

Shinnosuke Hirata

List of Publications by Year in descending order

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72
papers

524
citations

687363

13
h-index

794594

19
g-index

73
all docs

73
docs citations

73
times ranked

181
citing authors

#	ARTICLE	IF	CITATIONS
1	Accuracy and resolution of ultrasonic distance measurement with high-time-resolution cross-correlation function obtained by single-bit signal processing. <i>Acoustical Science and Technology</i> , 2009, 30, 429-438.	0.5	38
2	Liver tissue characterization for each pixel in ultrasound image using multi-Rayleigh model. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 07KF27.	1.5	34
3	Cross-Correlation by Single-bit Signal Processing for Ultrasonic Distance Measurement. <i>IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences</i> , 2008, E91-A, 1031-1037.	0.3	33
4	Ultrasonic distance and velocity measurement using a pair of LPM signals for cross-correlation method: Improvement of Doppler-shift compensation and examination of Doppler velocity estimation. <i>Ultrasonics</i> , 2012, 52, 873-879.	3.9	25
5	Ultrasonic position and velocity measurement for a moving object by M-sequence pulse compression using Doppler velocity estimation by spectrum-pattern analysis. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 07HC14.	1.5	25
6	Doppler Velocity Estimation Based on Spectral Characteristics of M-Sequence-Modulated Signals in Ultrasonic Measurement for Moving Objects. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 07HC06.	1.5	21
7	Quantitative analysis of ultrasonic images of fibrotic liver using co-occurrence matrix based on multi-Rayleigh model. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 07HF15.	1.5	21
8	Quantitative evaluation method for liver fibrosis based on multi-Rayleigh model with estimation of number of tissue components in ultrasound B-mode image. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 07LF17.	1.5	16
9	Quantitative Evaluation of Liver Fibrosis Using Multi-Rayleigh Model with Hypoechoic Component. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 07HF19.	1.5	15
10	Probability image of tissue characteristics for liver fibrosis using multi-Rayleigh model with removal of nonspeckle signals. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 07HF20.	1.5	15
11	Verification of the influence of liver microstructure on the evaluation of shear wave velocity. <i>Japanese Journal of Applied Physics</i> , 2021, 60, SDDE11.	1.5	15
12	High-Accuracy Measurement of Small Movement of an Object behind Cloth Using Airborne Ultrasound. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 07HC15.	1.5	14
13	Non-contact measurement of propagation speed in tissue-mimicking phantom using pass-through airborne ultrasound. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 07KC17.	1.5	14
14	Ultrasonic distance and velocity measurement by low-calculation-cost Doppler-shift compensation and high-resolution Doppler velocity estimation with wide measurement range. <i>Acoustical Science and Technology</i> , 2009, 30, 220-223.	0.5	13
15	Real-time ultrasonic distance measurements for autonomous mobile robots using cross correlation by single-bit signal processing. , 2009, , .		11
16	Improvement in airborne position measurements based on an ultrasonic linear-period-modulated wave by 1-bit signal processing. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 07HC06.	1.5	11
17	Effect of beam width on quantitative estimation of liver fibrosis using ultrasonic images. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 07KF23.	1.5	10
18	Truncation-noise characteristics of finite-length M-sequence. <i>Acoustical Science and Technology</i> , 2015, 36, 254-261.	0.5	10

#	ARTICLE	IF	CITATIONS
19	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
20	Measurement of road surfaces by reflection characteristics of airborne ultrasound. Acoustical Science and Technology, 2016, 37, 322-325.	0.5	10
21	Quantitative evaluation for variability characteristics of reflected sound waves from sea surface. Japanese Journal of Applied Physics, 2019, 58, SGGB12.	1.5	10
22	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
23	A linearization-based method of simultaneous position and velocity measurement using ultrasonic waves. Sensors and Actuators A: Physical, 2015, 233, 480-499.	4.1	8
24	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
25	Fatty liver evaluation with double-Nakagami model under low-resolution conditions. Japanese Journal of Applied Physics, 2021, 60, SDDE06.	1.5	8
26	Design of a Self-Oscillating PWM Signal Generator With a Double Integration Loop. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 2064-2073.	5.4	7
27	Measurement of ultrasonic transmission attenuation characteristics of canvas fabric. Acoustical Science and Technology, 2015, 36, 171-174.	0.5	7
28	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
29	Improvement of the Needle-Type Dispenser for Precise Micro-Droplet Dispensation " Gap Measurement Between the Needle Tip and the Target Surface Based on Needle Vibration ". Journal of Robotics and Mechatronics, 2012, 24, 284-290.	1.0	7
30	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
31	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, SCGB10.	1.5	6
32	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
33	Three-dimensional position and velocity measurements using a pair of linear-period-modulated ultrasonic waves. Acoustical Science and Technology, 2013, 34, 233-236.	0.5	5
34	Airborne Ultrasonic Position and Velocity Measurement Using Two Cycles of Linear-Period-Modulated Signal. Lecture Notes in Computer Science, 2011, , 46-53.	1.3	5
35	Study about the propagation of airborne ultrasonic wave through a heel for bone-density estimation. , 2013, , .		4
36	Three-dimensional-positioning based on echolocation using a simple iterative method. AEU - International Journal of Electronics and Communications, 2015, 69, 680-684.	2.9	4

#	ARTICLE	IF	CITATIONS
37	High-frequency ultrasonic airborne Doppler method for noncontact elasticity measurements of living tissues. Japanese Journal of Applied Physics, 2020, 59, SKKB09.	1.5	4
38	Evaluation of ultrasonic target detection by alternate transmission of different codes in M-sequence pulse compression. , 2020, , .		4
39	Backscatter properties of two-layer phantoms using a high-frequency ultrasound annular array. Japanese Journal of Applied Physics, 2022, 61, SG1049.	1.5	4
40	Development of the miniature hemispherical tilt stage driven by stick-slip motion using piezoelectric actuators. , 2012, , .		3
41	A Frequency Synchronization Method for a Self-Oscillating PWM Signal Generator. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 244-248.	3.0	3
42	Evaluation of fibrotic probability image by multi-Rayleigh model for ultrasound image of liver using automatic region of interest selection. , 2015, , .		3
43	Selection on Golay complementary sequences in binary pulse compression for microbubble detection. Japanese Journal of Applied Physics, 2021, 60, 066501.	1.5	3
44	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
45	Evaluation of contrast enhancement ultrasound images of Sonazoid microbubbles in tissue-mimicking phantom obtained by optimal Golay pulse compression. Japanese Journal of Applied Physics, 2022, 61, SG1015.	1.5	3
46	Effective roughness on the sea surface for determining variability characteristics of reflected sound waves. Japanese Journal of Applied Physics, 2022, 61, SG1078.	1.5	3
47	Development of Piezo Driven Inchworm Micro X-Y Stage and Hemispherical Tilting Positioner with Microscope Head. Key Engineering Materials, 0, 447-448, 513-517.	0.4	2
48	Basic study of high DOF micromanipulation by surface tension using the multi-needle-type capillary. , 2011, , .		2
49	Three-dimensional-positioning measurements based on echolocation using linear-period-modulated ultrasonic signal. , 2014, , .		2
50	Non-contact measurement of propagation characteristics in human wrist using pass-through airborne ultrasound. , 2014, , .		2
51	Impact Piezo-Driven Micro Dispenser and Precise MiniatureXYStage. Journal of Robotics and Mechatronics, 2015, 27, 259-266.	1.0	2
52	Development of Microscopic Hardness and Stiffness Investigation System with MicroRobot. Journal of Robotics and Mechatronics, 2012, 24, 123-132.	1.0	2
53	Size-dependent translational velocity of phospholipid-coated bubbles driven by acoustic radiation force. Japanese Journal of Applied Physics, 2022, 61, SG1018.	1.5	2
54	Micro gap measurement by vibration mode for needle-type dispenser. , 2011, , .		1

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55	Development of Wire-Connected Mechanism for Precise Positioning. Key Engineering Materials, 0, 523-524, 645-649.	0.4	1
56	Improvement of non-contact measurement of propagation characteristics in tissues using pass-through airborne ultrasound. , 2016, , .		1
57	Comparison of modeling accuracy of amplitude distribution models for ultrasonic tissue characterization of liver fibrosis. , 2016, , .		1
58	Evaluation of position and velocity measurement for a moving object by pulse compression using ultrasound coded by preferred-pair M-sequences. , 2017, , .		1
59	Quantitative Evaluation Method for Liver Fibrosis in Clinical Ultrasound B-Mode Image Based on Optimized Multi-Rayleigh Model. , 2018, , .		1
60	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
61	Evaluation of Microgap Control of Needle-Type Dispenser for Precise Microdroplet Dispensation. Journal of Robotics and Mechatronics, 2013, 25, 848-854.	1.0	1
62	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
63	Sensor Signal Processing for Ultrasonic Sensors Using Delta-Modulated Single-Bit Digital Signal. Acoustical Imaging, 2008, , 317-322.	0.2	0
64	Measurement of human body surface displacement by breathing using airborne ultrasound. , 2015, , .		0
65	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
66	Simultaneous Measurement of Breathing and Heartbeat using Airborne Ultrasound in a Standing Position. Physics Procedia, 2015, 70, 364-367.	1.2	0
67	Evaluation of position and velocity measurement for a moving object by pulse compression using ultrasound coded by preferred-pair M-sequences. , 2017, , .		0
68	Study About Non-Contact Measurement of the Speed of Sound in a Parallel-Sides Tissue Using Pass-Through Airborne Ultrasound. , 2018, , .		0
69	Diagnosis of liver fibrosis based on quantification of factors associated with shear wave speed. Choonpa Igaku, 2021, 48, 193-199.	0.0	0
70	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
71	Development of Microscopic Hardness and Stiffness Investigation System with Microrobot 2nd Report, Vision Based Precise Navigation. Journal of Robotics and Mechatronics, 2013, 25, 97-105.	1.0	0
72	Two-Dimensional Airborne Position and Velocity Measurements Using a Pair of Linear-Period-Modulated Ultrasonic Waves. Acta Acustica United With Acustica, 2016, 102, 688-695.	0.8	0