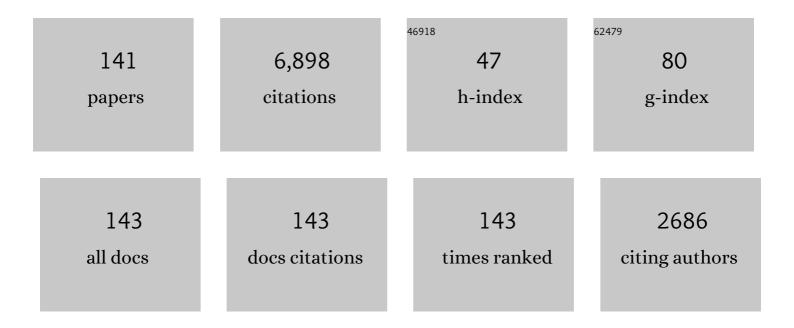
## Gregg E Trahey

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	On the feasibility of remote palpation using acoustic radiation force. Journal of the Acoustical Society of America, 2001, 110, 625-634.	0.5	726
2	Short-lag spatial coherence of backscattered echoes: imaging characteristics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 1377-1388.	1.7	348
3	Angle Independent Ultrasonic Detection of Blood Flow. IEEE Transactions on Biomedical Engineering, 1987, BME-34, 965-967.	2.5	345
4	Rapid tracking of small displacements with ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1103-1117.	1.7	339
5	Phase aberration correction in medical ultrasound using speckle brightness as a quality factor. Journal of the Acoustical Society of America, 1989, 85, 1819-1833.	0.5	297
6	Acoustic radiation force elasticity imaging in diagnostic ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 685-701.	1.7	248
7	In Vivo Assessment of Myocardial Stiffness with Acoustic Radiation Force Impulse Imaging. Ultrasound in Medicine and Biology, 2007, 33, 1706-1719.	0.7	161
8	Acoustic radiation force impulse imaging of the abdomen: demonstration of feasibility and utility. Ultrasound in Medicine and Biology, 2005, 31, 1185-1198.	0.7	157
9	Ultrasonic tracking of acoustic radiation force-induced displacements in homogeneous media. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1300-1313.	1.7	157
10	Acoustic radiation force impulse imaging of the mechanical properties of arteries: In vivo and ex vivo results. Ultrasound in Medicine and Biology, 2004, 30, 1163-1171.	0.7	131
11	A parallel tracking method for acoustic radiation force impulse imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 301-312.	1.7	122
12	Quantitative Assessment of the Magnitude, Impact and Spatial Extent of Ultrasonic Clutter. Ultrasonic Imaging, 2008, 30, 151-168.	1.4	104
13	A real time system for quantifying and displaying two-dimensional velocities using ultrasound. Ultrasound in Medicine and Biology, 1993, 19, 751-761.	0.7	102
14	Lesion Detectability in Diagnostic Ultrasound with Short-Lag Spatial Coherence Imaging. Ultrasonic Imaging, 2011, 33, 119-133.	1.4	102
15	Experimental velocity profiles and volumetric flow via two-dimensional speckle tracking. Ultrasound in Medicine and Biology, 1995, 21, 885-898.	0.7	100
16	Dynamic mechanical response of elastic spherical inclusions to impulsive acoustic radiation force excitation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 2065-2079.	1.7	100
17	Acoustic Radiation Force Impulse Imaging for Noninvasive Characterization of Carotid Artery Atherosclerotic Plaques: A Feasibility Study. Ultrasound in Medicine and Biology, 2009, 35, 707-716.	0.7	98
18	The direct estimation of sound speed using pulse–echo ultrasound. Journal of the Acoustical Society of America, 1998, 104, 3099-3106.	0.5	92

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19	Acoustic radiation force impulse imaging of myocardial radiofrequency ablation: initial in vivo results. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 631-641.	1.7	92
20	Acoustic radiation force impulse imaging of thermally- and chemically-induced lesions in soft tissues: preliminary ex vivo results. Ultrasound in Medicine and Biology, 2004, 30, 321-328.	0.7	91
21	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
22	A Finite Element Model of Remote Palpation of Breast Lesions Using Radiation Force: Factors Affecting Tissue Displacement. Ultrasonic Imaging, 2000, 22, 35-54.	1.4	89
23	The use of acoustic streaming in breast lesion diagnosis: a clinical study. Ultrasound in Medicine and Biology, 1999, 25, 75-87.	0.7	85
24	Estimates of echo correlation and measurement bias in acoustic radiation force impulse imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 631-641.	1.7	79
25	Potential and Limitations of Angle-Independent Flow Detection Algorithms Using Radio-Frequency and Detected Echo Signals. Ultrasonic Imaging, 1991, 13, 252-268.	1.4	77
26	A novel ultrasonic technique for differentiating cysts from solid lesions: Preliminary results in the breast. Ultrasound in Medicine and Biology, 1995, 21, 745-751.	0.7	77
27	Speckle coherence and implications for adaptive imaging. Journal of the Acoustical Society of America, 1997, 101, 1847-1858.	0.5	76
28	<i>In Vivo</i> Cardiac, Acoustic-Radiation-Force-Driven, Shear Wave Velocimetry. Ultrasonic Imaging, 2009, 31, 201-213.	1.4	75
29	The Evolution of Tissue Stiffness at Radiofrequency Ablation Sites During Lesion Formation and in the Periâ€Ablation Period. Journal of Cardiovascular Electrophysiology, 2015, 26, 1009-1018.	0.8	74
30	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
31	The detection of breast microcalcifications with medical ultrasound. Journal of the Acoustical Society of America, 1997, 101, 29-39.	0.5	66
32	Short-Lag Spatial Coherence Imaging of Cardiac Ultrasound Data: Initial Clinical Results. Ultrasound in Medicine and Biology, 2013, 39, 1861-1874.	0.7	65
33	A novel interpolation strategy for estimating subsample speckle motion. Physics in Medicine and Biology, 2000, 45, 1541-1552.	1.6	61
34	In Vivo Guidance and Assessment of Liver Radio-Frequency Ablation with Acoustic Radiation Force Elastography. Ultrasound in Medicine and Biology, 2008, 34, 1590-1603.	0.7	61
35	Synthetic aperture focusing for short-lag spatial coherence imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1816-1826.	1.7	61
36	Single- and Multiple-Track-Location Shear Wave and Acoustic Radiation Force Impulse Imaging: Matched Comparison of Contrast, Contrast-to-Noise Ratio and Resolution. Ultrasound in Medicine and Biology, 2015, 41, 1043-1057.	0.7	61

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37	Adaptive Clutter Filtering via Blind Source Separation for Two-Dimensional Ultrasonic Blood Velocity Measurement. Ultrasonic Imaging, 2002, 24, 193-214.	1.4	58
38	Lag-One Coherence as a Metric for Ultrasonic Image Quality. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1768-1780.	1.7	58
39	Image quality, tissue heating, and frame rate trade-offs in acoustic radiation force impulse imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 63-76.	1.7	54
40	An <i>In Vitro</i> Assessment of Acoustic Radiation Force Impulse Imaging for Visualizing Cardiac Radiofrequency Ablation Lesions. Journal of Cardiovascular Electrophysiology, 2010, 21, 557-563.	0.8	52
41	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
42	The development and potential of acoustic radiation force impulse (ARFI) imaging for carotid artery plaque characterization. Vascular Medicine, 2011, 16, 302-311.	0.8	49
43	Intracardiac Echocardiography Measurement of Dynamic Myocardial Stiffness with Shear Wave Velocimetry. Ultrasound in Medicine and Biology, 2012, 38, 1271-1283.	0.7	49
44	Phase-aberration correction with a 3-D ultrasound scanner: feasibility study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1432-1439.	1.7	48
45	The Impact of Physiological Motion on Tissue Tracking During Radiation Force Imaging. Ultrasound in Medicine and Biology, 2007, 33, 1149-1166.	0.7	48
46	Feasibility of Swept Synthetic Aperture Ultrasound Imaging. IEEE Transactions on Medical Imaging, 2016, 35, 1676-1685.	5.4	47
47	Adaptive imaging and spatial compounding in the presence of aberration. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1131-1144.	1.7	46
48	Intracardiac acoustic radiation force impulse imaging: A novel imaging method for intraprocedural evaluation of radiofrequency ablation lesions. Heart Rhythm, 2012, 9, 1855-1862.	0.3	44
49	BSS-based filtering of physiological and ARFI-induced tissue and blood motion. Ultrasound in Medicine and Biology, 2003, 29, 1583-1592.	0.7	41
50	Challenges and implementation of radiation-force imaging with an intracardiac ultrasound transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 996-1009.	1.7	39
51	Synthetic tracked aperture ultrasound imaging: design, simulation, and experimental evaluation. Journal of Medical Imaging, 2016, 3, 027001.	0.8	39
52	Spatial and temporal aberrator stability for real-time adaptive imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1504-1517.	1.7	38
53	A motion-based approach to abdominal clutter reduction. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 2437-2449.	1.7	38
54	InÂVivo Application of Short-Lag Spatial Coherence Imaging inÂHuman Liver. Ultrasound in Medicine and Biology, 2013, 39, 534-542.	0.7	38

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55	Resolution and brightness characteristics of short-lag spatial coherence (SLSC) images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1265-1276.	1.7	37
56	Continuous delay estimation with polynomial splines. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 2026-2035.	1.7	36
57	Properties of Acoustical Speckle in the Presence of Phase Aberration Part II: Correlation Lengths. Ultrasonic Imaging, 1988, 10, 29-51.	1.4	35
58	Comparison of Physiological Motion Filters for <i>In Vivo</i> Cardiac ARFI. Ultrasonic Imaging, 2011, 33, 89-108.	1.4	35
59	Equivalence of time and aperture domain additive noise in ultrasound coherence. Journal of the Acoustical Society of America, 2015, 137, 132-138.	0.5	32
60	Acoustic radiation force impulse imaging of vulnerable plaques: a finite element method parametric analysis. Journal of Biomechanics, 2013, 46, 83-90.	0.9	31
61	Ultrasound Shear Wave Elasticity Imaging Quantifies Coronary Perfusion Pressure Effect on Cardiac Compliance. IEEE Transactions on Medical Imaging, 2015, 34, 465-473.	5.4	29
62	Adaptive imaging on a diagnostic ultrasound scanner at quasi real-time rates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1832-1843.	1.7	28
63	Acoustic Radiation Force-Driven Assessment of Myocardial Elasticity Using the Displacement Ratio Rate (DRR) Method. Ultrasound in Medicine and Biology, 2011, 37, 1087-1100.	0.7	27
64	Harmonic tracking of acoustic radiation force-induced displacements. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 2347-2358.	1.7	26
65	Comparison of Acoustic Radiation Force Impulse Imaging Derived Carotid Plaque Stiffness With Spatially Registered MRI Determined Composition. IEEE Transactions on Medical Imaging, 2015, 34, 2354-2365.	5.4	26
66	Quantifying Myocardial Contractility Changes Using Ultrasound-Based Shear Wave Elastography. Journal of the American Society of Echocardiography, 2017, 30, 90-96.	1.2	26
67	Quantifying Image Quality Improvement Using Elevated Acoustic Output in B-Mode Harmonic Imaging. Ultrasound in Medicine and Biology, 2017, 43, 2416-2425.	0.7	25
68	Noninvasive Assessment of Wall-Shear Rate and Vascular Elasticity Using Combined ARFI/SWEI/Spectral Doppler Imaging System. Ultrasonic Imaging, 2011, 33, 165-188.	1.4	23
69	Feasibility of Near Realâ€Time Lesion Assessment During Radiofrequency Catheter Ablation in Humans Using Acoustic Radiation Force Impulse Imaging. Journal of Cardiovascular Electrophysiology, 2014, 25, 1275-1283.	0.8	23
70	Novel Acoustic Radiation Force Impulse Imaging Methods for Visualization of Rapidly Moving Tissue. Ultrasonic Imaging, 2009, 31, 183-200.	1.4	22
71	3-D phantom and in vivo cardiac speckle tracking using a matrix array and raw echo data. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 839-854.	1.7	21
72	Multi-covariate Imaging of Sub-resolution Targets. IEEE Transactions on Medical Imaging, 2019, 38, 1690-1700.	5.4	21

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73	Incoherent Clutter Suppression Using Lag-One Coherence. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1544-1557.	1.7	21
74	Frame Rate Considerations for Real-Time Abdominal Acoustic Radiation Force Impulse Imaging. Ultrasonic Imaging, 2006, 28, 193-210.	1.4	20
75	Real-time high-framerate in vivo cardiac SLSC imaging with a GPU-based beamformer. , 2015, , .		19
76	Clinical Utility of Fetal Short-Lag Spatial Coherence Imaging. Ultrasound in Medicine and Biology, 2018, 44, 794-806.	0.7	18
77	Three-dimensional flow images by reconstruction from two-dimensional vector velocity maps. Journal of the American Society of Echocardiography, 1995, 8, 915-923.	1.2	17
78	A Method for Direct Localized Sound Speed Estimates Using Registered Virtual Detectors. Ultrasonic Imaging, 2012, 34, 159-180.	1.4	17
79	Acoustic Radiation Force Impulse Imaging on ex vivo Abdominal Aortic Aneurysm Model. Ultrasound in Medicine and Biology, 2010, 36, 821-832.	0.7	16
80	Short-lag spatial coherence imaging on matrix arrays, Part 1: Beamforming methods and simulation studies. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1101-1112.	1.7	16
81	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
82	In vivo demonstration of a real-time simultaneous B-mode/spatial coherence GPU-based beamformer. , 2013, , .		13
83	Short-lag spatial coherence imaging on matrix arrays, Part II: Phantom and in vivo experiments. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1113-1122.	1.7	13
84	Sources and characterization of clutter in cardiac B-mode images. , 2009, , .		12
85	A novel motion compensation algorithm for acoustic radiation force elastography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 1095-1111.	1.7	11
86	Contrast in Intracardiac Acoustic Radiation Force Impulse Images of Radiofrequency Ablation Lesions. Ultrasonic Imaging, 2014, 36, 133-148.	1.4	11
87	A Comparison of Acoustic Radiation Force-Derived Indices of Cardiac Function in the Langendorff Perfused Rabbit Heart. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1288-1295.	1.7	11
88	Intracardiac Echocardiography and Acoustic Radiation Force Impulse Imaging of a Dynamic <i>Ex Vivo</i> Ovine Heart Model. Ultrasonic Imaging, 2008, 30, 63-77.	1.4	10
89	A GPU-based real-time spatial coherence imaging system. Proceedings of SPIE, 2013, , .	0.8	10
90	Assessment of Diastolic Function Using Ultrasound Elastography. Ultrasound in Medicine and Biology, 2018, 44, 551-561.	0.7	10

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91	Blocked Elements in 1-D and 2-D Arrays—Part II: Compensation Methods as Applied to Large Coherent Apertures. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 922-936.	1.7	8
92	Clinical Evaluation of Combined Spatial Compounding and Adaptive Imaging in Breast Tissue. Ultrasonic Imaging, 2004, 26, 203-216.	1.4	7
93	The effects of image degradation on ultrasound-guided HIFU. , 2010, , .		7
94	A synthetic aperture study of aperture size in the presence of noise and in vivo clutter. Proceedings of SPIE, 2013, , .	0.8	7
95	Non-invasive Measurement of Dynamic Myocardial Stiffness Using Acoustic Radiation Force Impulse Imaging. Ultrasound in Medicine and Biology, 2019, 45, 1112-1130.	0.7	7
96	<title>Investigation of real-time remote palpation imaging</title> ., 2001, 4325, 113.		6
97	Improved visualization of endocardial borders with Short-Lag Spatial Coherence imaging of fundamental and harmonic ultrasound data. , 2012, , .		6
98	Three-Dimensional Single-Track-Location Shear Wave Elasticity Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1784-1794.	1.7	6
99	Magnitude, origins, and reduction of abdominal ultrasonic clutter. , 2008, , .		5
100	Acoustic Radiation Force Impulse Imaging of Mechanical Stiffness Propagation in Myocardial Tissue. Ultrasonic Imaging, 2012, 34, 142-158.	1.4	5
101	Speckle coherence of piecewise-stationary stochastic targets. Journal of the Acoustical Society of America, 2019, 146, 1721-1731.	0.5	5
102	Measuring Intraventricular Pressure Using Ultrasound Elastography. Journal of Ultrasound in Medicine, 2019, 38, 1167-1177.	0.8	5
103	Reverberation Clutter Suppression Using 2-D Spatial Coherence Analysis. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 84-97.	1.7	5
104	Development and evaluation of pulse sequences for freehand ARFI imaging. , 2011, , .		4
105	Clutter reduction in echocardiography with short-lag spatial coherence (SLSC) imaging. , 2012, , .		4
106	A harmonic tracking method for Acoustic Radiation Force Impulse (ARFI) imaging. , 2012, , .		4
107	Arterial stiffness measurements with acoustic radiation force impulse imaging. , 2003, , .		3
108	Performance evaluation of spatial compounding in the presence of aberration and adaptive imaging. ,		3

2003, 5035, 1.

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109	Acoustic-radiation-force-induced shear wave propagation in cardiac tissue. Proceedings of SPIE, 2009, , .	0.8	3
110	Comparative resolution and tracking performance in B-mode and short-lag spatial coherence (SLSC) images. , 2011, , .		3
111	Transcostal imaging with large coherent apertures: Ex vivo studies. , 2014, , .		3
112	Implementation of swept synthetic aperture imaging. Proceedings of SPIE, 2015, , .	0.8	3
113	Coherence beamforming and its applications to the difficult-to-image patient. , 2017, , .		3
114	Effect of Transmit Beamforming on Clutter Levels in Transthoracic Echocardiography. Ultrasonic Imaging, 2018, 40, 215-231.	1.4	3
115	Short-Lag Spatial Coherence Imaging in 1.5-D and 1.75-D Arrays: Elevation Performance and Array Design Considerations. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1047-1056.	1.7	3
116	MimickNet, Matching Clinical Post-Processing Under Realistic Black-Box Constraints. , 2019, , .		3
117	Optical Tracking of Superficial Dynamics from an Acoustic Radiation Force-Induced Excitation. Ultrasonic Imaging, 2009, 31, 17-30.	1.4	2
118	Short-lag spatial coherence imaging. , 2010, , .		2
119	Feasibility and safety of transthoracic cardiac acoustic radiation force impulse imaging methods. , 2012, , .		2
120	Identification and impact of blocked elements in 1-D and 2-D arrays. , 2013, , .		2
121	M-mode ARFI imaging demonstrates the effect of coronary perfusion on cardiac stiffness. , 2014, , .		2
122	Quality factors for phase-aberration correction in medical ultrasound. , 1990, 1231, 40.		1
123	Acoustic radiation force impulse imaging of cardiac tissue. , 2009, , .		1
124	Improved detectability of hypoechoic regions with short-lag spatial coherence imaging: experimental validation. Proceedings of SPIE, 2011, , .	0.8	1
125	Feasability of a ARFI/B-mode/Doppler system for real-time, freehand scanning of the cardiovascular system. Proceedings of SPIE, 2011, , .	0.8	1
126	Comparative evaluation of wavefront coherence imaging methods in the presence of clutter. , 2011, , .		1

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127	Efficient strategies for estimating spatial coherence on matrix probes. , 2012, , .		1
128	Sparse sampling methods for efficient spatial coherence estimation. , 2014, , .		1
129	Frequency-Dependent Spatial Coherence in Conventional and Chirp Transmissions. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1707-1720.	1.7	1
130	Spatial Coherence Adaptive Clutter Filtering in Color Flow Imaging—Part I: Simulation Studies. IEEE Open Journal of Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 2, 106-118.	0.9	1
131	Adaptive diagnostic ultrasonic imaging. Comptes Rendus Physique, 2001, 2, 1113-1130.	0.1	0
132	Radiation force imaging: challenges and opportunities. , 2007, , .		0
133	On the characterization of left ventricular function with acoustic radiation force impulse imaging. , 2009, , .		0
134	Parametric pressure-volume analysis and acoustic radiation force impulse imaging of left ventricular function. , 2010, , .		0
135	The development of a combined b-mode, ARFI, and spectral Doppler ultrasound imaging system for investigating cardiovascular stiffness and hemodynamics. , 2011, , .		0
136	In vivo application of SLSC imaging in human liver. , 2011, , .		0
137	Clinical realization of short-lag spatial coherence imaging on 2D arrays. , 2012, , .		0
138	A harmonic tracking method for improved visualization of arterial structures with acoustic radiation force impulse imaging. , 2013, , .		0
139	The Feasibility of Myocardial Infarct Visualization Using Atrial Kick Induced Strain (AKIS) Contrast. Ultrasound in Medicine and Biology, 2014, 40, 1104-1117.	0.7	0
140	Congruence of Frequency-Dependent Spatial Coherence Between Linear Frequency-Modulated Pulses and Conventional Pulses. , 2020, , .		0
141	Spatial Coherence Adaptive Clutter Filtering in Color Flow Imaging—Part II: Phantom and In Vivo Experiments. IEEE Open Journal of Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 2, 119-130.	0.9	0