: a feasibility study. Optics Letters, 2015, 40, 3568.	3.3	23
30	Micro-Doppler Photoacoustic Effect and Sensing by Ultrasound Radar. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 152-157.	2.9	21
31	“Guide Star”-Assisted Noninvasive Photoacoustic Measurement of Glucose. ACS Sensors, 2018, 3, 2550-2557.	7.8	21
32	Ki-GAN: Knowledge Infusion Generative Adversarial Network for Photoacoustic Image Reconstruction In Vivo. Lecture Notes in Computer Science, 2019, , 273-281.	1.3	21
33	GPU-accelerated two dimensional synthetic aperture focusing for photoacoustic microscopy. APL Photonics, 2018, 3, .	5.7	20
34	Photoacoustic Classification of Tumor Model Morphology Based on Support Vector Machine: A Simulation and Phantom Study. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-9.	2.9	19
35	Implementation and Testing of Ankle-Foot Prosthesis With a New Compensated Controller. IEEE/ASME Transactions on Mechatronics, 2019, 24, 1775-1784.	5.8	18
36	Reconstruct the Photoacoustic Image Based On Deep Learning with Multi-frequency Ring-shape Transducer Array. , 2019, 2019, 7115-7118.		18

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37	Photoacoustic induced surface acoustic wave sensor for concurrent opto-mechanical microfluidic sensing of dyes and plasmonic nanoparticles. RSC Advances, 2016, 6, 50238-50244.	3.6	17
38	Quantitative Photoacoustic Blood Oxygenation Imaging Using Deep Residual And Recurrent Neural Network. , 2019, , .		17
39	Toward Wearable Healthcare: A Miniaturized 3D Imager With Coherent Frequency-Domain Photoacoustics. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1417-1424.	4.0	17
40	A Noise Reduction Method for Photoacoustic Imaging <i>In Vivo</i> Based on EMD and Conditional Mutual Information. IEEE Photonics Journal, 2019, 11, 1-10.	2.0	17
41	Enabling both time-domain and frequency-domain photoacoustic imaging by a fingertip laser diode system. Optics Letters, 2019, 44, 1988.	3.3	16
42	Photoacoustic and Ultrasound Dual-Modality Endoscopic Imaging Based on ALN Pmut Array. , 2022, , .		16
43	Photoacoustic Resonance Imaging. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-7.	2.9	15
44	Deep learning enabled real-time photoacoustic tomography system via single data acquisition channel. Photoacoustics, 2021, 22, 100270.	7.8	15
45	Accelerated Photoacoustic Tomography Reconstruction via Recurrent Inference Machines. , 2019, 2019, 6371-6374.		13
46	Low-Cost Photoacoustic Tomography System Based on Multi-Channel Delay-Line Module. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 778-782.	3.0	13
47	Phase-domain photoacoustic sensing. Applied Physics Letters, 2017, 110, .	3.3	12
48	Adaptive Photoacoustic Sensing Using Matched Filter. , 2017, 1, 1-3.		12
49	Design of powered ankle-foot prosthesis driven by parallel elastic actuator. , 2015, , .		11
50	Dual-Contrast Nonlinear Photoacoustic Sensing and Imaging Based on Single High-Repetition- Rate Pulsed Laser. IEEE Sensors Journal, 2019, 19, 5559-5565.	4.7	11
51	Time-domain photoacoustic waveform analysis for glucose measurement. Analyst, The, 2020, 145, 7964-7972.	3.5	11
52	Synergy-based knee angle estimation using kinematics of thigh. Gait and Posture, 2021, 89, 25-30.	1.4	11
53	Compressed sensing for photoacoustic computed tomography based on an untrained neural network with a shape prior. Biomedical Optics Express, 2021, 12, 7835.	2.9	11
54	AS-Net: Fast Photoacoustic Reconstruction With Multi-Feature Fusion From Sparse Data. IEEE Transactions on Computational Imaging, 2022, 8, 215-223.	4.4	11

#	ARTICLE	IF	CITATIONS
55	A new powered ankle-foot prosthesis with compact parallel spring mechanism. , 2016, , .		9
56	Wavelet de-noising method with adaptive threshold selection for photoacoustic tomography. , 2018, 2018, 4796-4799.		9
57	De-noising of photoacoustic sensing and imaging based on combined empirical mode decomposition and independent component analysis. Journal of Biophotonics, 2019, 12, e201900042.	2.3	9
58	Human Breast Numerical Model Generation Based on Deep Learning for Photoacoustic Imaging. , 2020, 2020, 1919-1922.		9
59	Multiple stimulated emission fluorescence photoacoustic sensing and spectroscopy. Applied Physics Letters, 2016, 109, .	3.3	8
60	Optical Spectroscopic Ultrasound Displacement Imaging: A Feasibility Study. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-8.	2.9	8
61	Low-Cost Multi-Wavelength Photoacoustic Imaging Based on Portable Continuous-Wave Laser Diode Module. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 738-745.	4.0	8
62	A Correlated Microwave-Acoustic Imaging method for early-stage cancer detection. , 2012, 2012, 480-3.		7
63	Hybrid Neural Network for Photoacoustic Imaging Reconstruction. , 2019, 2019, 6367-6370.		7
64	Programmable Acoustic Delay-Line Enabled Low-Cost Photoacoustic Tomography System. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 2075-2084.	3.0	7
65	Limited-View Photoacoustic Imaging Reconstruction With Dual Domain Inputs Based On Mutual Inforamtion. , 2021, , .		6
66	Size-adjustable ring-shape photoacoustic tomography imager in vivo. Journal of Biophotonics, 2022, 15, e202200070.	2.3	6
67	Magnetically mediated thermoacoustic imaging. Proceedings of SPIE, 2014, , .	0.8	5
68	A Prototype for a Palm-sized Photoacoustic Sensing Unit. X-Acoustics Imaging and Sensing, 2015, 1, .	0.1	5
69	3D Photoacoustic Simulation of Human Skin Vascular for Quantitative Image Analysis. , 2021, , .		5
70	Deep learning adapted acceleration for limited-view photoacoustic image reconstruction. Optics Letters, 2022, 47, 1911.	3.3	5
71	Fingertip Laser Diode System Enables Both Time-Domain and Frequency-Domain Photoacoustic Imaging. , 2019, , .		3
72	Deep Learning Approach to Reconstruct the Photoacoustic Image Using Multi-Frequency Data. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
73	Image Infusion of Photoacoustic Imaging Based on Novel Adjustable Hand-held Probe. , 2019, , .		3
74	Low-Cost Photoacoustic Tomography System Based on Water-Made Acoustic Delay-Line. , 2019, , .		3
75	A Light-Adjustable Hand-Held Probe for Photoacoustic Tomography <i>in vivo</i>. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-11.	2.9	3
76	Detection of weak optical absorption by optical-resolution photoacoustic microscopy. Photoacoustics, 2022, 25, 100335.	7.8	3
77	Snapshot time-reversed ultrasonically encoded optical focusing guided by time-reversed photoacoustic wave. Photoacoustics, 2022, 26, 100352.	7.8	3
78	Microwave-acoustic correlated imaging and circuit modelling of biological tissues. , 2013, , .		2
79	Analysis of stimulated Raman photoacoustics in frequency domain: A feasibility study. Journal of Applied Physics, 2016, 120, 083105.	2.5	2
80	Design of Continuously-Adjustable Light-Scanning Handheld Probe for Photoacoustic Imaging. IEEE Photonics Journal, 2021, 13, 1-6.	2.0	2
81	Low-Cost Photoacoustic Tomography System Enabled by Frequency-Division Multiplexing. , 2021, , .		2
82	Photoacoustic Characterization of Cortical and Cancellous Bone in The Vertebrae. , 2021, 2021, 294-297.		2
83	Photoacoustic phasoscopy for tissue characterization. , 2012, , .		1
84	Nonlinear electromagnetic-acoustic sensing and imaging. , 2016, , .		1
85	Low-power magnetoacoustic sensing with 30W power amplifier. , 2019, , .		1
86	Adjustable Handheld Probe Design for Photoacoustic Imaging:Experimental Validation. , 2019, 2019, 7119-7122.		1
87	Deep Learning Regularized Acceleration for Photoacoustic Image Reconstruction. , 2021, , .		1
88	Electromagnetic acoustics sensing and imaging for biomedical applications. , 2014, , .		0
89	Electromagnetic acoustics towards revolutionary imaging and therapy. , 2016, , .		0
90	Response to "Comment on "Multiple stimulated emission fluorescence photoacoustic sensing and spectroscopy" [Appl. Phys. Lett. 111, 056101 (2017)]. Applied Physics Letters, 2017, 111, 056102.	3.3	0

#	ARTICLE	IF	CITATIONS
91	Signal and image de-noising algorithm investigation for photoacoustic tomography system. , 2018, , .		0
92	Magnetically Mediated Thermoacoustics: Imaging and Sensing. , 2019, , .		0
93	Design of scanning robot for atherosclerosis detection via photoacoustic imaging. , 2021, , .		0
94	Dual-contrast nonlinear photoacoustic sensing based on quasi-CW single-pulsed laser. , 2018, , .		0
95	Photoacoustic imaging with custom-designed fingertip laser diode. , 2018, , .		0
96	Photoacoustic classification of tumor malignancy based on support vector machine. , 2018, , .		0
97	Combining EMD with ICA for photoacoustic imaging denoising. , 2018, , .		0
98	Learned Parameters and Increment for Iterative Photoacoustic Image Reconstruction via Deep Learning. , 2021, 2021, 2989-2992.		0