

# Paul C Beard

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9575746/publications.pdf>

Version: 2024-02-01

56  
papers

5,638  
citations

201674

27  
h-index

168389

53  
g-index

59  
all docs

59  
docs citations

59  
times ranked

5314  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomedical photoacoustic imaging. <i>Interface Focus</i> , 2011, 1, 602-631.	3.0	1,697
2	Contrast agents for molecular photoacoustic imaging. <i>Nature Methods</i> , 2016, 13, 639-650.	19.0	979
3	Backward-mode multiwavelength photoacoustic scanner using a planar Fabry-Perot polymer film ultrasound sensor for high-resolution three-dimensional imaging of biological tissues. <i>Applied Optics</i> , 2008, 47, 561.	2.1	472
4	Deep in vivo photoacoustic imaging of mammalian tissues using a tyrosinase-based genetic reporter. <i>Nature Photonics</i> , 2015, 9, 239-246.	31.4	362
5	Ultrasensitive plano-concave optical microresonators for ultrasound sensing. <i>Nature Photonics</i> , 2017, 11, 714-719.	31.4	255
6	Carbon Nanotube/PDMS Composite Coatings on Optical Fibers for All-Optical Ultrasound Imaging. <i>Advanced Functional Materials</i> , 2016, 26, 8390-8396.	14.9	120
7	All-optical forward-viewing photoacoustic probe for high-resolution 3D endoscopy. <i>Light: Science and Applications</i> , 2018, 7, 75.	16.6	119
8	Accelerated high-resolution photoacoustic tomography via compressed sensing. <i>Physics in Medicine and Biology</i> , 2016, 61, 8908-8940.	3.0	112
9	Gold-silica quantum rattles for multimodal imaging and therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 1959-1964.	7.1	107
10	Broadband miniature optical ultrasound probe for high resolution vascular tissue imaging. <i>Biomedical Optics Express</i> , 2015, 6, 1502.	2.9	99
11	Polydimethylsiloxane Composites for Optical Ultrasound Generation and Multimodality Imaging. <i>Advanced Functional Materials</i> , 2018, 28, 1704919.	14.9	81
12	High power visible light emitting diodes as pulsed excitation sources for biomedical photoacoustics. <i>Biomedical Optics Express</i> , 2016, 7, 1260.	2.9	78
13	Evaluation of Absorbing Chromophores Used in Tissue Phantoms for Quantitative Photoacoustic Spectroscopy and Imaging. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 600-607.	2.9	64
14	Pencil beam all-optical ultrasound imaging. <i>Biomedical Optics Express</i> , 2016, 7, 3696.	2.9	54
15	In vivo dual-modality photoacoustic and optical coherence tomography imaging of human dermatological pathologies. <i>Biomedical Optics Express</i> , 2015, 6, 3163.	2.9	52
16	Non-invasive multimodal optical coherence and photoacoustic tomography for human skin imaging. <i>Scientific Reports</i> , 2017, 7, 17975.	3.3	51
17	Rapid volumetric photoacoustic tomographic imaging with a Fabry-Perot ultrasound sensor depicts peripheral arteries and microvascular vasomotor responses to thermal stimuli. <i>European Radiology</i> , 2018, 28, 1037-1045.	4.5	51
18	Performance characteristics of an interventional multispectral photoacoustic imaging system for guiding minimally invasive procedures. <i>Journal of Biomedical Optics</i> , 2015, 20, 1.	2.6	50

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19	All-Optical Rotational Ultrasound Imaging. Scientific Reports, 2019, 9, 5576.	3.3	47
20	Photoacoustic imaging of human lymph nodes with endogenous lipid and hemoglobin contrast. Journal of Biomedical Optics, 2015, 20, 1.	2.6	45
21	Dual modality optical coherence and whole-body photoacoustic tomography imaging of chick embryos in multiple development stages. Biomedical Optics Express, 2014, 5, 3150.	2.9	43
22	Combined multi-modal photoacoustic tomography, optical coherence tomography (OCT) and OCT angiography system with an articulated probe for in vivo human skin structure and vasculature imaging. Biomedical Optics Express, 2016, 7, 3390.	2.9	40
23	Super-resolution ultrasound. Nature, 2015, 527, 451-452.	27.8	36
24	Photoacoustic imaging of the human placental vasculature. Journal of Biophotonics, 2020, 13, e201900167.	2.3	36
25	Velocity measurements in whole blood using acoustic resolution photoacoustic Doppler. Biomedical Optics Express, 2016, 7, 2789.	2.9	32
26	Large area laser scanning optical resolution photoacoustic microscopy using a fibre optic sensor. Biomedical Optics Express, 2018, 9, 650.	2.9	32
27	Estimating blood oxygenation from photoacoustic images: can a simple linear spectroscopic inversion ever work?. Journal of Biomedical Optics, 2019, 24, 1.	2.6	32
28	Interventional Photoacoustic Imaging of the Human Placenta with Ultrasonic Tracking for Minimally Invasive Fetal Surgeries. Lecture Notes in Computer Science, 2015, 9349, 371-378.	1.3	29
29	In vivo three-dimensional photoacoustic imaging of the renal vasculature in preclinical rodent models. American Journal of Physiology - Renal Physiology, 2018, 314, F1145-F1153.	2.7	29
30	Characteristics of optimized fibre-optic ultrasound receivers for minimally invasive photoacoustic detection. Proceedings of SPIE, 2015, , .	0.8	27
31	Exogenous contrast agents for thermoacoustic imaging: An investigation into the underlying sources of contrast. Medical Physics, 2015, 42, 170-181.	3.0	26
32	Tunable Semiconducting Polymer Nanoparticles with INDT-Based Conjugated Polymers for Photoacoustic Molecular Imaging. Bioconjugate Chemistry, 2017, 28, 1734-1740.	3.6	26
33	All-optical dual photoacoustic and optical coherence tomography intravascular probe. Photoacoustics, 2018, 11, 65-70.	7.8	26
34	Longitudinal Photoacoustic Imaging of the Pharmacodynamic Effect of Vascular Targeted Therapy on Tumors. Clinical Cancer Research, 2019, 25, 7436-7447.	7.0	26
35	Video-rate all-optical ultrasound imaging. Biomedical Optics Express, 2018, 9, 3481.	2.9	25
36	Photoacoustic tomography using orthogonal Fabry-Pérot sensors. Journal of Biomedical Optics, 2016, 22, 041009.	2.6	24

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37	Single-shot hybrid photoacoustic-fluorescent microendoscopy through a multimode fiber with wavefront shaping. Biomedical Optics Express, 2020, 11, 5717.	2.9	24
38	A reconfigurable all-optical ultrasound transducer array for 3D endoscopic imaging. Scientific Reports, 2017, 7, 1208.	3.3	23
39	Acoustic Wave Field Reconstruction From Compressed Measurements With Application in Photoacoustic Tomography. IEEE Transactions on Computational Imaging, 2017, 3, 710-721.	4.4	22
40	Photoacoustic imaging using an 8-beam Fabry-Perot scanner. Proceedings of SPIE, 2016, , .	0.8	21
41	Monitoring neovascularization and integration of decellularized human scaffolds using photoacoustic imaging. Photoacoustics, 2019, 13, 76-84.	7.8	21
42	Miniature all-optical flexible forward-viewing photoacoustic endoscopy probe for surgical guidance. Optics Letters, 2020, 45, 6238.	3.3	21
43	Acoustic resolution photoacoustic Doppler velocimetry in blood-mimicking fluids. Scientific Reports, 2016, 6, 20902.	3.3	20
44	Ultrafast laser-scanning optical resolution photoacoustic microscopy at up to 2 million A-lines per second. Journal of Biomedical Optics, 2018, 23, 1.	2.6	20
45	Single-pixel camera photoacoustic tomography. Journal of Biomedical Optics, 2019, 24, 1.	2.6	16
46	An optical coherence photoacoustic microscopy system using a fiber optic sensor. APL Photonics, 2021, 6, .	5.7	13
47	Stem cell delivery to kidney via minimally invasive ultrasound-guided renal artery injection in mice. Scientific Reports, 2020, 10, 7514.	3.3	10
48	Freehand and video-rate all-optical ultrasound imaging. Ultrasonics, 2021, 116, 106514.	3.9	10
49	Special Section Guest Editorial: Photoacoustic Imaging and Sensing. Journal of Biomedical Optics, 2017, 22, 041001.	2.6	7
50	Ultrasonic Needle Tracking with Dynamic Electronic Focusing. Ultrasound in Medicine and Biology, 2022, 48, 520-529.	1.5	7
51	Processing methods for photoacoustic Doppler flowmetry with a clinical ultrasound scanner. Journal of Biomedical Optics, 2018, 23, 1.	2.6	6
52	Rapid spatial mapping of the acoustic pressure in high intensity focused ultrasound fields at clinical intensities using a novel planar Fabry-Pérot interferometer. , 2015, , .		2
53	Directivity of a planar fabry-perot optical ultrasound sensor. , 2017, , .		0
54	Source density apodisation in 2D all-optical ultrasound imaging. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
55	10.1063/5.0059351.1., 2021,, .		0
56	CuInS <sub>2</sub> Quantum Dot and Polydimethylsiloxane Nanocomposites for All-Optical Ultrasound and Photoacoustic Imaging (Adv. Mater. Interfaces 20/2021). Advanced Materials Interfaces, 2021, 8, 2170114.	3.7	0