

# Jean Provost

## List of Publications by Year in descending order

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52  
papers

2,108  
citations

257357

24  
h-index

243529

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g-index

56  
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56  
docs citations

56  
times ranked

1513  
citing authors

#	ARTICLE	IF	CITATIONS
1	In Vivo Pulsatility Measurement of Cerebral Microcirculation in Rodents Using Dynamic Ultrasound Localization Microscopy. IEEE Transactions on Medical Imaging, 2022, 41, 782-792.	5.4	14
2	Dynamic Myocardial Ultrasound Localization Angiography. IEEE Transactions on Medical Imaging, 2021, 40, 3379-3388.	5.4	13
3	Sparse channel sampling for ultrasound localization microscopy (SPARSE-ULM). Physics in Medicine and Biology, 2021, 66, 095008.	1.6	7
4	A Deep Learning Framework for Spatiotemporal Ultrasound Localization Microscopy. IEEE Transactions on Medical Imaging, 2021, 40, 1428-1437.	5.4	44
5	Equivalent time active cavitation imaging. Physics in Medicine and Biology, 2021, 66, 195010.	1.6	2
6	Flow Rate and Low Hematocrit Measurements for <i>In Vitro</i> Blood Processing With Doppler Ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1293-1302.	1.7	4
7	Concurrent imaging of vascularization and metabolism in a mouse model of paraganglioma under anti-angiogenic treatment. Theranostics, 2020, 10, 3518-3532.	4.6	12
8	Ultrafast Ultrasound Imaging for Super-Resolution Preclinical Cardiac PET. Molecular Imaging and Biology, 2020, 22, 1342-1352.	1.3	4
9	4D simultaneous tissue and blood flow Doppler imaging: revisiting cardiac Doppler index with single heart beat 4D ultrafast echocardiography. Physics in Medicine and Biology, 2019, 64, 085013.	1.6	20
10	Ultrafast 3D Ultrasound Localization Microscopy Using a 32 $\times$ 32 Matrix Array. IEEE Transactions on Medical Imaging, 2019, 38, 2005-2015.	5.4	89
11	Mapping Biological Current Densities With Ultrafast Acoustoelectric Imaging: Application to the Beating Rat Heart. IEEE Transactions on Medical Imaging, 2019, 38, 1852-1857.	5.4	14
12	Simultaneous positron emission tomography and ultrafast ultrasound for hybrid molecular, anatomical and functional imaging. Nature Biomedical Engineering, 2018, 2, 85-94.	11.6	44
13	Spatiotemporal matrix image formation for programmable ultrasound scanners. Physics in Medicine and Biology, 2018, 63, 03NT03.	1.6	23
14	3D elastic tensor imaging in weakly transversely isotropic soft tissues. Physics in Medicine and Biology, 2018, 63, 155005.	1.6	20
15	Performance evaluation of the PET component of a hybrid PET/CT-ultrafast ultrasound imaging instrument. Physics in Medicine and Biology, 2018, 63, 19NT01.	1.6	7
16	4D <i>in vivo</i> ultrafast ultrasound imaging using a row-column addressed matrix and coherently-compounded orthogonal plane waves. Physics in Medicine and Biology, 2017, 62, 4571-4588.	1.6	61
17	An integrated and highly sensitive ultrafast acoustoelectric imaging system for biomedical applications. Physics in Medicine and Biology, 2017, 62, 5808-5822.	1.6	25
18	Imaging the dynamics of cardiac fiber orientation in vivo using 3D Ultrasound Backscatter Tensor Imaging. Scientific Reports, 2017, 7, 830.	1.6	57

#	ARTICLE	IF	CITATIONS
19	A Positron Emission Tomography registered Ultrafast Sonography prototype for preclinical in-vivo studies. , 2016, , .		0
20	In-vivo 4D Ultrafast vector flow imaging: Quantitative assessment of arterial blood flow. , 2016, , .		5
21	4D ultrafast ultrasound flow imaging: <i>in vivo</i> quantification of arterial volumetric flow rate in a single heartbeat. Physics in Medicine and Biology, 2016, 61, L48-L61.	1.6	101
22	A Comparison of the Performance of Different Multiline Transmit Setups for Fast Volumetric Cardiac Ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2082-2091.	1.7	19
23	Ultrafast Harmonic Coherent Compound (UHCC) Imaging for High Frame Rate Echocardiography and Shear-Wave Elastography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 420-431.	1.7	61
24	Validation of an intracardiac ultrasonic therapy imaging dual mode transducer. Irbm, 2015, 36, 351-354.	3.7	3
25	3-D ultrafast doppler imaging applied to the noninvasive mapping of blood vessels in Vivo. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1467-1472.	1.7	95
26	4-D ultrafast shear-wave imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1059-1065.	1.7	83
27	Assessing the atrial electromechanical coupling during atrial focal tachycardia, flutter, and fibrillation using electromechanical wave imaging in humans. Computers in Biology and Medicine, 2015, 65, 161-167.	3.9	20
28	3D ultrafast ultrasound imaging <i>in vivo</i> . Physics in Medicine and Biology, 2014, 59, L1-L13.	1.6	290
29	Sparse Matrix Beamforming and Image Reconstruction for 2-D HIFU Monitoring Using Harmonic Motion Imaging for Focused Ultrasound (HMIFU) With In Vitro Validation. IEEE Transactions on Medical Imaging, 2014, 33, 2107-2117.	5.4	33
30	Quantitative evaluation of atrial radio frequency ablation using intracardiac shear wave elastography. Medical Physics, 2014, 41, 112901.	1.6	24
31	Stochastic precision analysis of 2D cardiac strain estimation <i>in vivo</i> . Physics in Medicine and Biology, 2014, 59, 6841-6858.	1.6	30
32	Ultrafast acoustoelectric imaging. , 2014, , .		4
33	Electromechanical Wave Imaging of Biologically and Electrically Paced Canine Hearts <i>in Vivo</i> . Ultrasound in Medicine and Biology, 2014, 40, 177-187.	0.7	20
34	A clinical feasibility study of atrial and ventricular electromechanical wave imaging. Heart Rhythm, 2013, 10, 856-862.	0.3	59
35	Single-heartbeat electromechanical wave imaging with optimal strain estimation using temporally unequipped acquisition sequences. Physics in Medicine and Biology, 2012, 57, 1095-1112.	1.6	28
36	Electromechanical wave imaging for noninvasive mapping of the 3D electrical activation sequence in canines and humans <i>in vivo</i> . Journal of Biomechanics, 2012, 45, 856-864.	0.9	33

#	ARTICLE	IF	CITATIONS
37	Elevated Strain and Structural Disarray Occur at the Right Ventricular Apex. Cardiovascular Engineering and Technology, 2012, 3, 52-61.	0.7	4
38	Mapping of cardiac electrical activation with electromechanical wave imaging: An in silico "in vivo reciprocity study. Heart Rhythm, 2011, 8, 752-759.	0.3	53
39	Physiologic Cardiovascular Strain and Intrinsic Wave Imaging. Annual Review of Biomedical Engineering, 2011, 13, 477-505.	5.7	38
40	Electromechanical wave imaging for arrhythmias. Physics in Medicine and Biology, 2011, 56, L1-L11.	1.6	79
41	<i>In vivo</i> study of myocardial elastography under graded ischemia conditions. Physics in Medicine and Biology, 2011, 56, 1155-1172.	1.6	56
42	Non-invasive Electromechanical Wave Imaging of atrial, supraventricular and ventricular cardiac conduction disorders in canines and humans. , 2011, , .		0
43	Imaging the electromechanical activity of the heart in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8565-8570.	3.3	71
44	Electromechanical Wave Imaging of Normal and Ischemic Hearts<i>In Vivo</i>. IEEE Transactions on Medical Imaging, 2010, 29, 625-635.	5.4	73
45	Evaluation of receptive field size from higher harmonics in visuotopic mapping using continuous stimulation optical imaging. Journal of Neuroscience Methods, 2010, 189, 138-150.	1.3	10
46	In vivo validation of Myocardial Elastography under graded ischemia conditions. , 2010, , .		0
47	Bimodal modulation and continuous stimulation in optical imaging to map direction selectivity. NeuroImage, 2010, 49, 1416-1431.	2.1	18
48	Non-invasive localization and quantification of graded ischemia using Electromechanical Wave Imaging in vivo. , 2009, , .		0
49	The Application of Compressed Sensing for Photo-Acoustic Tomography. IEEE Transactions on Medical Imaging, 2009, 28, 585-594.	5.4	245
50	A composite high-frame-rate system for clinical cardiovascular imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 2221-2233.	1.7	93
51	In vivo validation of 2D myocardial elastography at variable levels of ischemia. , 2008, , .		0
52	Compressive sampling in photo-acoustic imaging. Proceedings of SPIE, 2007, , .	0.8	0