Qianqian Fang

List of Publications by Year
in descending order

51 papers	4,087 citations	236612 25 h-index	233125 45 g-index
63 all docs	63 docs citations	63 times ranked	4135 citing authors

#	Article	IF	Citations
1	MCX Cloudâ€"a modern, scalable, high-performance and in-browser Monte Carlo simulation platform with cloud computing. Journal of Biomedical Optics, 2022, 27, .	1.4	20
2	MOCA: a systematic toolbox for designing and assessing modular functional near-infrared brain imaging probes. Neurophotonics, 2022, 9, .	1.7	2
3	BlenderPhotonics: an integrated open-source software environment for three-dimensional meshing and photon simulations in complex tissues. Journal of Biomedical Optics, 2022, 27, .	1.4	7
4	Graphics-processing-unit-accelerated Monte Carlo simulation of polarized light in complex three-dimensional media. Journal of Biomedical Optics, 2022, 27, .	1.4	7
5	Framework for denoising Monte Carlo photon transport simulations using deep learning. Journal of Biomedical Optics, 2022, 27, .	1.4	2
6	Signal and measurement considerations for human translation of diffuse in vivo flow cytometry. Journal of Biomedical Optics, 2022, 27, .	1.4	4
7	BlenderPhotonics â€" an integrated computer-aided design, meshing and Monte Carlo simulation environment for biophotonics. , 2022, , .		0
8	A computationally efficient Monteâ€Carlo model for biomedical Raman spectroscopy. Journal of Biophotonics, 2021, 14, e202000377.	1.1	5
9	Light transport modeling in highly complex tissues using the implicit mesh-based Monte Carlo algorithm. Biomedical Optics Express, 2021, 12, 147.	1.5	16
10	Diffuse Optical Tomography. , 2021, , 1-38.		0
11	Improving model-based functional near-infrared spectroscopy analysis using mesh-based anatomical and light-transport models. Neurophotonics, 2020, 7, 1.	1.7	65
12	Transcranial photobiomodulation with near-infrared light from childhood to elderliness: simulation of dosimetry. Neurophotonics, 2020, 7, 1.	1.7	22
13	Hybrid mesh and voxel based Monte Carlo algorithm for accurate and efficient photon transport modeling in complex bio-tissues. Biomedical Optics Express, 2020, 11, 6262.	1.5	35
14	Accelerating Monte Carlo modeling of structured-light-based diffuse optical imaging via â€œphoton sharingâ€• Optics Letters, 2020, 45, 2842.	1.7	7
15	A Simulation Study for Transcranial Photobiomodulation Dosimetry Across Lifespan. , 2020, , .		0
16	Lead-DBS v2: Towards a comprehensive pipeline for deep brain stimulation imaging. NeuroImage, 2019, 184, 293-316.	2.1	527
17	Graphics processing unit-accelerated mesh-based Monte Carlo photon transport simulations. Journal of Biomedical Optics, 2019, 24, 1.	1.4	38
18	Dual-grid mesh-based Monte Carlo algorithm for efficient photon transport simulations in complex three-dimensional media. Journal of Biomedical Optics, 2019, 24, 1.	1.4	24

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19	Selective photobiomodulation for emotion regulation: model-based dosimetry study. Neurophotonics, 2019, 6, 1.	1.7	49
20	Near infrared spectroscopy for measuring changes in bone hemoglobin content after exercise in individuals with spinal cord injury. Journal of Orthopaedic Research, 2018, 36, 183-191.	1.2	17
21	Impact of errors in experimental parameters on reconstructed breast images using diffuse optical tomography. Biomedical Optics Express, 2018, 9, 1130.	1.5	10
22	Scalable and massively parallel Monte Carlo photon transport simulations for heterogeneous computing platforms. Journal of Biomedical Optics, 2018, 23, 1.	1.4	134
23	Graphics processing units-accelerated adaptive nonlocal means filter for denoising three-dimensional Monte Carlo photon transport simulations. Journal of Biomedical Optics, 2018, 23, 1.	1.4	11
24	Direct approach to compute Jacobians for diffuse optical tomography using perturbation Monte Carlo-based photon â€œreplayâ€. Biomedical Optics Express, 2018, 9, 4588.	1.5	52
25	Multimodal breast cancer imaging using coregistered dynamic diffuse optical tomography and digital breast tomosynthesis. Journal of Biomedical Optics, 2017, 22, 046008.	1.4	38
26	Connectivity Predicts deep brain stimulation outcome in <scp>P</scp>arkinson disease. Annals of Neurology, 2017, 82, 67-78.	2.8	514
27	Normalization of compression-induced hemodynamics in patients responding to neoadjuvant chemotherapy monitored by dynamic tomographic optical breast imaging (DTOBI). Biomedical Optics Express, 2017, 8, 555.	1.5	21
28	Generalized mesh-based Monte Carlo for wide-field illumination and detection via mesh retessellation. Biomedical Optics Express, 2016, 7, 171.	1.5	53
29	Frequency domain near-infrared multiwavelength imager design using high-speed, direct analog-to-digital conversion. Journal of Biomedical Optics, 2016, 21, 016010.	1.4	20
30	Characterizing breast lesions through robust multimodal data fusion using independent diffuse optical and x-ray breast imaging. Journal of Biomedical Optics, 2015, 20, 080502.	1.4	12
31	Multimodal reconstruction of microvascular-flow distributions using combined two-photon microscopy and Doppler optical coherence tomography. Neurophotonics, 2015, 2, 015008.	1.7	28
32	Quantifying the Microvascular Origin of BOLD-fMRI from First Principles with Two-Photon Microscopy and an Oxygen-Sensitive Nanoprobe. Journal of Neuroscience, 2015, 35, 3663-3675.	1.7	196
33	Characterization of structural-prior guided optical tomography using realistic breast models derived from dual-energy x-ray mammography. Biomedical Optics Express, 2015, 6, 2366.	1.5	37
34	Re-tessellated mesh-based Monte Carlo for wide-field illumination sources. , 2015, , .		0
35	Comparison of a layered slab and an atlas head model for Monte Carlo fitting of time-domain near-infrared spectroscopy data of the adult head. Journal of Biomedical Optics, 2014, 19, 016010.	1.4	52
36	Hemodynamic signature of breast cancer under fractional mammographic compression using a dynamic diffuse optical tomography system. Biomedical Optics Express, 2013, 4, 2911.	1.5	32

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37	Mesh-based Monte Carlo method in time-domain widefield fluorescence molecular tomography. Journal of Biomedical Optics, 2012, 17, 1.	1.4	60
38	Accelerating mesh-based Monte Carlo method on modern CPU architectures. Biomedical Optics Express, 2012, 3, 3223.	1.5	76
39	Validating atlas-guided DOT: A comparison of diffuse optical tomography informed by atlas and subject-specific anatomies. NeuroImage, 2012, 62, 1999-2006.	2.1	81
40	Quantitative assessment of diffuse optical tomography sensitivity to the cerebral cortex using a whole-head probe. Physics in Medicine and Biology, 2012, 57, 2857-2872.	1.6	32
41	Combined Optical and X-ray Tomosynthesis Breast Imaging. Radiology, 2011, 258, 89-97.	3.6	192
42	Comment on â€œA study on tetrahedron-based inhomogeneous Monte-Carlo optical simulationâ€. Biomedical Optics Express, 2011, 2, 1258.	1.5	6
43	Viable Three-Dimensional Medical Microwave Tomography: Theory and Numerical Experiments. IEEE Transactions on Antennas and Propagation, 2010, 58, 449-458.	3.1	57
44	Mesh-based Monte Carlo method using fast ray-tracing in PlÃ¼cker coordinates. Biomedical Optics Express, 2010, 1, 165.	1.5	326
45	Microwave-Induced Thermoacoustics: Assisting Microwave Tomography. IEEE Transactions on Magnetics, 2009, 45, 1654-1657.	1.2	8
46	Combined optical imaging and mammography of the healthy breast: Optical contrast derived from breast structure and compression. IEEE Transactions on Medical Imaging, 2009, 28, 30-42.	5.4	131
47	Monte Carlo Simulation of Photon Migration in 3D Turbid Media Accelerated by Graphics Processing Units. Optics Express, 2009, 17, 20178.	1.7	714
48	Tetrahedral mesh generation from volumetric binary and grayscale images. , 2009, , .		233
49	Oxygen advection and diffusion in a three- dimensional vascular anatomical network. Optics Express, 2008, 16, 17530-41.	1.7	45
50	Microwave imaging for neoadjuvant chemotherapy monitoring. , 2006, , .		6
51	Singular Value Analysis of the Jacobian Matrix in Microwave Image Reconstruction. IEEE Transactions on Antennas and Propagation, 2006, 54, 2371-2380.	3.1	56