

Jürgen Arendt Jensen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6174237/publications.pdf>

Version: 2024-02-01

458
papers

11,725
citations

61984

43
h-index

39675

94
g-index

463
all docs

463
docs citations

463
times ranked

3722
citing authors

#	ARTICLE	IF	CITATIONS
1	Calculation of pressure fields from arbitrarily shaped, apodized, and excited ultrasound transducers. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1992, 39, 262-267.	3.0	2,051
2	Synthetic aperture ultrasound imaging. Ultrasonics, 2006, 44, e5-e15.	3.9	640
3	A new method for estimation of velocity vectors. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1998, 45, 837-851.	3.0	385
4	Use of modulated excitation signals in medical ultrasound. Part I: basic concepts and expected benefits. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 177-191.	3.0	322
5	A model for the propagation and scattering of ultrasound in tissue. Journal of the Acoustical Society of America, 1991, 89, 182-190.	1.1	310
6	High frame-rate blood vector velocity imaging using plane waves: Simulations and preliminary experiments. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 1729-1743.	3.0	221
7	SARUS: A synthetic aperture real-time ultrasound system. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1838-1852.	3.0	214
8	Use of modulated excitation signals in medical ultrasound. Part II: design and performance for medical imaging applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 192-207.	3.0	205
9	Broadband minimum variance beamforming for ultrasound imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 314-325.	3.0	200
10	Ultrasound research scanner for real-time synthetic aperture data acquisition. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 881-891.	3.0	148
11	A new estimator for vector velocity estimation [medical ultrasonics]. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2001, 48, 886-894.	3.0	126
12	Medical ultrasound imaging. Progress in Biophysics and Molecular Biology, 2007, 93, 153-165.	2.9	124
13	Multielement synthetic transmit aperture imaging using temporal encoding. IEEE Transactions on Medical Imaging, 2003, 22, 552-563.	8.9	120
14	Sequential beamforming for synthetic aperture imaging. Ultrasonics, 2013, 53, 1-16.	3.9	113
15	In-vivo synthetic aperture flow imaging in medical ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 848-856.	3.0	110
16	Use of modulated excitation signals in medical ultrasound. Part III: high frame rate imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 208-219.	3.0	108
17	3-D imaging using row-column-addressed arrays with integrated apodization - part i: apodization design and line element beamforming. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 947-958.	3.0	105
18	Ultrasound Open Platforms for Next-Generation Imaging Technique Development. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1078-1092.	3.0	104

#	ARTICLE	IF	CITATIONS
19	Ultrasonic colour Doppler imaging. Interface Focus, 2011, 1, 490-502.	3.0	98
20	Clinical evaluation of chirp-coded excitation in medical ultrasound. Ultrasound in Medicine and Biology, 2003, 29, 895-905.	1.5	96
21	Investigation of transverse oscillation method. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 959-971.	3.0	96
22	3-D imaging using rowâ€“column-addressed arrays with integrated apodizationâ€” part ii: transducer fabrication and experimental results. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 959-971.	3.0	96
23	Ultrasound Vector Flow Imaging: I: Sequential Systems. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1-1.	3.0	96
24	Two-Dimensional Random Arrays for Real Time Volumetric Imaging. Ultrasonic Imaging, 1994, 16, 143-163.	2.6	92
25	Potential of coded excitation in medical ultrasound imaging. Ultrasonics, 2000, 38, 183-189.	3.9	90
26	Computer Phantoms for Simulating Ultrasound B-Mode and CFM Images. Acoustical Imaging, 1997, , 75-80.	0.2	84
27	Ultrasound Vector Flow Imagingâ€”Part II: Parallel Systems. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1722-1732.	3.0	81
28	A new calculation procedure for spatial impulse responses in ultrasound. Journal of the Acoustical Society of America, 1999, 105, 3266-3274.	1.1	72
29	Directional velocity estimation using focusing along the flow direction. I: theory and simulation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 857-872.	3.0	71
30	Examples of In Vivo Blood Vector Velocity Estimation. Ultrasound in Medicine and Biology, 2007, 33, 541-548.	1.5	69
31	Evaluation of healthy muscle tissue by strain and shear wave elastography â€“ Dependency on depth and ROI position in relation to underlying bone. Ultrasonics, 2016, 71, 127-133.	3.9	69
32	Nonparametric estimation of ultrasound pulses. IEEE Transactions on Biomedical Engineering, 1994, 41, 929-936.	4.2	67
33	Directional synthetic aperture flow imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2004, 51, 1107-1118.	3.0	67
34	Deconvolution of Ultrasound Images. Ultrasonic Imaging, 1992, 14, 1-15.	2.6	63
35	Comparison of Real-Time In-Vivo Spectral and Vector Velocity Estimation. Ultrasound in Medicine and Biology, 2012, 38, 145-151.	1.5	63
36	In-vivo Examples of Flow Patterns With The Fast Vector Velocity Ultrasound Method. Ultraschall in Der Medizin, 2009, 30, 471-477.	1.5	54

#	ARTICLE	IF	CITATIONS
37	Optimized Plane Wave Imaging for Fast and High-Quality Ultrasound Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1922-1934.	3.0	53
38	Effects Influencing Focusing in Synthetic Aperture Vector Flow Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 1811-1825.	3.0	52
39	<title>Virtual ultrasound sources in high-resolution ultrasound imaging</title>. , 2002, , .		51
40	Deconvolution of In Vivo Ultrasound B-Mode Images. Ultrasonic Imaging, 1993, 15, 122-133.	2.6	50
41	Recursive ultrasound imaging. , 0, , .		50
42	Ultrasound fields from triangular apertures. Journal of the Acoustical Society of America, 1996, 100, 2049-2056.	1.1	49
43	Estimation of Velocity Vectors in Synthetic Aperture Ultrasound Imaging. IEEE Transactions on Medical Imaging, 2006, 25, 1637-1644.	8.9	46
44	Experimental ultrasound system for real-time synthetic imaging. , 0, , .		45
45	Deconvolution of <i>in-Vivo</i> Ultrasound B-Mode Images. Ultrasonic Imaging, 1993, 15, 122-133.	2.6	44
46	2-D tissue motion compensation of synthetic transmit aperture images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 594-610.	3.0	44
47	Novel Flow Quantification of the Carotid Bulb and the Common Carotid Artery with Vector Flow Ultrasound. Ultrasound in Medicine and Biology, 2014, 40, 2700-2706.	1.5	44
48	Three-Dimensional Super-Resolution Imaging Using a Row-Column Array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 538-546.	3.0	44
49	In vivo comparison of three ultrasound vector velocity techniques to MR phase contrast angiography. Ultrasonics, 2009, 49, 659-667.	3.9	43
50	In vivo validation of a blood vector velocity estimator with MR angiography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 91-100.	3.0	43
51	3-D Vector Flow Estimation With Row-Column-Addressed Arrays. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1799-1814.	3.0	43
52	An object-oriented multi-threaded software beamformation toolbox. , 2011, , .		41
53	Implementation of a versatile research data acquisition system using a commercially available medical ultrasound scanner. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1487-1499.	3.0	41
54	PSF dedicated to estimation of displacement vectors for tissue elasticity imaging with ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 746-756.	3.0	40

#	ARTICLE	IF	CITATIONS
55	Volume Flow in Arteriovenous Fistulas Using Vector Velocity Ultrasound. <i>Ultrasound in Medicine and Biology</i> , 2014, 40, 2707-2714.	1.5	40
56	Application of different spatial sampling patterns for sparse array transducer design. <i>Ultrasonics</i> , 2000, 37, 667-671.	3.9	39
57	Space-time encoding for high frame rate ultrasound imaging. <i>Ultrasonics</i> , 2002, 40, 593-597.	3.9	39
58	Ambient pressure sensitivity of microbubbles investigated through a parameter study. <i>Journal of the Acoustical Society of America</i> , 2009, 126, 3350-3358.	1.1	38
59	Impact of acoustic pressure on ambient pressure estimation using ultrasound contrast agent. <i>Ultrasonics</i> , 2010, 50, 294-299.	3.9	38
60	Aortic Valve Stenosis Increases Helical Flow and Flow Complexity: A Study of Intra-Operative Cardiac Vector Flow Imaging. <i>Ultrasound in Medicine and Biology</i> , 2017, 43, 1607-1617.	1.5	38
61	Fast simulation of ultrasound images. , 0, , .		37
62	Fast parametric beamformer for synthetic aperture imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2008, 55, 1755-1767.	3.0	37
63	Adaptive spectral doppler estimation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009, 56, 700-714.	3.0	37
64	Blood velocity estimation using ultrasound and spectral iterative adaptive approaches. <i>Signal Processing</i> , 2011, 91, 1275-1283.	3.7	37
65	A multi-threaded version of Field II. , 2014, , .		37
66	A transverse oscillation approach for estimation of three-dimensional velocity vectors, Part II: experimental validation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014, 61, 1608-1618.	3.0	36
67	Directional velocity estimation using focusing along the flow direction. II: experimental investigation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2003, 50, 873-880.	3.0	35
68	Compact FPGA-based beamformer using oversampled 1-bit A/D converters. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2005, 52, 870-880.	3.0	35
69	Ultrasonic 3-D Vector Flow Method for Quantitative <i>In Vivo</i> Peak Velocity and Flow Rate Estimation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017, 64, 544-554.	3.0	35
70	3D synthetic aperture imaging using a virtual source element in the elevation plane. , 0, , .		34
71	In-vivo evaluation of convex array synthetic aperture imaging. <i>Ultrasound in Medicine and Biology</i> , 2007, 33, 37-47.	1.5	34
72	Synthetic Aperture Sequential Beamforming. , 2008, , .		34

#	ARTICLE	IF	CITATIONS
91	3-D ultrasound imaging performance of a row-column addressed 2-D array transducer: A measurement study. , 2013, , .		29
92	First report on intraoperative vector flow imaging of the heart among patients with healthy and diseased aortic valves. Ultrasonics, 2015, 56, 243-250.	3.9	29
93	Estimation of pulses in ultrasound B-scan images. IEEE Transactions on Medical Imaging, 1991, 10, 164-172.	8.9	28
94	Spectral velocity estimation in ultrasound using sparse data sets. Journal of the Acoustical Society of America, 2006, 120, 211-220.	1.1	28
95	P2B-12 Minimum Variance Beamforming for High Frame-Rate Ultrasound Imaging. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	28
96	Performance of SARUS: A synthetic aperture real-time ultrasound system. , 2010, , .		27
97	Electrostatic and small-signal analysis of CMUTs with circular and square anisotropic plates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1563-1579.	3.0	27
98	Curvilinear 3-D Imaging Using Row-Column-Addressed 2-D Arrays With a Diverging Lens: Feasibility Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 978-988.	3.0	27
99	Assessment of hybrid speckle reduction algorithms. Physics in Medicine and Biology, 1991, 36, 1539-1549.	3.0	26
100	InÂVivo Evaluation of Synthetic Aperture Sequential Beamforming. Ultrasound in Medicine and Biology, 2012, 38, 708-716.	1.5	26
101	Comparison of 3-D synthetic aperture phased-array ultrasound imaging and parallel beamforming. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1638-1650.	3.0	26
102	Estimation of High Velocities in Synthetic-Aperture Imagingâ€”Part I: Theory. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1024-1031.	3.0	26
103	Introduction to the Special Issue on Novel Equipment for Ultrasound Research. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1705-1706.	3.0	25
104	Coded ultrasound for blood flow estimation using subband processing. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 2211-2220.	3.0	25
105	Analysis of Systolic Backflow and Secondary Helical Blood Flow in the Ascending Aorta Using Vector Flow Imaging. Ultrasound in Medicine and Biology, 2016, 42, 899-908.	1.5	25
106	Probe development of CMUT and PZT rowâ€“column-addressed 2-D arrays. Sensors and Actuators A: Physical, 2018, 273, 121-133.	4.1	25
107	A Comparison Study of Vector Velocity, Spectral Doppler and Magnetic Resonance of Blood Flow in the Common Carotid Artery. Ultrasound in Medicine and Biology, 2018, 44, 1751-1761.	1.5	25
108	Detection and Localization of Ultrasound Scatterers Using Convolutional Neural Networks. IEEE Transactions on Medical Imaging, 2020, 39, 3855-3867.	8.9	25

#	ARTICLE	IF	CITATIONS
109	Clinical use and evaluation of coded excitation in B-mode images. , 0, , .		24
110	Safety Assessment of Advanced Imaging Sequences I: Measurements. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 110-119.	3.0	24
111	Directional Transverse Oscillation Vector Flow Estimation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1194-1204.	3.0	24
112	<i>In Vivo</i> Motion Correction in Super-Resolution Imaging of Rat Kidneys. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 3082-3093.	3.0	24
113	<title>Comparison between different encoding schemes for synthetic aperture imaging</title>. , 2002, , .		23
114	Vector velocity estimation of blood flow â€œ A new application in medical ultrasound. Ultrasound, 2017, 25, 189-199.	0.7	23
115	Noninvasive Estimation of Pressure Changes Using 2-D Vector Velocity Ultrasound: An Experimental Study With <i>In Vivo</i> Examples. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 709-719.	3.0	23
116	Resolving Ultrasound Contrast Microbubbles Using Minimum Variance Beamforming. IEEE Transactions on Medical Imaging, 2019, 38, 194-204.	8.9	23
117	Practical applications of synthetic aperture imaging. , 2010, , .		22
118	System-Level Design of an Integrated Receiver Front End for a Wireless Ultrasound Probe. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1935-1946.	3.0	22
119	Vector Flow Imaging Compared with Digital Subtraction Angiography for Stenosis Assessment in the Superficial Femoral Artery â€œ A Study of Vector Concentration, Velocity Ratio and Stenosis Degree Percentage. Ultrasound International Open, 2019, 05, E53-E59.	0.6	22
120	Adaptive receive and transmit apodization for synthetic aperture ultrasound imaging. , 2009, , .		21
121	3D ultrasound imaging performance of a row-column addressed 2D array transducer: a simulation study. Proceedings of SPIE, 2013, , .	0.8	21
122	Tissue harmonic synthetic aperture ultrasound imaging. Journal of the Acoustical Society of America, 2014, 136, 2050-2056.	1.1	21
123	Anatomic and Functional Imaging Using Rowâ€œColumn Arrays. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 2722-2738.	3.0	21
124	Compounding in synthetic aperture imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 2054-65.	3.0	20
125	Convex array vector velocity imaging using transverse oscillation and its optimization. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 2043-2053.	3.0	20
126	Vector velocity volume flow estimation: Sources of error and corrections applied for arteriovenous fistulas. Ultrasonics, 2016, 70, 136-146.	3.9	20

#	ARTICLE	IF	CITATIONS
127	Vector Flow Imaging Compared with Conventional Doppler Ultrasound and Thermo-dilution for Estimation of Blood Flow in the Ascending Aorta. Ultrasonic Imaging, 2017, 39, 3-18.	2.6	20
128	Super-Resolution Axial Localization of Ultrasound Scatter Using Multi-Focal Imaging. IEEE Transactions on Biomedical Engineering, 2018, 65, 1840-1851.	4.2	20
129	8A-3 System Architecture of an Experimental Synthetic Aperture Real-Time Ultrasound System. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	19
130	Plane wave medical ultrasound imaging using adaptive beamforming. , 2008, , .		19
131	Three-dimensional synthetic aperture focusing using a rocking convex array transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1051-1063.	3.0	19
132	Robust microbubble tracking for super resolution imaging in ultrasound. , 2016, , .		19
133	Simulation of RF data with tissue motion for optimizing stationary echo canceling filters. Ultrasonics, 2003, 41, 415-419.	3.9	18
134	Designing Waveforms for Temporal Encoding Using a Frequency Sampling Method. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 2070-2081.	3.0	18
135	Investigation of an angular spectrum approach for pulsed ultrasound fields. Ultrasonics, 2013, 53, 1185-1191.	3.9	18
136	Super-Resolution Imaging with Ultrasound for Visualization of the Renal Microvasculature in Rats Before and After Renal Ischemia: A Pilot Study. Diagnostics, 2020, 10, 862.	2.6	18
137	Ultrasound super-resolution imaging with a hierarchical Kalman tracker. Ultrasonics, 2022, 122, 106695.	3.9	18
138	Ultrasound image quality assessment: a framework for evaluation of clinical image quality. Proceedings of SPIE, 2010, , .	0.8	17
139	Modeling transducer impulse responses for predicting calibrated pressure pulses with the ultrasound simulation program Field II. Journal of the Acoustical Society of America, 2010, 127, 2825-2835.	1.1	17
140	Recent advances in blood flow vector velocity imaging. , 2011, , .		17
141	A Method for Direct Localized Sound Speed Estimates Using Registered Virtual Detectors. Ultrasonic Imaging, 2012, 34, 159-180.	2.6	17
142	Measuring 3D velocity vectors using the Transverse Oscillation method. , 2012, , .		17
143	A hand-held row-column addressed CMUT probe with integrated electronics for volumetric imaging. , 2015, , .		17
144	A Vector Flow Imaging Method for Portable Ultrasound Using Synthetic Aperture Sequential Beamforming. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1655-1665.	3.0	17

#	ARTICLE	IF	CITATIONS
145	Real-Time Volumetric Synthetic Aperture Software Beamforming of Row-Column Probe Data. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2608-2618.	3.0	17
146	In-vivo validation of fast spectral velocity estimation techniques. Ultrasonics, 2010, 50, 52-59.	3.9	16
147	Implementation of synthetic aperture imaging on a hand-held device. , 2014, , .		16
148	Deconvolution of ultrasound images. Ultrasonic Imaging, 1992, 14, 1-15.	2.6	15
149	Estimation of <i>in Vivo</i> Pulses in Medical Ultrasound. Ultrasonic Imaging, 1994, 16, 190-203.	2.6	15
150	Algorithms for estimating blood velocities using ultrasound. Ultrasonics, 2000, 38, 358-362.	3.9	15
151	Spatial filters for focusing ultrasound images. , 0, , .		15
152	Frequency division transmission imaging and synthetic aperture reconstruction. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 900-911.	3.0	15
153	Safety Assessment of Advanced Imaging Sequences II: Simulations. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 120-127.	3.0	15
154	Increasing the field-of-view of row-column-addressed ultrasound transducers: implementation of a diverging compound lens. Ultrasonics, 2018, 88, 97-105.	3.9	15
155	Estimation of High Velocities in Synthetic-Aperture Imaging-Part II: Experimental Investigation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1032-1038.	3.0	15
156	Implementation of ultrasound time-domain cross-correlation blood velocity estimators. IEEE Transactions on Biomedical Engineering, 1993, 40, 468-474.	4.2	14
157	Directional velocity estimation using a spatio-temporal encoding technique based on frequency division for synthetic transmit aperture ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1289-1299.	3.0	14
158	P2B-1 Synthetic Aperture Focusing Applied to Imaging Using a Rotating Single Element Transducer. , 2007, , .		14
159	Synthetic aperture focusing for a single-element transducer undergoing helical motion. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 935-943.	3.0	14
160	3D vector velocity estimation using a 2D phased array. , 2011, , .		14
161	Optimization of transverse oscillating fields for vector velocity estimation with convex arrays. , 2013, , .		14
162	Vector Flow Imaging Compared with Pulse Wave Doppler for Estimation of Peak Velocity in the Portal Vein. Ultrasound in Medicine and Biology, 2018, 44, 593-601.	1.5	14

#	ARTICLE	IF	CITATIONS
163	Pediatric Transthoracic Cardiac Vector Flow Imaging – A Preliminary Pictorial Study. Ultrasound International Open, 2019, 05, E20-E26.	0.6	14
164	Tissue motion in blood velocity estimation and its simulation. , 0, , .		13
165	SPEED-ACCURACY TRADE-OFFS IN COMPUTING SPATIAL IMPULSE RESPONSES FOR SIMULATING MEDICAL ULTRASOUND IMAGING. Journal of Computational Acoustics, 2001, 09, 731-744.	1.0	13
166	Delay generation methods with reduced memory requirements. , 2003, , .		13
167	Accuracy and Precision of a Plane Wave Vector Flow Imaging Method in the Healthy Carotid Artery. Ultrasound in Medicine and Biology, 2018, 44, 1727-1741.	1.5	13
168	Curvilinear 3-D Imaging Using Row-Column-Addressed 2-D Arrays With a Diverging Lens: Phantom Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1182-1192.	3.0	13
169	CMUT Electrode Resistance Design: Modeling and Experimental Verification by a Row-Column Array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1110-1118.	3.0	13
170	Super-Resolution Ultrasound Imaging of Rat Kidneys before and after Ischemia-Reperfusion. , 2019, , .		13
171	Row-column beamforming with dynamic apodizations on a GPU. , 2019, , .		13
172	Estimation of in Vivo Pulses in Medical Ultrasound. Ultrasonic Imaging, 1994, 16, 190-203.	2.6	12
173	Artifacts in blood velocity estimation using ultrasound and cross-correlation. Medical and Biological Engineering and Computing, 1994, 32, S165-S170.	2.8	12
174	Three-dimensional real-time synthetic aperture imaging using a rotating phased array transducer. , 0, , .		12
175	Real time 3D visualization of ultrasonic data using a standard PC. Ultrasonics, 2003, 41, 421-426.	3.9	12
176	Compact implementation of dynamic receive apodization in ultrasound scanners. , 2004, 5373, 260.		12
177	Synthetic aperture flow imaging using dual stage beamforming: Simulations and experiments. Journal of the Acoustical Society of America, 2013, 133, 2014-2024.	1.1	12
178	Investigation of PDMS as coating on CMUTs for imaging. , 2014, , .		12
179	Noninvasive estimation of 2-D pressure gradients in steady flow using ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1409-1418.	3.0	12
180	Fast 3-D Velocity Estimation in 4-D Using a 62 + 62 Row-Column Addressed Array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 608-623.	3.0	12

#	ARTICLE	IF	CITATIONS
181	Multi element synthetic aperture transmission using a frequency division approach. , 0, , .		11
182	Duplex scanning using sparse data sequences. , 2008, , .		11
183	Precise time-of-flight calculation for 3-D synthetic aperture focusing. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 1880-1887.	3.0	11
184	APES beamforming applied to medical ultrasound imaging. , 2009, , .		11
185	Clinical Evaluation of Synthetic Aperture Sequential Beamforming Ultrasound in Patients with Liver Tumors. Ultrasound in Medicine and Biology, 2014, 40, 2805-2810.	1.5	11
186	Capacitive substrate coupling of row-column-addressed 2-D CMUT arrays. , 2016, , .		11
187	3D printed calibration micro-phantoms for super-resolution ultrasound imaging validation. Ultrasonics, 2021, 114, 106353.	3.9	11
188	An Analysis of Pulsed Wave Ultrasound Systems for Blood Velocity Estimation. Acoustical Imaging, 1996, , 377-384.	0.2	11
189	Evaluation of 2D super-resolution ultrasound imaging of the rat renal vasculature using ex vivo micro-computed tomography. Scientific Reports, 2021, 11, 24335.	3.3	11
190	<title>Multi-element synthetic transmit aperture imaging using temporal encoding</title>. , 2002, , .		10
191	Maximum likelihood blood velocity estimator incorporating properties of flow physics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2004, 51, 80-92.	3.0	10
192	Recursive delay calculation unit for parametric beamformer. , 2006, , .		10
193	P2F-6 Designing Non-Linear Frequency Modulated Signals for Medical Ultrasound Imaging. , 2006, , .		10
194	Estimating 2-D vector velocities using multidimensional spectrum analysis. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 1744-1754.	3.0	10
195	Fast simulation of non-linear pulsed ultrasound fields using an angular spectrum approach. Ultrasonics, 2013, 53, 588-594.	3.9	10
196	A comparison between temporal and subband minimum variance adaptive beamforming. Proceedings of SPIE, 2014, , .	0.8	10
197	Implementation of real-time duplex synthetic aperture ultrasonography. , 2015, , .		10
198	A new approach to calculating spatial impulse responses. , 0, , .		9

#	ARTICLE	IF	CITATIONS
199	Preliminary in-vivo evaluation of convex array synthetic aperture imaging. , 2004, , .		9
200	Fast color flow mode imaging using plane wave excitation and temporal encoding. , 2005, , .		9
201	Fast Blood Vector Velocity Imaging using ultrasound: In-vivo examples of complex blood flow in the vascular system. , 2008, , .		9
202	Synthetic aperture beamformation using the GPU. , 2011, , .		9
203	3D Printed Flow Phantoms with Fiducial Markers for Super-Resolution Ultrasound Imaging. , 2018, , .		9
204	Non-Invasive Assessment of Intravascular Pressure Gradients: A Review of Current and Proposed Novel Methods. Diagnostics, 2019, 9, 5.	2.6	9
205	Equipment and methods for synthetic aperture anatomic and flow imaging. , 0, , .		8
206	A method for real-time three-dimensional vector velocity imaging. , 0, , .		8
207	Experimental investigation of transverse flow estimation using transverse oscillation. , 0, , .		8
208	Spatio-temporal encoding using narrow-band linear frequency modulated signals in synthetic aperture ultrasound imaging. , 2005, , .		8
209	Comparing interpolation schemes in dynamic receive ultrasound beamforming. , 0, , .		8
210	P3H-2 Improved Beamforming for Lateral Oscillations in Elastography Using Synthetic Aperture Imaging. , 2006, , .		8
211	Multi-frequency encoding for fast color flow or quadroplex imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 778-786.	3.0	8
212	Void-free direct bonding of CMUT arrays with single crystalline plates and pull-in insulation. , 2013, , .		8
213	Synthetic Aperture Sequential Beamforming implemented on multi-core platforms. , 2014, , .		8
214	Row-column addressed 2-D CMUT arrays with integrated apodization. , 2014, , .		8
215	Tissue Motion Estimation and Correction in Super Resolution Imaging. , 2019, , .		8
216	Tensor Velocity Imaging With Motion Correction. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1676-1686.	3.0	8

#	ARTICLE	IF	CITATIONS
217	Simulating arbitrary-geometry ultrasound transducers using triangles. , 0, , .		7
218	Velocity estimation using recursive ultrasound imaging and spatially encoded signals. , 0, , .		7
219	Trade off study on different envelope detectors for B-mode imaging. , 0, , .		7
220	Investigation of sound speed errors in adaptive beamforming. , 2008, , .		7
221	A Movable Phantom Design for Quantitative Evaluation of Motion Correction Studies on High Resolution PET Scanners. IEEE Transactions on Nuclear Science, 2010, 57, 1116-1124.	2.0	7
222	New interpretation of arterial stiffening due to cigarette smoking using a structurally motivated constitutive model. Journal of Biomechanics, 2011, 44, 1209-1211.	2.1	7
223	Implementation of tissue harmonic synthetic aperture imaging on a commercial ultrasound system. , 2012, , .		7
224	In vivo 3-D vector velocity estimation with continuous data. , 2015, , .		7
225	High frame rate vector velocity estimation using plane waves and transverse oscillation. , 2015, , .		7
226	Acoustical cross-talk in rowâ€“column addressed 2-D transducer arrays for ultrasound imaging. Ultrasonics, 2015, 63, 174-178.	3.9	7
227	Ultrasound Multiple Point Target Detection and Localization using Deep Learning. , 2019, , .		7
228	Common Carotid Artery Volume Flow: A Comparison Study between Ultrasound Vector Flow Imaging and Phase Contrast Magnetic Resonance Imaging. Neurology International, 2021, 13, 269-278.	2.8	7
229	Deep Learning Models for Fast Ultrasound Localization Microscopy. , 2020, , .		7
230	Performance Assessment of Rowâ€“Column Transverse Oscillation Tensor Velocity Imaging Using Computational Fluid Dynamics Simulation of Carotid Bifurcation Flow. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 1230-1242.	3.0	7
231	Adaptive Blood Velocity Estimation in Medical Ultrasound. , 2007, , .		6
232	Precision of needle tip localization using a receiver in the needle. , 2008, , .		6
233	Comparison of simulated and measured nonlinear ultrasound fields. , 2011, , .		6
234	Modeling and measurements of CMUTs with square anisotropic plates. , 2013, , .		6

#	ARTICLE	IF	CITATIONS
235	Comparison of vector velocity imaging using directional beamforming and transverse oscillation for a convex array transducer. Proceedings of SPIE, 2014, , .	0.8	6
236	Modal radiation patterns of baffled circular plates and membranes. Journal of the Acoustical Society of America, 2014, 135, 2523-2533.	1.1	6
237	Improved vector velocity estimation using Directional Transverse Oscillation. , 2015, , .		6
238	A Methodology for Anatomic Ultrasound Image Diagnostic Quality Assessment. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 206-217.	3.0	6
239	Vector and Doppler Ultrasound Velocities Evaluated in a Flow Phantom and the Femoropopliteal Vein. Ultrasound in Medicine and Biology, 2017, 43, 2477-2487.	1.5	6
240	A Row-Column-Addressed 2D Probe with an Integrated Compound Diverging Lens. , 2018, , .		6
241	Wafer bonded CMUT technology utilizing a Poly-Silicon-on-Insulator wafer. , 2019, , .		6
242	Carotid Stenosis Assessment with Vector Concentration before and after Stenting. Diagnostics, 2020, 10, 420.	2.6	6
243	Super-Resolution Ultrasound Imaging Can Quantify Alterations in Microbubble Velocities in the Renal Vasculature of Rats. Diagnostics, 2022, 12, 1111.	2.6	6
244	Performance of a vector velocity estimator [in ultrasound blood flow measurement]. , 0, , .		5
245	Real-time synthetic aperture imaging: opportunities and challenges. , 2006, , .		5
246	Parameter study of 3D synthetic aperture post-beamforming procedure. Ultrasonics, 2006, 44, e159-e164.	3.9	5
247	11C-4 Fast Blood Vector Velocity Imaging: Simulations and Preliminary In Vivo Results. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	5
248	Feasibility of non-linear simulation for Field II using an angular spectrum approach. , 2008, , .		5
249	Non-invasive estimation of blood pressure using ultrasound contrast agents. Physics Procedia, 2010, 3, 245-253.	1.2	5
250	Comparison of 3D synthetic aperture imaging and expsoscan using phantom measurements. , 2012, , .		5
251	Ultrasound backscatter from free-swimming fish at 1 MHz for fish identification. , 2012, , .		5
252	Preliminary study of synthetic aperture tissue harmonic imaging on in-vivo data. , 2013, , .		5

#	ARTICLE	IF	CITATIONS
253	Real time deconvolution of in-vivo ultrasound images. , 2013, , .		5
254	In-vivo convex array vector flow imaging. , 2014, , .		5
255	Accuracy and sources of error for an angle independent volume flow estimator. , 2014, , .		5
256	Elimination of second-harmonics in CMUTs using square pulse excitation. , 2016, , .		5
257	High frame rate synthetic aperture 3D vector flow imaging. , 2016, , .		5
258	A framework for simulating ultrasound imaging based on first order nonlinear pressure-velocity relations. Ultrasonics, 2016, 69, 152-165.	3.9	5
259	Characterization of Medical Ultrasound Transducers. , 2018, , .		5
260	SA-VFI: the IEEE IUS Challenge on Synthetic Aperture Vector Flow Imaging. , 2018, , .		5
261	Evaluation of Peak Reflux Velocities with Vector Flow Imaging and Spectral Doppler Ultrasound in Varicose Veins. Ultrasound International Open, 2018, 04, E91-E98.	0.6	5
262	History and Latest Advances in Flow Estimation Technology: From 1-D in 2-D to 3-D in 4-D. , 2019, , .		5
263	Super-Resolution Ultrasound Imaging Provides Quantification of the Renal Cortical and Medullary Vasculature in Obese Zucker Rats: A Pilot Study. Diagnostics, 2022, 12, 1626.	2.6	5
264	Detection probabilities for time-domain velocity estimation. , 0, , .		4
265	A code division technique for multiple element synthetic aperture transmission. , 2004, , .		4
266	An in vitro investigation of transverse flow estimation. , 2004, , .		4
267	In vitro measurement of ambient pressure changes using a realistic clinical setup. , 2008, , .		4
268	Simulation of microbubble response to ambient pressure changes. Proceedings of SPIE, 2008, , .	0.8	4
269	High resolution ultrasound imaging using adaptive beamforming with reduced number of active elements. Physics Procedia, 2010, 3, 659-665.	1.2	4
270	Simulating capacitive micromachined ultrasonic transducers (CMUTs) using field II. , 2010, , .		4

#	ARTICLE	IF	CITATIONS
271	Simulation of second harmonic ultrasound fields. , 2010, , .		4
272	Second harmonic imaging using synthetic aperture sequential beamforming. , 2011, , .		4
273	Performance of synthetic aperture compounding for in-vivo imaging. , 2011, , .		4
274	Third harmonic imaging using pulse inversion. , 2011, , .		4
275	Preliminary comparison of 3D synthetic aperture imaging with Exploscan. , 2012, , .		4
276	Modelling of CMUTs with anisotropic plates. , 2012, , .		4
277	Spectral velocity estimation in the transverse direction. , 2013, , .		4
278	New developments in vector velocity imaging using the transverse oscillation approach. Proceedings of SPIE, 2013, , .	0.8	4
279	3-D velocity estimation for two planes in vivo. , 2014, , .		4
280	Adaptive multi-lag for synthetic aperture vector flow imaging. , 2014, , .		4
281	Thermal Oxidation of Structured Silicon Dioxide. ECS Journal of Solid State Science and Technology, 2014, 3, N63-N68.	1.8	4
282	Volumetric ultrasound imaging with row-column addressed 2-D arrays using Spatial Matched Filter beamforming. , 2015, , .		4
283	Velocity estimation of the main portal vein with Transverse Oscillation. , 2015, , .		4
284	Output pressure and harmonic characteristics of a CMUT as function of bias and excitation voltage. , 2015, , .		4
285	3-D vector velocity estimation with row-column addressed arrays. , 2015, , .		4
286	Fourier beamformation of multistatic synthetic aperture ultrasound imaging. , 2015, , .		4
287	Clinical Evaluation of Synthetic Aperture Harmonic Imaging for Scanning Focal Malignant Liver Lesions. Ultrasound in Medicine and Biology, 2015, 41, 2368-2375.	1.5	4
288	Novel automatic detection of pleura and B-lines (comet-tail artifacts) on in vivo lung ultrasound scans. Proceedings of SPIE, 2016, , .	0.8	4

#	ARTICLE	IF	CITATIONS
289	Hybrid segmentation of vessels and automated flow measures in in-vivo ultrasound imaging. , 2016, , .		4
290	Automatic segmentation of vessels in in-vivo ultrasound scans. Proceedings of SPIE, 2017, , .	0.8	4
291	BCB polymer based row-column addressed CMUT. , 2017, , .		4
292	Real-Time 2-D Phased Array Vector Flow Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1205-1213.	3.0	4
293	3-D Super Resolution Imaging using a 62+62 Elements Row-Column Array. , 2019, , .		4
294	Vector Flow Imaging of the Ascending Aorta in Patients with Tricuspid and Bicuspid Aortic Valve Stenosis Treated with Biological and Mechanical Implants. Ultrasound in Medicine and Biology, 2020, 46, 64-72.	1.5	4
295	Flow Complexity Estimation in Dysfunctional Arteriovenous Dialysis Fistulas using Vector Flow Imaging. Ultrasound in Medicine and Biology, 2020, 46, 2493-2504.	1.5	4
296	Tracking Performance in Ultrasound Super-Resolution Imaging. , 2020, , .		4
297	A new approach for the estimation of the axial velocity using ultrasound. Ultrasonics, 2000, 37, 661-665.	3.9	3
298	<title>Performance of velocity vector estimation using an improved dynamic beamforming setup</title>. , 2001, , .		3
299	1K-3 Preliminary In-Vivo Results for Spatially Coded Synthetic Transmit Aperture Ultrasound Based on Frequency Division. , 2006, , .		3
300	Effective and versatile software beamformation toolbox. , 2007, , .		3
301	Testing of a one dimensional model for Field II calibration. , 2008, , .		3
302	Performance of the Transverse Oscillation method using beamformed data from a commercial scanner. , 2009, , .		3
303	Transverse oscillations for phased array vector velocity imaging. , 2010, , .		3
304	Arterial secondary blood flow patterns visualized with vector flow ultrasound. , 2011, , .		3
305	Preliminary in-vivo evaluation of synthetic aperture sequential beamformation using a multielement convex array. , 2011, , .		3
306	Non-linear Imaging sing an Experimental Synthetic Aperture Real Time Ultrasound Scanner. IFMBE Proceedings, 2011, , 101-104.	0.3	3

#	ARTICLE	IF	CITATIONS
307	Simulation of ultrasound backscatter images from fish. Proceedings of SPIE, 2011, , .	0.8	3
308	Computational fluid dynamics using in vivo ultrasound blood flow measurements. , 2012, , .		3
309	2-D row-column CMUT arrays with an open-grid support structure. , 2013, , .		3
310	Internal strain estimation for quantification of human heel pad elastic modulus: A phantom study. Ultrasonics, 2013, 53, 439-446.	3.9	3
311	Determining inter-fractional motion of the uterus using 3D ultrasound imaging during radiotherapy for cervical cancer. Proceedings of SPIE, 2014, , .	0.8	3
312	Real-time GPU implementation of transverse oscillation vector velocity flow imaging. Proceedings of SPIE, 2014, , .	0.8	3
313	Rapid measurements of intensities for safety assessment of advanced imaging sequences. , 2014, , .		3
314	In-vivo synthetic aperture and plane wave high frame rate cardiac imaging. , 2014, , .		3
315	Increased frame rate for plane wave imaging without loss of image quality. , 2015, , .		3
316	In vivo high frame rate vector flow imaging using plane waves and directional beamforming. , 2016, , .		3
317	Vector velocity estimation for portable ultrasound using directional transverse oscillation and synthetic aperture sequential beamforming. , 2016, , .		3
318	3D vector flow using a row-column addressed CMUT array. Proceedings of SPIE, 2016, , .	0.8	3
319	High frame rate synthetic aperture vector flow imaging for transthoracic echocardiography. , 2016, , .		3
320	Output pressure and pulse-echo characteristics of CMUTs as function of plate dimensions. , 2017, , .		3
321	Energy based clutter filtering for vector flow imaging. , 2017, , .		3
322	Design of a Novel Zig-Zag 192+192 Row Column Addressed Array Transducer: A Simulation Study. , 2018, , .		3
323	Spatiotemporal Filtering for Synthetic Aperture Slow Flow Imaging. , 2018, , .		3
324	Respiratory variability of peak velocities in the common femoral vein estimated with vector flow imaging and Doppler ultrasound. Ultrasound in Medicine and Biology, 2018, 44, 1941-1950.	1.5	3

#	ARTICLE	IF	CITATIONS
325	188+188 Rowâ€“Column Addressed CMUT Transducer for Super Resolution Imaging. , 2019, , .		3
326	Automatic Classification of Arterial and Venous Flow in Super-resolution Ultrasound Images of Rat Kidneys. , 2021, , .		3
327	Deconvolution of in vivo ultrasound images. , 0, , .		2
328	Improved beamforming performance using pulsed plane wave decomposition. , 0, , .		2
329	<title>Efficient focusing scheme for transverse velocity estimation using cross-correlation</title>. , 2001, , .		2
330	<title>New coding concept for fast ultrasound imaging using pulse trains</title>. , 2002, 4687, 68.		2
331	Spectral velocity estimation using the autocorrelation function and sparse data sequences. , 0, , .		2
332	11C-1 Fast Spectral Velocity Estimation Using Adaptive Techniques: In-Vivo Results. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	2
333	12B-3 Validation of Transverse Oscillation Vector Velocity Estimation In-Vivo. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	2
334	In vivo examples of synthetic aperture vector flow imaging. , 2007, , .		2
335	4B-4 Precise Time-of-Flight Calculation For 3D Synthetic Aperture Focusing. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	2
336	Angular spectrum simulation of pulsed ultrasound fields. , 2009, , .		2
337	Synthetic aperture flow imaging using a dual stage beamformer approach. , 2010, , .		2
338	Angular spectrum approach for fast simulation of pulsed non-linear ultrasound fields. , 2011, , .		2
339	Ultrasonography Fused with PET-CT Hybrid Imaging. Current Medical Imaging, 2011, 7, 248-251.	0.8	2
340	An architecture and implementation of real-time synthetic aperture compounding with SARUS. , 2011, , .		2
341	`Spatial impulse response of a rectangular double curved transducer. Journal of the Acoustical Society of America, 2012, 131, 2730-2741.	1.1	2
342	Optimizing synthetic aperture compound imaging. , 2012, , .		2

#	ARTICLE	IF	CITATIONS
343	High frame rate synthetic aperture duplex imaging. , 2013, , .		2
344	Non-invasive measurement of pressure gradients using ultrasound. Proceedings of SPIE, 2013, , .	0.8	2
345	Iterative autocorrelation motion estimation with application to elasticity imaging. , 2013, , .		2
346	Increasing the dynamic range of synthetic aperture vector flow imaging. Proceedings of SPIE, 2014, , .	0.8	2
347	Simulation and efficient measurements of intensities for complex imaging sequences. , 2014, , .		2
348	High resolution depth-resolved imaging from multi-focal images for medical ultrasound. , 2015, 2015, 7067-70.		2
349	In-vivo high dynamic range vector flow imaging. , 2015, , .		2
350	Automated hierarchical time gain compensation for<i>in-vivo</i>ultrasound imaging. Proceedings of SPIE, 2015, , .	0.8	2
351	Volumetric synthetic aperture imaging with a piezoelectric 2D row-column probe. Proceedings of SPIE, 2016, , .	0.8	2
352	Optimization of synthetic aperture image quality. Proceedings of SPIE, 2016, , .	0.8	2
353	3-D imaging using row-column-addressed 2-D arrays with a diverging lens. , 2016, , .		2
354	Validation Platform for Development of Computational Fluid Dynamics of Intra-Cardiac Blood-Flow. , 2019, , .		2
355	Full Volumetric 3-D Vector Flow Imaging using a 62+62 Row-Column Array. , 2019, , .		2
356	3D Printed Calibration Micro-phantoms for Validation of Super-Resolution Ultrasound Imaging. , 2019, , .		2
357	Development of Super-Resolution Sharpness-Based Axial Localization for Ultrasound Imaging. IEEE Access, 2019, 7, 6297-6309.	4.2	2
358	Portable Vector Flow Imaging Compared With Spectral Doppler Ultrasonography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 453-462.	3.0	2
359	Real Time Synthetic Aperture and Plane Wave Ultrasound Imaging with the Xilinx VERSALâ„¢ SIMD-VLIW Architecture. , 2020, , .		2
360	Pressure Difference Estimation in Non-stenotic Carotid Bifurcation Phantoms Using Vector Flow Imaging. Ultrasound in Medicine and Biology, 2022, 48, 346-357.	1.5	2

#	ARTICLE	IF	CITATIONS
361	Model-based Deep Learning on Ultrasound Channel Data for Fast Ultrasound Localization Microscopy. , 2021, , .		2
362	A new maximum likelihood blood velocity estimator incorporating spatial and temporal correlation. , 0, , .		1
363	Method for in-vivo synthetic aperture B-flow imaging. , 2004, 5373, 44.		1
364	Experimental investigation of synthetic aperture flow angle estimation. , 2005, , .		1
365	Blood vector velocity estimation using an autocorrelation approach: in vivo investigation. , 0, , .		1
366	Plane wave fast color flow mode imaging: a parameter study. , 2006, , .		1
367	2K-6 Cardiac In-Vivo Measurements Using Synthetic Transmit Aperture Ultrasound. , 2006, , .		1
368	P3C-3 In-Vivo Vector Velocity Imaging Using Directional Cross-Correlation. , 2006, , .		1
369	P3C-4 Motion Compensated Beamforming in Synthetic Aperture Vector Flow Imaging. , 2006, , .		1
370	P6B-4 Multi-Dimensional Spectrum Analysis for 2-D Vector Velocity Estimation. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	1
371	Coded ultrasound for blood flow estimation using subband processing. , 2007, , .		1
372	Rocking convex array used for 3D synthetic aperture focusing. , 2008, , .		1
373	Transverse correlation: An efficient transverse flow estimator - initial results. , 2008, , .		1
374	In-vivo evaluation of three ultrasound vector velocity techniques with MR angiography. , 2008, , .		1
375	Calibration of Field II using a convex ultrasound transducer. Physics Procedia, 2010, 3, 995-1001.	1.2	1
376	Quantification of complex blood flow using real-time in vivo vector flow ultrasound. , 2010, , .		1
377	Testing of a spatial impulse response algorithm for double curved transducers. , 2010, , .		1
378	Directional synthetic aperture flow imaging using a dual stage beamformer approach. , 2011, , .		1

#	ARTICLE	IF	CITATIONS
379	Simulation of shadowing effects in ultrasound imaging from computed tomography images. , 2011, , .		1
380	Compound imaging using Synthetic Aperture Sequential Beamformation. , 2011, , .		1
381	Multilayer Piezoelectric Transducer Models Combined with Field II. Acta Acustica United With Acustica, 2012, 98, 546-554.	0.8	1
382	Vector volume flow in arteriovenous fistulas. , 2013, , .		1
383	A delta-sigma beamformer with integrated apodization. , 2013, , .		1
384	Inter-operator variability in defining uterine position using three-dimensional ultrasound imaging. , 2013, , .		1
385	In vivo three-dimensional velocity vector imaging and volumetric flow rate measurements. , 2013, , .		1
386	Performance evaluation of compounding and directional beamforming techniques for carotid strain imaging using plane wave transmissions. , 2014, , .		1
387	Simulation study of real time 3-D synthetic aperture sequential beamforming for ultrasound imaging. , 2014, , .		1
388	Data adaptive estimation of transversal blood flow velocities. , 2014, , .		1
389	Non-invasive estimation of pressure gradients in pulsatile flow using ultrasound. , 2014, , .		1
390	Dimensional scaling for optimized CMUT operations. , 2014, , .		1
391	Ultrasound evaluation of an abdominal aortic fluid-structure interaction model. , 2014, , .		1
392	Image quality degradation from transmit delay profile quantization. , 2015, , .		1
393	Transverse oscillation vector flow imaging for transthoracic echocardiography. , 2015, , .		1
394	<i>In vivo</i> real-time volumetric synthetic aperture ultrasound imaging. Proceedings of SPIE, 2015, , .	0.8	1
395	Velocity Estimation in Medical Ultrasound [Life Sciences]. IEEE Signal Processing Magazine, 2017, 34, 94-100.	5.6	1
396	Accuracy and precision of plane wave vector flow imaging for laminar and complex flow in vivo. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
397	Real-time implementation of synthetic aperture vector flow imaging on a consumer-level tablet. , 2017, , .		1
398	Atherosclerotic Lesions in the Superficial Femoral Artery (SFA) Characterized with Velocity Ratios using Vector Velocity Ultrasound. Ultrasound International Open, 2018, 04, E79-E84.	0.6	1
399	Fast GPU-beamforming of Row-Column Addressed Probe Data. , 2019, , .		1
400	3-D Directional Transverse Oscillations Synthetic Aperture Vector Flow Imaging with a 1024 Element Matrix Probe. , 2019, , .		1
401	Minimum Variance beamforming for closely spaced microbubbles. , 2019, , .		1
402	3-D Synthetic Aperture High Volume Rate Tensor Velocity Imaging Using 1024 Element Matrix Probe. , 2020, , .		1
403	Super-resolution Ultrasound Imaging of the Renal Microvasculature in Rats with Metabolic syndrome. , 2020, , .		1
404	Tensor Velocity Imaging with Motion Correction. , 2020, , .		1
405	Real-time blood flow estimation using a recursive least-squares lattice filter. , 0, , .		0
406	Joint probability discrimination between stationary tissue and blood velocity signals. , 0, , .		0
407	OC095: Synthetic aperture imaging in medical ultrasound. Ultrasound in Obstetrics and Gynecology, 2004, 24, 242-242.	1.7	0
408	P6B-5 In Vivo Vector Flow Imaging Using Improved Directional Beamforming. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	0
409	12B-6 Multi-Frequency Encoding for Rapid Color Flow and Quadroplex Imaging. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	0
410	4B-6 A Novel Method for Direct Localized Sound Speed Measurement Using the Virtual Source Paradigm. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	0
411	In-vivo validation of fast spectral velocity estimation techniques - preliminary results. , 2008, , .		0
412	Parameter sensitivity study of a Field II multilayer transducer model on a convex transducer. , 2009, , .		0
413	Evaluation study of fast spectral estimators using in-vivo data. , 2009, , .		0
414	Simulation of high quality ultrasound imaging. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
415	A method for synthetic aperture compounding. , 2010, , .		0
416	Evaluation of automatic time gain compensated in-vivo ultrasound sequences. , 2010, , .		0
417	Scalable intersample interpolation architecture for high-channel-count beamformers. , 2011, , .		0
418	Preliminary comparison between real-time in-vivo spectral and transverse oscillation velocity estimates. Proceedings of SPIE, 2011, , .	0.8	0
419	Transverse oscillation vector velocity estimation using a phased array transducer. , 2012, , .		0
420	In vivo color flow mapping using synthetic aperture dual stage beamforming. , 2012, , .		0
421	Clinical evaluation of synthetic aperture sequential beamforming. , 2012, , .		0
422	Age and gender related differences in aortic blood flow. Proceedings of SPIE, 2012, , .	0.8	0
423	Shadow effects in simulated ultrasound images derived from computed tomography images using a focused beam tracing model. Journal of the Acoustical Society of America, 2012, 132, 487-497.	1.1	0
424	Intraoperative vector flow imaging of the heart. , 2013, , .		0
425	Non-invasive measurement of pressure gradients in pulsatile flow using ultrasound. , 2013, , .		0
426	A phantom study on temporal and subband Minimum Variance adaptive beamforming. , 2014, , .		0
427	Clinical evaluation of Synthetic Aperture Sequential Beamforming and Tissue Harmonic Imaging. , 2014, , .		0
428	Assessment of Flatness of Assumed Planar Surfaces for Ultrasound Investigation of Elastic Surfaces. Physics Procedia, 2015, 70, 1233-1236.	1.2	0
429	Vector flow imaging of the ascending aorta. , 2015, , .		0
430	Advanced automated gain adjustments for in-vivo ultrasound imaging. , 2015, , .		0
431	Non-invasive estimation of pressure changes along a streamline using vector velocity ultrasound. , 2015, , .		0
432	Synthetic aperture imaging using a semi-analytic model for the transmit beams. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
433	Surveillance of hemodialysis vascular access with ultrasound vector flow imaging. , 2015, , .		0
434	Reply. Arthritis and Rheumatology, 2015, 67, 1681-1683.	5.6	0
435	Experimental 3-D vector velocity estimation with row-column addressed arrays. , 2016, , .		0
436	Analog gradient beamformer for a wireless ultrasound scanner. Proceedings of SPIE, 2016, , .	0.8	0
437	Blood flow velocity in the popliteal vein using transverse oscillation ultrasound. , 2016, , .		0
438	Quantitative measurements using ultrasound Vector Flow Imaging. , 2016, , .		0
439	Preliminary investigation of an ultrasound method for estimating pressure changes in deep-positioned vessels. , 2016, , .		0
440	Simulating CMUT arrays using time domain FEA. , 2017, , .		0
441	Volumetric 3-D vector flow measurements using a 62+62 row-column addressed array. , 2017, , .		0
442	Accuracy and precision study of plane wave vector flow imaging for laminar and complex flow in vivo. , 2017, , .		0
443	3-D imaging using row-column addressed 2-D arrays with a diverging lens: Phantom study. , 2017, , .		0
444	High-frame-rate imaging of a carotid bifurcation using a low-complexity velocity estimation approach. , 2017, , .		0
445	Volumetric 3-D vector flow measurements using a 62+62 row-column addressed array. , 2017, , .		0
446	3-D imaging using row-column-addressed 2-D arrays with a diverging lens: Phantom study. , 2017, , .		0
447	Synthetic aperture sequential beamforming using spatial matched filtering. , 2017, , .		0
448	Improved focusing method for 3-D imaging using row-column-addressed 2-D arrays. , 2017, , .		0
449	Volumetric Color Flow Map Using Row Column Transducer Array-Simulation Study. , 2018, , .		0
450	Flow Changes After Biological and Mechanical Aortic Valve Implantation Measured with VFI. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
451	A comparison between image and signal sharpness-based axial localization of ultrasound scatterers. , 2019, , .		0
452	Pressure Difference Estimation in Carotid Bulbs using Vector Flow Imaging - A Phantom Study. , 2019, , .		0
453	Vector Concentration used for Stenosis Assessment in the Carotid Artery before and after Carotid Stenting. , 2019, , .		0
454	Do raw signal data provide better localisation than image data for super-resolution imaging?. , 2019, , .		0
455	Non-invasive Intravascular Pressure Gradient Estimation using Synthetic Aperture Ultrasound. , 2021, , .		0
456	Improved microbubble (MB) Localisation Using Particle Detecting algorithm: Evaluation of Algorithm Performance for Different Beamforming Methods. , 2020, , .		0
457	Investigating a CMUT's Ability to Achieve Non-linear Contrast Enhancement. , 2020, , .		0
458	Transthoracic Vector Flow Imaging in Pediatric Patients with Valvular Stenosis â€œ A Proof of Concept Study. Ultrasound International Open, 2021, 07, E48-E54.	0.6	0