Jeffrey J L Carson

List of Publications by Year
in descending order

109	1,297	393982	395343
papers	citations	19 h-index	33 g-index

109	109	109	1512
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simultaneous Monitoring of the Cerebral and Skeletomuscular Microcirculation using Hyperspectral Near Infrared Spectroscopy and Intravital Video Microscopy. FASEB Journal, 2021, 35, .	0.2	0
2	Single-shot detection of 8 unique monochrome fringe patterns representing 4 distinct directions via multispectral fringe projection profilometry. Scientific Reports, 2021, 11, 10367.	1.6	2
3	Single-shot 4-step phase-shifting multispectral fringe projection profilometry. Optics Express, 2021, 29, 27975.	1.7	7
4	PhaseWare: Phase map retrieval for fringe projection profilometry and off-axis digital holographic interferometry. SoftwareX, 2021, 13, 100652.	1.2	3
5	Perfusion and Metabolic Neuromonitoring during Ventricular Taps in Infants with Post-Hemorrhagic Ventricular Dilatation. Brain Sciences, 2020, 10, 452.	1.1	20
6	Structured-light surface scanning system to evaluate breast morphology in standing and supine positions. Scientific Reports, 2020, 10, 14087.	1.6	5
7	Lipid-weighted intraoperative photoacoustic tomography of breast tumors: Volumetric comparison to preoperative MRI. Photoacoustics, 2020, 18, 100165.	4.4	12
8	Development of a Human Photoacoustic Imaging Reporter Gene Using the Clinical Dye Indocyanine Green. Radiology Imaging Cancer, 2019, 1, e190035.	0.7	15
9	Intraoperative photoacoustic screening of breast cancer: a new perspective on malignancy visualization and surgical guidance. Journal of Biomedical Optics, 2019, 24, 1.	1.4	14
10	Holographic camera for non-contact measurement of nanoscale surface heights. , 2019, , .		1
11	Algorithm for phase-displacement conversion from reflection digital holographic interferometry. , 2019, , .		3
12	Development of a scanning photoacoustic tomography system for tumor margin assessment in breast conserving surgery. , 2019, , .		1
13	Non-contact imaging of breast surface for breast surgical planning. , 2019, , .		0
14	A study of angle dependent surface plasmon polaritons in nano-hole array structures. Journal of Applied Physics, 2016, 120, 034302.	1.1	12
15	Effect of quantum interference on absorption of light in metamaterial hybrids. Journal Physics D: Applied Physics, 2016, 49, 445103.	1.3	16
16	Objective Assessment and Design Improvement of a Staring, Sparse Transducer Array by the Spatial Crosstalk Matrix for 3D Photoacoustic Tomography. PLoS ONE, 2015, 10, e0124759.	1.1	6
17	Metamaterial-based theoretical description of light scattering by metallic nano-hole array structures. Journal of Applied Physics, 2015, 117, 184302.	1.1	13
18	Tunable 3D Plasmonic Cavity Nanosensors for Surface-Enhanced Raman Spectroscopy with Sub-femtomolar Limit of Detection. ACS Photonics, 2015, 2, 752-759.	3.2	80

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19	Bolus tracking with nanofilter-based multispectral videography for capturing microvasculature hemodynamics. Scientific Reports, 2015, 4, 4737.	1.6	5
20	Two-dimensional multispectral imager based on tiled arrangement of metallic nanohole arrays. Proceedings of SPIE, 2014, , .	0.8	0
21	Nanostructure-based optical filters for multispectral imaging applications. , 2014, , .		0
22	Three dimensional metallic nanostructures for bulk and bio-SPR sensing applications. , 2014, , .		0
23	Mesoscopic reflectance angular domain spectroscopic imaging. Journal of Biomedical Optics, 2014, 19, 076010.	1.4	1
24	Surface plasmon resonance sensing properties of a 3D nanostructure consisting of aligned nanohole and nanocone arrays. Analyst, The, 2014, 139, 1876-1882.	1.7	10
25	A comprehensive study on metallic nano-hole arrays with a surface plasmon energy matching property. , 2013, , .		0
26	Large area periodic, systematically changing, multishape nanostructures by laser interference lithography and cell response to these topographies. Journal of Biomedical Optics, 2013, 18, 035002.	1.4	22
27	A Three-Dimensional Plasmonic Nanostructure with Extraordinary Optical Transmission. Plasmonics, 2013, 8, 217-224.	1.8	18
28	Transmission resonance of a three-dimensional nanostructure with a localized surface plasmon property. , 2013, , .		1
29	Towards future systems with nano-optics contributions. Proceedings of SPIE, 2013, , .	0.8	0
30	Dr. Marvin C. Ziskin, 2011 Recipient of the d'Arsonval Award. Bioelectromagnetics, 2013, 34, 1-2.	0.9	0
31	Combined 3D photoacoustic and 2D fluorescence imaging of indocyanine green contrast agent flow. Proceedings of SPIE, 2013, , .	0.8	8
32	Dynamic contrast-enhanced 3D photoacoustic imaging. Proceedings of SPIE, 2013, , .	0.8	1
33	Development of a neonatal skull phantom for photoacoustic imaging. Proceedings of SPIE, 2013, , .	0.8	2
34	Hyperspectral angular domain imaging for ex-vivo breast tumor detection. , 2013, , .		1
35	Potential for photoacoustic imaging of the neonatal brain. , 2013, , .		3
36	Real-time multispectral 3-D photoacoustic imaging of blood phantoms. , 2013, , .		1

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37	Radial angular filter arrays for angle-resolved scattering spectroscopy. Optics Express, 2013, 21, 2928.	1.7	1
38	Nanohole-array-based device for 2D snapshot multispectral imaging. Scientific Reports, 2013, 3, 2589.	1.6	48
39	Resolution analysis of an angular domain imaging system with two dimensional angular filters. , 2013, , .		0
40	Two-dimensional angular filter array for angular domain imaging with 3D printed angular filters. Proceedings of SPIE, 2013, , .	0.8	0
41	Hyperspectral imaging of tissue mimicking phantoms: principle component analysis. , 2013, , .		0
42	3D photoacoustic imaging using a staring sparse array with 60 transducers. Proceedings of SPIE, 2012, , .	0.8	7
43	Nano-hole array structure with improved surface plasmon energy matching characteristics. Applied Physics Letters, 2012, 100, .	1.5	42
44	Surface plasmon resonance sensing using index-matched metallic nano-hole array structures. Proceedings of SPIE, 2012, , .	0.8	0
45	Use of a radial angular filter array to estimate the position of an optically attenuating object within a turbid medium. Proceedings of SPIE, 2012, , .	0.8	1
46	Multispectral angular domain imaging with a tunable pulsed laser light source. , 2012, , .		0
47	Angle-resolved spectroscopy: a tissue-mimicking phantom study. , 2012, , .		1
48	Angular domain spectroscopic imaging for breast cancer margin assessment after lumpectomy. Proceedings of SPIE, 2012, , .	0.8	2
49	Effect of surface plasmon energy matching on the sensing capability of metallic nano-hole arrays. Applied Physics Letters, 2012, 100, 063110.	1.5	27
50	Detection and Quantification of Myocardial Reperfusion Hemorrhage Using T2*-Weighted CMR. JACC: Cardiovascular Imaging, 2011, 4, 1274-1283.	2.3	85
51	Method for imaging quantum dots during exposure to gamma radiation. , 2011, , .		3
52	Singular value decomposition analysis of a photoacoustic imaging system and 3D imaging at 07 FPS. Optics Express, 2011, 19, 13405.	1.7	11
53	Effect of surface plasmon cross-talk on optical properties of closely packed nano-hole arrays. Optics Express, 2011, 19, 25773.	1.7	8
54	Optical resonance transmission properties of nano-hole arrays in a gold film: effect of adhesion layer. Optics Express, 2011, 19, 26186.	1.7	48

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55	Experimental analysis of cross-talk effects between a series of nano-hole structures on the same metal film. , 2011, , .		0
56	Estimate of effective singular values of a photoacoustic imaging system by noise characterization. , 2011, , .		0
57	Effect of adhesion layer on optical resonance transmission properties of nano-hole arrays in an optically thick gold film. , 2011, , .		0
58	Experimental analysis of optical resonance transmission properties of sub-wavelength hole arrays in optically thick metal films. , 2011, , .		0
59	Effect of glutathione depletion, hyperthermia, and a 100â€mT static magnetic field on an hsp70/luc reporter system. Bioelectromagnetics, 2011, 32, 453-462.	0.9	5
60	Transillumination hyperspectral imaging for histopathological examination of excised tissue. Journal of Biomedical Optics, 2011, 16, 086014.	1.4	12
61	Deep illumination angular domain spectroscopic imaging: tissue-mimicking phantom study. Proceedings of SPIE, 2011, , .	0.8	0
62	Angular-domain spectroscopic imaging of turbid media: derivative analysis. , 2011, , .		0
63	Optimization of radial angular filter arrays for detecting the angular distribution of light. , 2011, , .		1
64	Three-dimensional angular domain optical projection tomography. Proceedings of SPIE, 2011, , .	0.8	0
65	Development of a hand-held 3D photoacoustic imaging system for breast cancer detection. Proceedings of SPIE, 2010, , .	0.8	0
66	3D photoacoustic imaging. Proceedings of SPIE, 2010, , .	0.8	6
67	Angular domain spectroscopic imaging of turbid media using silicon micromachined microchannel arrays. , 2010, , .		2
68	Hyperspectral optical imaging of tissues using silicon micromachined microchannel arrays. Proceedings of SPIE, 2010, , .	0.8	3
69	Localization of spherical lesions in tumor-mimicking phantoms by 3D sparse array photoacoustic imaging. Medical Physics, 2010, 37, 1619-1628.	1.6	13
70	Contrast and resolution analysis of angular domain imaging for iterative optical projection tomography reconstruction. Proceedings of SPIE, 2010, , .	0.8	0
71	Angular domain fluorescence imaging for small animal research. Journal of Biomedical Optics, 2010, 15, 016023.	1.4	6
72	Analysis of a photoacoustic imaging system by singular value decomposition. , 2010, , .		1

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73	Depth and extent of gold nanorod photothermal conversion in tissue-like phantoms that contain hemoglobin. Proceedings of SPIE, 2010, , .	0.8	1
74	Depth and extent of gold nanorod photothermal conversion in tissue-mimicking phantoms. Proceedings of SPIE, 2010, , .	0.8	2
75	Analysis of a photoacoustic imaging system by the crosstalk matrix and singular value decomposition. Optics Express, 2010, 18, 11406.	1.7	16
76	Contrast and resolution analysis of iterative angular domain optical projection tomography. Optics Express, 2010, 18, 19444.	1.7	11
77	Experimental and numerical analysis on the optical resonance transmission properties of nano-hole arrays. Optics Express, 2010, 18, 22255.	1.7	32
78	Angular domain fluorescence lifetime imaging: a tissue-like phantom study. Optics Express, 2010, 18, 23247.	1.7	1
79	3D photoacoustic imaging of a moving target. Proceedings of SPIE, 2009, , .	0.8	1
80	Effect of time gating and polarization discrimination of propagating light in turbid media during angular domain imaging (ADI). , 2009, , .		1
81	Image contrast enhancement during time-angular domain imaging through turbid media by estimation of background scattered light. , 2009, , .		0
82	Angular domain fluorescent lifetime imaging in turbid media. , 2009, , .		2
83	Angular domain optical projection tomography in turbid media. Proceedings of SPIE, 2009, , .	0.8	0
84	The effect of 100â€‰mT SMF on activation of the hsp70 promoter in a heat shock/luciferase reporter system. Journal of Cellular Biochemistry, 2009, 108, 956-962.	1.2	3
85	Realâ€time measurement of cytosolic free calcium concentration in DEMâ€treated HLâ€60 cells during static magnetic field exposure and activation by ATP. Bioelectromagnetics, 2009, 30, 213-221.	0.9	13
86	Effect of 100 mT homogeneous static magnetic field on [Ca²⁺]_c response to ATP in HLâ€60 cells following GSH depletion. Bioelectromagnetics, 2009, 30, 322-329.	0.9	10
87	Depth of photothermal conversion of gold nanorods embedded in a tissue-like phantom. Nanotechnology, 2009, 20, 195102.	1.3	39
88	Development and characterization of an omni-directional photoacoustic point source for calibration of a staring 3D photoacoustic imaging system. Optics Express, 2009, 17, 15228.	1.7	20
89	Optical Degradation of CdSe/ZnS Quantum Dots upon Gamma-Ray Irradiation. Journal of Physical Chemistry C, 2009, 113, 2580-2585.	1.5	35
90	The effect of temperature and freezeâ€“thaw processes on gold nanorods. Nanotechnology, 2009, 20, 505502.	1.3	10

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91	Angular domain optical imaging of turbid media using enhanced micro-tunnel filter arrays. Proceedings of SPIE, 2009, , .	0.8	3
92	Angular distribution of quasi-ballistic light measured through turbid media using angular domain optical imaging. Proceedings of SPIE, 2009, , .	0.8	5
93	Development of an omni-directional photoacoustic source for the characterization of a hemispherical sparse detector array. Proceedings of SPIE, 2009, , .	0.8	1
94	Realâ€time measurement of cytosolic free calcium concentration in HLâ€60 cells during static magnetic field exposure and activation by ATP. Bioelectromagnetics, 2008, 29, 439-446.	0.9	20
95	Image contrast enhancement in angular domain optical imaging of turbid media. Optics Express, 2008, 16, 21492.	1.7	29
96	Four-dimensional photoacoustic imaging of moving targets. Optics Express, 2008, 16, 21570.	1.7	36
97	Three-dimensional photoacoustic imaging by sparse-array detection and iterative image reconstruction. Journal of Biomedical Optics, 2008, 13, 054052.	1.4	42
98	Synthesis and in vitro cytotoxicity of mPEG-SH modified gold nanorods. , 2008, , .		5
99	Measurement of photoacoustic transducer position by robotic source placement and nonlinear parameter estimation. , 2008, , .		3
100	Measurement of photoacoustic detector sensitivity distribution by robotic source placement. Proceedings of SPIE, 2008, , .	0.8	3
101	Real-time measurement of cytosolic free calcium concentration in Jurkat cells during ELF magnetic field exposure and evaluation of the role of cell cycle. Bioelectromagnetics, 2006, 27, 354-364.	0.9	26
102	Optical Detection of Tumors In Vivo by Visible Light Tissue Oximetry. Technology in Cancer Research and Treatment, 2005, 4, 227-234.	0.8	17
103	Enhanced Effectiveness of Radiochemotherapy with Tirapazamine by Local Application of Electric Pulses to Tumors. Radiation Research, 2004, 162, 185-193.	0.7	20
104	Continuous, Noninvasive, and Localized Microvascular Tissue Oximetry Using Visible Light Spectroscopy. Anesthesiology, 2004, 100, 1469-1475.	1.3	96
105	Response of the Peroxidase-Oxidase Oscillator to Light Is Controlled by MB+â^'NADH Photochemistry. Journal of Physical Chemistry B, 2003, 107, 8637-8642.	1.2	8
106	Behavioural evidence that magnetic field effects in the land snail,Cepaea nemoralis, might not depend on magnetite or induced electric currents. Bioelectromagnetics, 1996, 17, 123-130.	0.9	44
107	Fluorescence spectrophotometer for the real time detection of cytosolic free calcium from cell suspensions during exposure to extremely low frequency magnetic fields. Review of Scientific Instruments, 1996, 67, 4336-4346.	0.6	7
108	Possible mechanisms by which extremely low frequency magnetic fields affect opioid function. FASEB Journal, 1995, 9, 807-814.	0.2	107

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109	Extremely Low Frequency Magnetic Field Exposure from MRI/MRS Procedures. Annals of the New York Academy of Sciences, 1992, 649, 44-58.	1.8	12