Marek Belohlavek

List of Publications by Year
in descending order

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56	4,049	361413	161849
papers	citations	20 h-index	54 g-index

57	57	57	4574
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Automatic segmentation of the left ventricle in echocardiographic images using convolutional neural networks. Quantitative Imaging in Medicine and Surgery, 2021, 11, 1763-1781.	2.0	20
2	Dopplerâ€Guided Acoustically Active Injection Catheter. Journal of Ultrasound in Medicine, 2021, , .	1.7	0
3	A hybrid <scp>echocardiographyâ€CFD</scp> framework for ventricular flow simulations. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e03352.	2.1	9
4	Real-Time Visualization of an Acoustically Active Injection Catheter With Ultrasound Imaging: Algorithm and In Vivo Validation in a Swine Model. IEEE Transactions on Biomedical Engineering, 2019, 66, 3212-3219.	4.2	2
5	A Realâ€time Color Doppler Marker for Echocardiographic Guidance of an Acoustically Active Extracorporeal Membrane Oxygenation Cannula. Journal of Ultrasound in Medicine, 2019, 38, 1875-1885.	1.7	4
6	An Interposed Pad in Openâ€Chest Echocardiographic Porcine Scans for Mimicking Ultrasound Signal Attenuation in a Human Chest. Journal of Ultrasound in Medicine, 2018, 37, 501-509.	1.7	5
7	Unambiguous Identification and Visualization of an Acoustically Active Catheter by Ultrasound Imaging in Real Time: Theory, Algorithm, and Phantom Experiments. IEEE Transactions on Biomedical Engineering, 2018, 65, 1468-1475.	4.2	12
8	Left Ventricular Septal Hypertrophy in Elderly Patients With Aortic Stenosis. Journal of Ultrasound in Medicine, 2018, 37, 217-224.	1.7	7
9	Acoustic navigation of intramyocardial injection needle catheter using color doppler echocardiography. , 2018, , .		1
10	Acoustically Active Catheter for Intracardiac Navigation by Color Doppler Ultrasonography. Ultrasound in Medicine and Biology, 2017, 43, 1888-1896.	1.5	6
11	Automated Three-Dimensional Reconstruction of the Left Ventricle From Multiple-Axis Echocardiography. Journal of Biomechanical Engineering, 2016, 138, .	1.3	2
12	Acoustically Active Injection Catheter Guided by Ultrasound: Navigation Tests in Acutely Ischemic Porcine Hearts. Ultrasound in Medicine and Biology, 2014, 40, 1650-1659.	1.5	7
13	Left Ventricular Flow Analysis: Recent Advances in Numerical Methods and Applications in Cardiac Ultrasound. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-11.	1.3	23
14	Weighted Least-Squares Finite Element Method for Cardiac Blood Flow Simulation with Echocardiographic Data. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-9.	1.3	8
15	Detection of Progressive Myocardial Tissue Injury by UltrasonicÂIntegrated Backscatter Immediately After CoronaryÂReperfusion. Ultrasound in Medicine and Biology, 2012, 38, 1662-1669.	1.5	1
16	Post-Systolic Shortening. JACC: Cardiovascular Imaging, 2012, 5, 12-14.	5.3	2
17	Accurate Guidance of a Catheter by Ultrasound Imaging and Identification of a Catheter Tip by Pulsedâ€Wave Doppler. PACE - Pacing and Clinical Electrophysiology, 2012, 35, 44-50.	1.2	10
18	Current and Evolving Echocardiographic Techniques for the Quantitative Evaluation of Cardiac Mechanics: ASE/EAE Consensus Statement on Methodology and Indications. Journal of the American Society of Echocardiography, 2011, 24, 277-313.	2.8	1,026

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19	Current and Evolving Echocardiographic Techniques for the Quantitative Evaluation of Cardiac Mechanics: ASE/EAE Consensus Statement on Methodology and Indications Endorsed by the Japanese Society of Echocardiography. European Journal of Echocardiography, 2011, 12, 167-205.	2.3	796
20	Flow Velocity Vector Fields by Ultrasound Particle Imaging Velocimetry. Journal of Ultrasound in Medicine, 2011, 30, 187-195.	1.7	37
21	Impact of pericardial adhesions on diastolic function as assessed by vortex formation time, a parameter of transmitral flow efficiency. Cardiovascular Ultrasound, 2010, 8, 42.	1.6	19
22	Increase in the Late Diastolic Filling Force Is Associated With Impaired Transmitral Flow Efficiency in Acute Moderate Elevation of Left Ventricular Afterload. Journal of Ultrasound in Medicine, 2009, 28, 175-182.	1.7	10
23	Impact of Acute Moderate Elevation in Left Ventricular Afterload on Diastolic Transmitral Flow Efficiency: Analysis by Vortex Formation Time. Journal of the American Society of Echocardiography, 2009, 22, 427-431.	2.8	36
24	Patients With Alzheimer Disease Have Altered Transmitral Flow. Journal of Ultrasound in Medicine, 2009, 28, 1493-1500.	1.7	34
25	Classification of acute myocardial ischemia by artificial neural network using echocardiographic strain waveforms. Computers in Biology and Medicine, 2008, 38, 416-424.	7.0	6
26	Comparison of Usefulness of Tissue Doppler Imaging Versus Brain Natriuretic Peptide for Differentiation of Constrictive Pericardial Disease from Restrictive Cardiomyopathy. American Journal of Cardiology, 2008, 102, 357-362.	1.6	34
27	Disparate Patterns of Left Ventricular Mechanics Differentiate Constrictive Pericarditis From Restrictive Cardiomyopathy. JACC: Cardiovascular Imaging, 2008, 1, 29-38.	5.3	128
28	Doppler Strain Imaging Closely Reflects Myocardial Energetic Status in Acute Progressive Ischemia and Indicates Energetic Recovery After Reperfusion. Journal of the American Society of Echocardiography, 2008, 21, 961-968.	2.8	11
29	Electromechanical Activation Sequence in Normal Heart. Heart Failure Clinics, 2008, 4, 303-314.	2.1	21
30	Arterioventricular Coupling and Ventricular Efficiency After Antihypertensive Therapy. Hypertension, 2008, 51, 275-281.	2.7	26
31	Does Implantation of Sonomicrometry Crystals Alter Regional Cardiac Muscle Function?. Journal of the American Society of Echocardiography, 2007, 20, 1407-1412.	2.8	5
32	Left Ventricular Form and Function Revisited: Applied Translational Science to Cardiovascular Ultrasound Imaging. Journal of the American Society of Echocardiography, 2007, 20, 539-551.	2.8	261
33	Left Ventricular Isovolumic Flow Sequence During Sinus and Paced Rhythms. Journal of the American College of Cardiology, 2007, 49, 899-908.	2.8	158
34	Parametric Detection and Measurement of Perfusion Defects in Attenuated Contrast Echocardiographic Images. Journal of Ultrasound in Medicine, 2007, 26, 739-748.	1.7	9
35	Parametric harmonic-to-fundamental ratio contrast echocardiography: A novel approach to identification and accurate measurement of left ventricular area under variable levels of ultrasound signal attenuation. Ultrasonics, 2007, 46, 109-118.	3.9	3
36	Analysis of Postsystolic Myocardial Thickening Work in Selective Myocardial Layers During Progressive Myocardial Ischemia. Journal of the American Society of Echocardiography, 2006, 19, 1102-1111.	2.8	14

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37	Apex-to-Base Dispersion in Regional Timing of Left Ventricular Shortening and Lengthening. Journal of the American College of Cardiology, 2006, 47, 163-172.	2.8	193
38	Left Ventricular Structure and Function. Journal of the American College of Cardiology, 2006, 48, 1988-2001.	2.8	416
39	Biphasic tissue Doppler waveforms during isovolumic phases are associated with asynchronous deformation of subendocardial and subepicardial layers. Journal of Applied Physiology, 2005, 99, 1104-1111.	2.5	96
40	Delayed Onset of Subendocardial Diastolic Thinning at Rest Identifies Hypoperfused Myocardium. Circulation, 2005, 111, 2943-2950.	1.6	38
41	Spectral Normalization for Ultrasonic Contrast Microbubble Detection. Ultrasonic Imaging, 2004, 26, 150-162.	2.6	4
42	Strain rate and strain: A step-by-step approach to image and data acquisition. Journal of the American Society of Echocardiography, 2004, 17, 1011-1020.	2.8	101
43	Ultrasound Stimulated Vibro-acoustography. Lecture Notes in Computer Science, 2004, , 1-10.	1.3	1
44	Automated quantitative analysis of the shift of frequency spectra generated by attenuated signals from contrast microbubbles. Ultrasonics, 2003, 41, 75-81.	3.9	3
45	Clinical applications of strain rate imaging. Journal of the American Society of Echocardiography, 2003, 16, 1334-1342.	2.8	121
46	Strain and strain rate echocardiography. Current Opinion in Cardiology, 2002, 17, 443-454.	1.8	112
47	Time to onset of regional relaxation: feasibility, variability and utility of a novel index of regional myocardial function by strain rate imaging. Journal of the American College of Cardiology, 2002, 39, 1531-1537.	2.8	100
48	Rapid quantitative assessment of myocardial perfusion: Spectral analysis of myocardial contrast echocardiographic images. Journal of the American Society of Echocardiography, 2002, 15, 63-68.	2.8	7
49	Radio frequency dual-spectra analysis of regional myocardial perfusion: Comparison with harmonic densitometric method. Journal of the American Society of Echocardiography, 2002, 15, 1277-1284.	2.8	4
50	Epicardial ultrasound guidance of coronary catheter placement in an experimental animal model. Journal of the American Society of Echocardiography, 2002, 15, 1387-1390.	2.8	5
51	Dual-Spectra Ultrasonography. Journal of Ultrasound in Medicine, 2002, 21, 249-259.	1.7	9
52	Radiofrequency spectral analysis of attenuated ultrasound signals in experiments with echo contrast microbubbles. Journal of the American Society of Echocardiography, 2001, 14, 789-797.	2.8	10
53	Real-time strain rate echocardiographic imaging: Temporal and spatial analysis of postsystolic compression in acutely ischemic myocardium. Journal of the American Society of Echocardiography, 2001, 14, 360-369.	2.8	45
54	Myocardial Contrast Echocardiography: Texture Analysis for Identification of Nonperfused versus Perfused Myocardium. Echocardiography, 2001, 18, 665-672.	0.9	5

#	Article	IF	Citations
55	Vibro-Acoustography: Quantification of Flow with Highly-Localized Low-Frequency Acoustic Force. Ultrasonic Imaging, 2001, 23, 249-256.	2.6	9
56	Tumor-Like Mitral Annular Calcification with Central Liquefaction. Echocardiography, 1993, 10, 459-463.	0.9	17