Hiroyuki Hachiya

List of Publications by Year
in descending order

107	1,442	304743	377865
papers	citations	22 h-index	34 g-index

109	109	109	410
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	B-Mode Ultrasound With Algorithm Based on Statistical Analysis of Signals: Evaluation of Liver Fibrosis in Patients With Chronic Hepatitis C. American Journal of Roentgenology, 2009, 193, 1037-1043.	2.2	94
2	A pilot approach for quantitative assessment of liver fibrosis using ultrasound: preliminary results in 79 cases. Journal of Hepatology, 2006, 44, 68-75.	3.7	77
3	Proposal of a parametric imaging method for quantitative diagnosis of liver fibrosis. Journal of Medical Ultrasonics (2001), 2010, 37, 155-166.	1.3	62
4	Estimation of Characteristics of Echo Envelope Using RF Echo Signal from the Liver. Japanese Journal of Applied Physics, 2001, 40, 3900-3904.	1.5	60
5	Relationship Between Speed of Sound in and Density of Normal and Diseased Rat Livers. Japanese Journal of Applied Physics, 1994, 33, 3130-3133.	1.5	54
6	Determination of sound speed in biological tissues based on frequency analysis of pulse response. Journal of the Acoustical Society of America, 1992, 92, 1564-1568.	1.1	49
7	Estimation of the Scatterer Distribution of the Cirrhotic Liver using Ultrasonic Image. Japanese Journal of Applied Physics, 1998, 37, 3093-3096.	1.5	43
8	Examination of the Spatial Correlation of Statistics Information in the Ultrasonic Echo from Diseased Liver. Japanese Journal of Applied Physics, 2002, 41, 3585-3589.	1.5	43
9	Modeling of the Cirrhotic Liver Considering the Liver Lobule Structure. Japanese Journal of Applied Physics, 1999, 38, 3388-3392.	1.5	38
10	Quantitative Estimation Method for Liver Fibrosis Based on Combination of Rayleigh Distributions. Japanese Journal of Applied Physics, 2010, 49, 07HF06.	1.5	38
11	Stability of Quantitative Evaluation Method of Liver Fibrosis Using Amplitude Distribution Model of Fibrotic Liver. Japanese Journal of Applied Physics, 2011, 50, 07HF17.	1.5	35
12	Liver tissue characterization for each pixel in ultrasound image using multi-Rayleigh model. Japanese Journal of Applied Physics, 2014, 53, 07KF27.	1.5	34
13	Three-Dimensional Model of the Scatterer Distribution in Cirrhotic Liver. Japanese Journal of Applied Physics, 2003, 42, 3292-3298.	1.5	33
14	Measurement of Acoustic Property Distributions of Diseased Heart and Liver Tissues. Japanese Journal of Applied Physics, 2001, 40, 3907-3911.	1.5	31
15	Extraction of Quantitative Three-Dimensional Information from Ultrasonic Volumetric Images of Cirrhotic Liver. Japanese Journal of Applied Physics, 2000, 39, 3266-3269.	1.5	30
16	Evaluation of Ultrasonic Fiber Structure Extraction Technique Using Autopsy Specimens of Liver. Japanese Journal of Applied Physics, 2005, 44, 4615-4621.	1.5	30
17	Target Detectability Using Coded Acoustic Signal in Indoor Environments. Japanese Journal of Applied Physics, 2008, 47, 4325-4328.	1.5	30
18	Development of Ultrasonic Multiple Access Method Based on M-Sequence Code. Japanese Journal of Applied Physics, 2007, 46, 4490.	1.5	29

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19	A New Modeling for the Changes in the Distribution of Scatterers in Cirrhotic Liver. Japanese Journal of Applied Physics, 2000, 39, 3262-3265.	1.5	28
20	Ultrasonic position and velocity measurement for a moving object by M-sequence pulse compression using Doppler velocity estimation by spectrum-pattern analysis. Japanese Journal of Applied Physics, 2015, 54, 07HC14.	1.5	25
21	Estimation of scatterer size and acoustic concentration in sound field produced by linear phased array transducer. Japanese Journal of Applied Physics, 2015, 54, 07HF14.	1.5	25
22	Position detection of small objects in indoor environments using coded acoustic signal. Acoustical Science and Technology, 2008, 29, 15-20.	0.5	23
23	Experimental Evaluation of Quantitative Diagnosis Technique for Hepatic Fibrosis Using Ultrasonic Phantom. Japanese Journal of Applied Physics, 2012, 51, 07GF09.	1.5	22
24	Doppler Velocity Estimation Based on Spectral Characteristics of M-Sequence-Modulated Signals in Ultrasonic Measurement for Moving Objects. Japanese Journal of Applied Physics, 2013, 52, 07HC06.	1.5	21
25	Quantitative analysis of ultrasonic images of fibrotic liver using co-occurrence matrix based on multi-Rayleigh model. Japanese Journal of Applied Physics, 2015, 54, 07HF15.	1.5	21
26	Precise Measurement of Travel Time Difference for Acoustic Reciprocal Transmission. Japanese Journal of Applied Physics, 2003, 42, 3206-3211.	1.5	20
27	THE ULTRASONIC THREE-DIMENSIONAL FILTER FOR THE QUANTITATIVE DIAGNOSIS OF LIVER FIBROSIS. Journal of Mechanics in Medicine and Biology, 2009, 09, 579-588.	0.7	18
28	Ultrasound-based lipid content quantification using double Nakagami distribution model in rat liver steatosis. Japanese Journal of Applied Physics, 2020, 59, SKKE23.	1.5	17
29	Stability of Quantitative Evaluation Method of Liver Fibrosis Using Amplitude Distribution Model of Fibrotic Liver. Japanese Journal of Applied Physics, 2011, 50, 07HF17.	1.5	17
30	Estimation of the Travel Time Using the New Measurement Technique for Long-range Transmission. Japanese Journal of Applied Physics, 2004, 43, 3169-3175.	1.5	16
31	Quantitative evaluation method for liver fibrosis based on multi-Rayleigh model with estimation of number of tissue components in ultrasound B-mode image. Japanese Journal of Applied Physics, 2018, 57, 07LF17.	1.5	16
32	Quantitative Evaluation of Liver Fibrosis Using Multi-Rayleigh Model with Hypoechoic Component. Japanese Journal of Applied Physics, 2013, 52, 07HF19.	1.5	15
33	Probability image of tissue characteristics for liver fibrosis using multi-Rayleigh model with removal of nonspeckle signals. Japanese Journal of Applied Physics, 2015, 54, 07HF20.	1.5	15
34	Estimation of the Stability of Acoustic Reciprocal Transmission in Long-Range Propagation at the Central Equatorial Pacific. Japanese Journal of Applied Physics, 2002, 41, 3525-3529.	1.5	14
35	High-Accuracy Measurement of Small Movement of an Object behind Cloth Using Airborne Ultrasound. Japanese Journal of Applied Physics, 2013, 52, 07HC15.	1.5	14
36	Non-contact measurement of propagation speed in tissue-mimicking phantom using pass-through airborne ultrasound. Japanese Journal of Applied Physics, 2014, 53, 07KC17.	1.5	14

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37	Attempt at standardization of bone quantitative ultrasound in Japan. Journal of Medical Ultrasonics (2001), 2018, 45, 3-13.	1.3	14
38	Estimation of Correlation of Acoustic Reciprocal Transmissions Using Central Equatorial Pacific Tomography Data. Japanese Journal of Applied Physics, 2005, 44, 4729-4733.	1.5	13
39	Observation of multipath propagation at Sagami Bay using M-sequence acoustical signal.. The Journal of the Marine Acoustics Society of Japan, 1990, 17, 106-113.	0.2	13
40	Fluctuation of Long-Distance Sound Propagation in the Central Pacific. Japanese Journal of Applied Physics, 2006, 45, 4842-4846.	1.5	12
41	Analysis of Tidal Effect on Reciprocal Sound Propagation in Central Pacific Ocean. Japanese Journal of Applied Physics, 2008, 47, 4349-4353.	1.5	12
42	Automatic Interference Elimination Algorithm for Ultrasonic Multiple Access Method. Japanese Journal of Applied Physics, 2008, 47, 4319-4324.	1.5	12
43	A review of physical and engineering factors potentially affecting shear wave elastography. Journal of Medical Ultrasonics (2001), 2021, 48, 403-414.	1.3	12
44	Estimation of the Stability of Acoustic Multipath in Long-Range Propagation at the Western Equatorial Pacific. Japanese Journal of Applied Physics, 1999, 38, 3366-3369.	1.5	11
45	Effect of beam width on quantitative estimation of liver fibrosis using ultrasonic images. Japanese Journal of Applied Physics, 2014, 53, 07KF23.	1.5	10
46	Truncation-noise characteristics of finite-length M-sequence. Acoustical Science and Technology, 2015, 36, 254-261.	0.5	10
47	Stability evaluation of parameter estimation of multi-Rayleigh model for ultrasound B-mode image of liver fibrosis. Japanese Journal of Applied Physics, 2016, 55, 07KF09.	1.5	10
48	Measurement of road surfaces by reflection characteristics of airborne ultrasound. Acoustical Science and Technology, 2016, 37, 322-325.	0.5	10
49	Proposal of compound amplitude envelope statistical analysis model considering low scatterer concentration. Japanese Journal of Applied Physics, 2018, 57, 07LD19.	1.5	10
50	Quantitative evaluation for variability characteristics of reflected sound waves from sea surface. Japanese Journal of Applied Physics, 2019, 58, SGGB12.	1.5	10
51	Estimation of the Stability of Acoustic Multipath in Long-Range Propagation. Japanese Journal of Applied Physics, 2001, 40, 3811-3814.	1.5	9
52	Analysis of fluctuation for pixel-pair distance in co-occurrence matrix applied to ultrasonic images for diagnosis of liver fibrosis. Journal of Medical Ultrasonics (2001), 2017, 44, 23-35.	1.3	9
53	Acoustic Imaging for Archaeological Investigations Using Wavelet Transform. Japanese Journal of Applied Physics, 1996, 35, 3101-3104.	1.5	8
54	Examination of optimal moments as input parameters for evaluation of liver fibrosis based on multi-Rayleigh model. Japanese Journal of Applied Physics, 2018, 57, 07LF27.	1.5	8

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55	Echo envelope analysis method for quantifying heterogeneity of scatterer distribution for tissue characterization of liver fibrosis. , 2010, , .		7
56	Measurement of ultrasonic transmission attenuation characteristics of canvas fabric. Acoustical Science and Technology, 2015, 36, 171-174.	0.5	7
57	Evaluation of correlation property of linear-frequency-modulated signals coded by maximum-length sequences. Japanese Journal of Applied Physics, 2016, 55, 07KC09.	1.5	7
58	Accuracy evaluation of quantitative diagnosis method of liver fibrosis based on multi-Rayleigh model using optimal combination of input moments. Japanese Journal of Applied Physics, 2020, 59, SKKE27.	1.5	7
59	A method for the non-contact measurement of two-dimensional displacement of chest surface by breathing and heartbeat using an airborne ultrasound. Japanese Journal of Applied Physics, 2019, 58, SGGB10.	1.5	6
60	Differential travel time series of the reciprocal transmission in 1999 ocean acoustic tomography data. Acoustical Science and Technology, 2005, 26, 76-78.	0.5	6
61	Experimental Evaluation of Quantitative Diagnosis Technique for Hepatic Fibrosis Using Ultrasonic Phantom. Japanese Journal of Applied Physics, 2012, 51, 07GF09.	1.5	6
62	Selection on the combination of M-sequence codes in alternate transmission for extension of measurable distance. Japanese Journal of Applied Physics, 2019, 58, 076503.	1.5	5
63	Severity of liver fibrosis using shear wave elastography is influenced by hepatic necroinflammation in chronic hepatitis patients, but not in cirrhotic patients. Hepatology Research, 2021, 51, 436-444.	3.4	5
64	Shear wave speed measurement bias in a viscoelastic phantom across six ultrasound elastography systems: a comparative study with transient elastography and magnetic resonance elastography. Journal of Medical Ultrasonics (2001), 2022, 49, 143-152.	1.3	5
65	Study about the propagation of airborne ultrasonic wave through a heel for bone-density estimation. , 2013, , .		4
66	Evaluation of ultrasonic target detection by alternate transmission of different codes in M-sequence pulse compression. , 2020, , .		4
67	Evaluation of fibrotic probability image by multi-Rayleigh model for ultrasound image of liver using automatic region of interest selection. , 2015, , .		3
68	Improved alternate transmission of different codes in M-sequence pulse compression using phase-shifted complex M-sequences. Japanese Journal of Applied Physics, 2020, 59, 086504.	1.5	3
69	A Method for Measurement of Sound Speed in Biological Tissues without Deformation. Japanese Journal of Applied Physics, 1991, 30, 235.	1.5	3
70	Non-contact measurement of propagation characteristics in human wrist using pass-through airborne ultrasound. , 2014, , .		2
71	An Estimation Method of Vertical Sound Speed Profile in Mid-Deep Water Using Multipath Propagation. Japanese Journal of Applied Physics, 1987, 26, 73.	1.5	2
72	An Omnidirectional Transducer Design Attached with High Sound-Speed Material for Use in Deep Seas. Japanese Journal of Applied Physics, 1989, 28, 57.	1.5	2

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73	A Low Frequency Underwater Sound Source with an Acoustic Reel Shape Resonator. Japanese Journal of Applied Physics, 1990, 29, 83.	1.5	1
74	Does contrast ultrasonography damage liver cell?. International Congress Series, 2004, 1274, 147-150.	0.2	1
75	Measurement of Thrombus Flux Using Transesophageal Echocardiography. Japanese Journal of Applied Physics, 2006, 45, 4749-4753.	1.5	1
76	P2D-2 Quantitative Estimation of Ultrasonic Multiple Access Method Based on M-Sequence Code. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	1
77	Transmission electron microscopy study on the effects of the ultrasound contrast agent Levovist on hepatic cells. Journal of Medical Ultrasonics (2001), 2012, 39, 107-113.	1.3	1
78	Quantification of the scatterer distributions for liver fibrosis using modified Q-Q probability plot. , 2014, , .		1
79	Improvement of non-contact measurement of propagation characteristics in tissues using pass-through airborne ultrasound. , 2016, , .		1
80	Comparison of modeling accuracy of amplitude distribution models for ultrasonic tissue characterization of liver fibrosis. , 2016, , .		1
81	Evaluation of position and velocity measurement for a moving object by pulse compression using ultrasound coded by preferred-pair M-sequences. , 2017, , .		1
82	Quantitative Evaluation Method for Liver Fibrosis in Clinical Ultrasound B-Mode Image Based on Optimized Multi-Rayleigh Model. , 2018, , .		1
83	Investigation of the Variability Characteristics of Sound Waves Reflected on the Sea Surface Considering Surface Wavelength. The Journal of the Marine Acoustics Society of Japan, 2021, 48, 56-67.	0.2	1
84	A method of visualizing the three-dimensional fiber tissue structure in diffuse liver diseases. Choonpa Igaku, 2009, 36, 59-61.	0.0	1
85	A Measuring Technique for Sand Ripples Using Ultrasonic Transducer Array. Japanese Journal of Applied Physics, 1988, 27, 94.	1.5	1
86	Ultrasonic position and velocity measurements for a moving object by the simultaneous transmission of preferred-pair M-sequences. Acoustical Science and Technology, 2020, 41, 857-864.	0.5	1
87	Engineering ethics. Journal of Medical Ultrasonics (2001), 2003, 30, 1-1.	1.3	0
88	Quantitative Estimation of the Ultrasound Transmission Characteristics for River Flow Measurement during a Flood. Japanese Journal of Applied Physics, 2003, 42, 3212-3215.	1.5	0
89	Quantitative Estimation of Diffused Liver Diseases Using Ultrasound Echo Signal. Key Engineering Materials, 2004, 270-273, 2085-2092.	0.4	0
90	Speckle removal from heterogeneous-tissue signals using independent component analysis. , 2009, , .		0

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91	The Japan Society of Ultrasonics in Medicine amidst the information technology revolution. Journal of Medical Ultrasonics (2001), 2011, 38, 177-178.	1.3	0
92	Present Status and Future Prospects of Ultrasonic Quantitative Diagnosis. Ieice Ess Fundamentals Review, 2012, 5, 244-252.	0.1	0
93	Ultrasonic Electronics. Japanese Journal of Applied Physics, 2014, 53, 07K001.	1.5	0
94	Measurement of human body surface displacement by breathing using airborne ultrasound. , 2015, , .		0
95	Effect of Non-speckle Echo Signals on Tissue Characteristics for Liver Fibrosis using Probability Density Function of Ultrasonic B-mode image. Physics Procedia, 2015, 70, 1173-1176.	1.2	0
96	Simultaneous Measurement of Breathing and Heartbeat using Airborne Ultrasound in a Standing Position. Physics Procedia, 2015, 70, 364-367.	1.2	0
97	Evaluation of position and velocity measurement for a moving object by pulse compression using ultrasound coded by preferred-pair M-sequences. , 2017, , .		0
98	Study About Non-Contact Measurement of the Speed of Sound in a Parallel-Sides Tissue Using Pass-Through Airborne Ultrasound. , 2018, , .		0
99	Present status and future of ultrasonic quantitative diagnostic techniques. Journal of Medical Ultrasonics (2001), 2018, 45, 389-389.	1.3	0
100	Diagnosis of liver fibrosis based on quantification of factors associated with shear wave speed. Choonpa Igaku, 2021, 48, 193-199.	0.0	0
101	Analysis of fluctuation for pixel-pair distance in co-occurrence matrix applied to ultrasonic images for diagnosis of liver fibrosis. Choonpa Igaku, 2021, 48, 3-15.	0.0	0
102	Quantitative Measurement of Physical Properties of Myocardial Tissue Using Ultrasonic Microanalysis. The Showa University Journal of Medical Sciences, 2006, 18, 161-169.	0.1	0
103	Acoustic Measurement of Global Ocean Structure. Journal of the Japan Society for Precision Engineering, 2008, 74, 683-686.	0.1	0
104	A Method of Indoor Target Detection Using M-Sequence Acoustic Signal. Acoustical Imaging, 2008, , 323-329.	0.2	0
105	Detection of Right Atrium Movement in Thrombi Flow Measurement. Acoustical Imaging, 2008, , 439-444.	0.2	0
106	Scattering echo simulation that takes into account tissue acoustic structure. Choonpa Igaku, 2018, 45, 35-41.	0.0	0
107	Effective depth expansion for reliable fatty liver assessment using a double Nakagami distribution model. , 2020, , .		0