Paul C Beard

List of Publications by Year
in descending order

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	Ultrasonic Needle Tracking with Dynamic Electronic Focusing. Ultrasound in Medicine and Biology, 2022, 48, 520-529.	1.5	7
2	An optical coherence photoacoustic microscopy system using a fiber optic sensor. APL Photonics, 2021, 6, .	5.7	13
3	Freehand and video-rate all-optical ultrasound imaging. Ultrasonics, 2021, 116, 106514.	3.9	10
4	10.1063/5.0059351.1. , 2021, , .		0
5	CuInS₂ Quantum Dot and Polydimethylsiloxane Nanocomposites for Allâ€Optical Ultrasound and Photoacoustic Imaging (Adv. Mater. Interfaces 20/2021). Advanced Materials Interfaces, 2021, 8, 2170114.	3.7	0
6	Photoacoustic imaging of the human placental vasculature. Journal of Biophotonics, 2020, 13, e201900167.	2.3	36
7	Stem cell delivery to kidney via minimally invasive ultrasound-guided renal artery injection in mice. Scientific Reports, 2020, 10, 7514.	3.3	10
8	Single-shot hybrid photoacoustic-fluorescent microendoscopy through a multimode fiber with wavefront shaping. Biomedical Optics Express, 2020, 11, 5717.	2.9	24
9	Miniature all-optical flexible forward-viewing photoacoustic endoscopy probe for surgical guidance. Optics Letters, 2020, 45, 6238.	3.3	21
10	All-Optical Rotational Ultrasound Imaging. Scientific Reports, 2019, 9, 5576.	3.3	47
11	Monitoring neovascularization and integration of decellularized human scaffolds using photoacoustic imaging. Photoacoustics, 2019, 13, 76-84.	7.8	21
12	Single-pixel camera photoacoustic tomography. Journal of Biomedical Optics, 2019, 24, 1.	2.6	16
13	Estimating blood oxygenation from photoacoustic images: can a simple linear spectroscopic inversion ever work?. Journal of Biomedical Optics, 2019, 24, 1.	2.6	32
14	Longitudinal Photoacoustic Imaging of the Pharmacodynamic Effect of Vascular Targeted Therapy on Tumors. Clinical Cancer Research, 2019, 25, 7436-7447.	7.0	26
15	Polydimethylsiloxane Composites for Optical Ultrasound Generation and Multimodality Imaging. Advanced Functional Materials, 2018, 28, 1704919.	14.9	81
16	Rapid volumetric photoacoustic tomographic imaging with a Fabry-Perot ultrasound sensor depicts peripheral arteries and microvascular vasomotor responses to thermal stimuli. European Radiology, 2018, 28, 1037-1045.	4.5	51
17	All-optical forward-viewing photoacoustic probe for high-resolution 3D endoscopy. Light: Science and Applications, 2018, 7, 75.	16.6	119
18	All-optical dual photoacoustic and optical coherence tomography intravascular probe. Photoacoustics, 2018, 11, 65-70.	7.8	26

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19	Large area laser scanning optical resolution photoacoustic microscopy using a fibre optic sensor. Biomedical Optics Express, 2018, 9, 650.	2.9	32
20	Video-rate all-optical ultrasound imaging. Biomedical Optics Express, 2018, 9, 3481.	2.9	25
21	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
22	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
23	Processing methods for photoacoustic Doppler flowmetry with a clinical ultrasound scanner. Journal of Biomedical Optics, 2018, 23, 1.	2.6	6
24	Special Section Guest Editorial: Photoacoustic Imaging and Sensing. Journal of Biomedical Optics, 2017, 22, 041001.	2.6	7
25	Tunable Semiconducting Polymer Nanoparticles with INDT-Based Conjugated Polymers for Photoacoustic Molecular Imaging. Bioconjugate Chemistry, 2017, 28, 1734-1740.	3.6	26
26	Ultrasensitive plano-concave optical microresonators for ultrasound sensing. Nature Photonics, 2017, 11, 714-719.	31.4	255
27	A reconfigurable all-optical ultrasound transducer array for 3D endoscopic imaging. Scientific Reports, 2017, 7, 1208.	3.3	23
28	Acoustic Wave Field Reconstruction From Compressed Measurements With Application in Photoacoustic Tomography. IEEE Transactions on Computational Imaging, 2017, 3, 710-721.	4.4	22
29	Non-invasive multimodal optical coherence and photoacoustic tomography for human skin imaging. Scientific Reports, 2017, 7, 17975.	3.3	51
30	Directivity of a planar fabry-perot optical ultrasound sensor. , 2017, , .		0
31	Source density apodisation in 2D all-optical ultrasound imaging. , 2017, , .		0
32	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
33	Pencil beam all-optical ultrasound imaging. Biomedical Optics Express, 2016, 7, 3696.	2.9	54
34	Photoacoustic imaging using an 8-beam Fabry-Perot scanner. Proceedings of SPIE, 2016, , .	0.8	21
35	Accelerated high-resolution photoacoustic tomography via compressed sensing. Physics in Medicine and Biology, 2016, 61, 8908-8940.	3.0	112
36	Photoacoustic tomography using orthogonal Fabryâ€“PÃ©rot sensors. Journal of Biomedical Optics, 2016, 22, 041009.	2.6	24

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37	High power visible light emitting diodes as pulsed excitation sources for biomedical photoacoustics. Biomedical Optics Express, 2016, 7, 1260.	2.9	78
38	Contrast agents for molecular photoacoustic imaging. Nature Methods, 2016, 13, 639-650.	19.0	979
39	Carbonâ€Nanotubeâ€“PDMS Composite Coatings on Optical Fibers for Allâ€Optical Ultrasound Imaging. Advanced Functional Materials, 2016, 26, 8390-8396.	14.9	120
40	Velocity measurements in whole blood using acoustic resolution photoacoustic Doppler. Biomedical Optics Express, 2016, 7, 2789.	2.9	32
41	Acoustic resolution photoacoustic Doppler velocimetry in blood-mimicking fluids. Scientific Reports, 2016, 6, 20902.	3.3	20
42	Exogenous contrast agents for thermoacoustic imaging: An investigation into the underlying sources of contrast. Medical Physics, 2015, 42, 170-181.	3.0	26
43	Photoacoustic imaging of human lymph nodes with endogenous lipid and hemoglobin contrast. Journal of Biomedical Optics, 2015, 20, 1.	2.6	45
44	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
45	Goldâ€“silica quantum rattles for multimodal imaging and therapy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1959-1964.	7.1	107
46	Deep in vivo photoacoustic imaging of mammalian tissues using a tyrosinase-based genetic reporter. Nature Photonics, 2015, 9, 239-246.	31.4	362
47	Broadband miniature optical ultrasound probe for high resolution vascular tissue imaging. Biomedical Optics Express, 2015, 6, 1502.	2.9	99
48	In vivo dual-modality photoacoustic and optical coherence tomography imaging of human dermatological pathologies. Biomedical Optics Express, 2015, 6, 3163.	2.9	52
49	Characteristics of optimized fibre-optic ultrasound receivers for minimally invasive photoacoustic detection. Proceedings of SPIE, 2015, , .	0.8	27
50	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
51	Performance characteristics of an interventional multispectral photoacoustic imaging system for guiding minimally invasive procedures. Journal of Biomedical Optics, 2015, 20, 1.	2.6	50
52	Super-resolution ultrasound. Nature, 2015, 527, 451-452.	27.8	36
53	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
54	Biomedical photoacoustic imaging. Interface Focus, 2011, 1, 602-631.	3.0	1,697

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55	Evaluation of Absorbing Chromophores Used in Tissue Phantoms for Quantitative Photoacoustic Spectroscopy and Imaging. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 600-607.	2.9	64
56	Backward-mode multiwavelength photoacoustic scanner using a planar Fabry-Perot polymer film ultrasound sensor for high-resolution three-dimensional imaging of biological tissues. Applied Optics, 2008, 47, 561.	2.1	472