Gianmarco F Pinton

List of Publications by Year in descending order

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61 papers

2,046 citations

18 h-index 243296 44 g-index

68 all docs 68 docs citations 68 times ranked 1475 citing authors

#	Article	IF	CITATIONS
1	Rapid tracking of small displacements with ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1103-1117.	1.7	339
2	Attenuation, scattering, and absorption of ultrasound in the skull bone. Medical Physics, 2011, 39, 299-307.	1.6	260
3	Super-resolution Ultrasound Imaging. Ultrasound in Medicine and Biology, 2020, 46, 865-891.	0.7	253
4	3-D Ultrasound Localization Microscopy for Identifying Microvascular Morphology Features of Tumor Angiogenesis at a Resolution Beyond the Diffraction Limit of Conventional Ultrasound. Theranostics, 2017, 7, 196-204.	4.6	202
5	A heterogeneous nonlinear attenuating full- wave model of ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 474-488.	1.7	171
6	Sources of image degradation in fundamental and harmonic ultrasound imaging using nonlinear, full-wave simulations. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 754-765.	1.7	91
7	Spatial coherence in human tissue: implications for imaging and measurement. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1976-1987.	1.7	67
8	Effects of nonlinear ultrasound propagation on high intensity brain therapy. Medical Physics, 2011, 38, 1207-1216.	1.6	61
9	Real-Time 3-D Contrast-Enhanced Transcranial Ultrasound and Aberration Correction. Ultrasound in Medicine and Biology, 2008, 34, 1387-1395.	0.7	52
10	Harmonic spatial coherence imaging: an ultrasonic imaging method based on backscatter coherence. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 648-659.	1.7	51
11	Super-Resolution Imaging Through the Human Skull. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 25-36.	1.7	39
12	Shear Shock Waves Observed in the Brain. Physical Review Applied, 2017, 8, .	1.5	30
13	Numerical prediction of frequency dependent 3D maps of mechanical index thresholds in ultrasonic brain therapy. Medical Physics, 2011, 39, 455-467.	1.6	29
14	Direct phase projection and transcranial focusing of ultrasound for brain therapy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1149-1159.	1.7	29
15	Superharmonic Ultrasound for Motion-Independent Localization Microscopy: Applications to Microvascular Imaging From Low to High Flow Rates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 957-967.	1.7	26
16	Adaptive motion estimation of shear shock waves in soft solids and tissue with ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1489-1503.	1.7	19
17	Nonlinear reflection of shock shear waves in soft elastic media. Journal of the Acoustical Society of America, 2010, 127, 683-691.	0.5	18
18	Optical tracking of acoustic radiation force impulse-induced dynamics in a tissue-mimicking phantom. Journal of the Acoustical Society of America, 2009, 126, 2733-2745.	0.5	13

#	Article	IF	CITATIONS
19	Modeling Ultrasound Propagation in the Moving Brain: Applications to Shear Shock Waves and Traumatic Brain Injury. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 201-212.	1.7	13
20	Mechanisms of attenuation and heating dissipation of ultrasound in the skull bone: Comparison between simulation models and experiments. , 2010, , .		11
21	Piecewise parabolic method for simulating one-dimensional shear shock wave propagation in tissue-mimicking phantoms. Shock Waves, 2017, 27, 879-888.	1.0	11
22	Adaptive Multifocus Beamforming for Contrast-Enhanced-Super-Resolution Ultrasound Imaging in Deep Tissue. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 2255-2263.	1.7	11
23	Observation of Self-Bending and Focused Ultrasound Beams in the Megahertz Range. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1460-1467.	1.7	11
24	Head Impact Telemetry System's Video-based Impact Detection and Location Accuracy. Medicine and Science in Sports and Exercise, 2020, 52, 2198-2206.	0.2	11
25	Diagnostic ultrasound imaging of the lung: A simulation approach based on propagation and reverberation in the human body. Journal of the Acoustical Society of America, 2021, 150, 3904-3913.	0.5	11
26	Focusing of Shear Shock Waves. Physical Review Applied, 2018, 9, .	1.5	10
27	Piecewise parabolic method for propagation of shear shock waves in relaxing soft solids: Oneâ€dimensional case. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3187.	1.0	9
28	Quantitative sub-resolution blood velocity estimation using ultrasound localization microscopy <i>ex-vivo</i> and <i>in-vivo</i> Biomedical Physics and Engineering Express, 2020, 6, 035019.	0.6	9
29	Transcranial Neuromodulation Array With Imaging Aperture for Simultaneous Multifocus Stimulation in Nonhuman Primates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 261-272.	1.7	9
30	Modeling of Shock Wave Propagation in Large Amplitude Ultrasound. Ultrasonic Imaging, 2008, 30, 44-60.	1.4	8
31	Blocked Elements in 1-D and 2-D Arrays—Part I: Detection and Basic Compensation on Simulated and In Vivo Targets. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 910-921.	1.7	8
32	The Impact of Acoustic Clutter on Large Array Abdominal Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 703-714.	1.7	8
33	Modeling and simulations of two dimensional propagation of shear shock waves in relaxing soft solids. Journal of Computational Physics, 2019, 395, 205-222.	1.9	7
34	Transient acoustic vaporization signatures unique to low boiling point phase change contrast agents enable super-resolution ultrasound imaging without spatiotemporal filtering. AIP Advances, 2020, 10, 105124.	0.6	7
35	Subresolution Displacements in Finite Difference Simulations of Ultrasound Propagation and Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 537-543.	1.7	6
36	Characterization of the Ultrasound Localization Microscopy Resolution Limit in the Presence of Image Degradation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 124-134.	1.7	6

3

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37	Super-resolved shear shock focusing in the human head. Brain Multiphysics, 2021, 2, 100033.	0.8	6
38	Effect of perfluorocarbon composition on activation of phaseâ€changing ultrasound contrast agents. Medical Physics, 2022, 49, 2212-2219.	1.6	6
39	An iterative fullwave simulation approach to multiple scattering in media with randomly distributed microbubbles. Physics in Medicine and Biology, 2017, 62, 4202-4217.	1.6	5
40	Rapid quantitative imaging of high intensity ultrasonic pressure fields. Journal of the Acoustical Society of America, 2020, 148, 660-677.	0.5	5
41	In situ ultrasound imaging of shear shock waves in the porcine brain. Journal of Biomechanics, 2022, 134, 110913.	0.9	4
42	Large coherent apertures: Improvements in deep abdominal imaging and fundamental limits imposed by clutter. , $2016, , .$		3
43	High frame-rate imaging and adaptive tracking of shear shock wave formation in the brain: A fullwave and experimental study. , 2017, , .		3
44	On the Relationship between Spatial Coherence and In Situ Pressure for Abdominal Imaging. Ultrasound in Medicine and Biology, 2021, 47, 2310-2320.	0.7	3
45	Using Low-Boiling Point Phase Change Contrast Agent Activation Signals for Super Resolution Ultrasound Localization Microscopy. , 2019, , .		2
46	Comparison of localization methods in super-resolution imaging. , 2021, , .		2
47	Reverberation clutter and sources of image degradation in transcostal imaging. , 2016, , .		1
48	Shear shock waves observed in the ex-vivo brain. , 2017, , .		1
49	Quantifying the Effect of Abdominal Body Wall on In Situ Peak Rarefaction Pressure During Diagnostic Ultrasound Imaging. Ultrasound in Medicine and Biology, 2021, 47, 1548-1558.	0.7	1
50	Three dimensional full-wave nonlinear acoustic simulations: Applications to ultrasound imaging. AIP Conference Proceedings, 2015, , .	0.3	0
51	High frame-rate imaging and adaptive tracking of shear shock wave formation in the brain: A fullwave and experimental study. , 2017, , .		0
52	Notice of Removal: In-vivo characterization of angiogenesis in tumor-bearing rats using multiple scattering of ultrasound., 2017,,.		0
53	Adaptive beamforming contrast enhanced super resolution imaging for improved sensitivity and resolution in deep tissues. , 2017, , .		0
54	Adaptive beamforming contrast enhanced super resolution imaging for improved sensitivity and resolution in deep tissues. , 2017, , .		0

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55	Subresolution Displacements and Shear Shock Wave Tracking in the Human Brain. , 2018, , .		0
56	Human Transcranial Super Resolution Imaging. , 2018, , .		0
57	Estimation of Viscoelastic Properties of Tissue with Arbitrary Power-Law Attenuation., 2018,,.		0
58	Simulation of shear shock waves in the human head for traumatic brain injury. Proceedings of Meetings on Acoustics, 2018 , , .	0.3	0
59	Shear Shock Wave Focusing in Human Skull Phantom: Observations with High-Frame Rate Ultrasound Imaging and Matched Simulations. , 2018, , .		0
60	On the Use of Spatial Coherence for in Situ Peak Rarefaction Pressure Estimation., 2018,,.		0
61	Super Harmonic Ultrasound Localization Microscopy. , 2019, , .		0