

Boris Chayer

List of Publications by Year in descending order

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papers

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567144

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874
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of Applying a Skin Compression With the Ultrasound Probe on Carotid Artery Strain Elastography. <i>Journal of Ultrasound in Medicine</i> , 2022, 41, 685-697.	0.8	2
2	Shear Wave Elastography and Quantitative Ultrasound as Biomarkers to Characterize Deep Vein Thrombosis In Vivo. <i>Journal of Ultrasound in Medicine</i> , 2022, 41, 1807-1816.	0.8	8
3	Deformability of ascending thoracic aorta aneurysms assessed using ultrafast ultrasound and a principal strain estimator: In vitro evaluation and in vivo feasibility. <i>Medical Physics</i> , 2022, , .	1.6	1
4	Quantitative ultrasound, elastography, and machine learning for assessment of steatosis, inflammation, and fibrosis in chronic liver disease. <i>PLoS ONE</i> , 2022, 17, e0262291.	1.1	19
5	Pilot clinical study of quantitative ultrasound spectroscopy measurements of erythrocyte aggregation within superficial veins. <i>Clinical Hemorheology and Microcirculation</i> , 2020, 74, 109-126.	0.9	11
6	Added Value of Quantitative Ultrasound and Machine Learning in BI-RADS 4â€“5 Assessment of Solid Breast Lesions. <i>Ultrasound in Medicine and Biology</i> , 2020, 46, 436-444.	0.7	17
7	Parameterized Strain Estimation for Vascular Ultrasound Elastography With Sparse Representation. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 3788-3800.	5.4	11
8	Anthropomorphic and biomechanical mockup for abdominal aortic aneurysm. <i>Medical Engineering and Physics</i> , 2020, 77, 60-68.	0.8	2
9	On the influence of external force induced by the ultrasound probe on internal carotid artery elastography features. , 2020, , .		0
10	Machine learning based on quantitative ultrasound for assessment of chronic liver disease. , 2020, , .		4
11	Atherosclerotic carotid bifurcation phantoms with stenotic soft inclusions for ultrasound flow and vessel wall elastography imaging. <i>Physics in Medicine and Biology</i> , 2019, 64, 095025.	1.6	17
12	Atherosclerotic carotid bifurcation phantoms with a stenotic soft inclusion for flow-structure ultrasound imaging analysis. , 2019, , .		0
13	Ultrafast Quantitative Ultrasound and Shear Wave Elastography Imaging of In Vivo Duck Fatty Livers. , 2019, , .		0
14	A global strain estimation algorithm for non-invasive vascular ultrasound elastography. , 2019, , .		2
15	BI-RADS assessment of solid breast lesions based on quantitative ultrasound and machine learning. , 2019, , .		0
16	Acoustic radiation force induced resonance elastography of coagulating blood: theoretical viscoelasticity modeling and<i>ex vivo</i>experimentation. <i>Physics in Medicine and Biology</i> , 2018, 63, 065018.	1.6	16
17	Estimation of polydispersity in aggregating red blood cells by quantitative ultrasound backscatter analysis. <i>Journal of the Acoustical Society of America</i> , 2018, 143, 2207-2216.	0.5	18
18	Stiffness Evaluation of Aortic Aneurysms Using an Ultrafast Principal Strain Estimator: In Vitro Validation. , 2018, , .		1

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19	Investigation of out-of-plane motion artifacts in 2D noninvasive vascular ultrasound elastography. <i>Physics in Medicine and Biology</i> , 2018, 63, 245003.	1.6	10
20	Accuracy of speckle tracking in the context of stress echocardiography in short axis view: An in vitro validation study. <i>PLoS ONE</i> , 2018, 13, e0193805.	1.1	6
21	Protocol for Robust In Vivo Measurements of Erythrocyte Aggregation Using Ultrasound Spectroscopy. <i>Ultrasound in Medicine and Biology</i> , 2017, 43, 2871-2881.	0.7	6
22	Influence of erythrocyte aggregation on radial migration of platelet-sized spherical particles in shear flow. <i>Journal of Biomechanics</i> , 2017, 61, 26-33.	0.9	3
23	Noninvasive Vascular Modulography Method for Imaging the Local Elasticity of Atherosclerotic Plaques: Simulation and In Vitro Vessel Phantom Study. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017, 64, 1805-1817.	1.7	18
24	Ultrafast myocardial elastography using coherent compounding of diverging waves during simulated exercise. , 2017, , .		0
25	Ultrafast myocardial elastography using coherent compounding of diverging waves during simulated stress tests: An in vitro study. , 2017, , .		2
26	Effective Medium Theory combined with a polydisperse Structure Factor Model for characterizing red blood cell aggregation. , 2016, , .		1
27	Segmentation of blood layers with particle image velocimetry (PIV) for reproducible in vivo characterization of erythrocyte aggregation. , 2016, , .		3
28	Experimental Application of Ultrafast Imaging to Spectral Tissue Characterization. <i>Ultrasound in Medicine and Biology</i> , 2015, 41, 2506-2519.	0.7	16
29	Noninvasive Vascular Elastography With Plane Strain Incompressibility Assumption Using Ultrafast Coherent Compound Plane Wave Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2015, 34, 2618-2631.	5.4	60
30	The Added Value of Statistical Modeling of Backscatter Properties in the Management of Breast Lesions at US. <i>Radiology</i> , 2015, 275, 666-674.	3.6	39
31	Experimental validation of plane wave imaging using k-space beamforming for spectral characterization of isotropic media. , 2014, , .		1
32	Development of a Photoacoustic, Ultrasound and Fluorescence Imaging Catheter for the Study of Atherosclerotic Plaque. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2014, 8, 696-703.	2.7	36
33	Nyquist velocity extension in ultrafast color Doppler. , 2014, , .		0
34	A multimodality vascular imaging phantom of an abdominal aortic aneurysm with a visible thrombus. <i>Medical Physics</i> , 2013, 40, 063701.	1.6	18
35	Ultrasound Monitoring of RBC Aggregation as a Real-Time Marker of the Inflammatory Response in a Cardiopulmonary Bypass Swine Model*. <i>Critical Care Medicine</i> , 2013, 41, e171-e178.	0.4	11
36	Velocity measurement accuracy in optical microhemodynamics: experiment and simulation. <i>Physiological Measurement</i> , 2012, 33, 1585-1602.	1.2	14

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37	In-vivo and real-time ultrasonic monitoring of red blood cell aggregation with the structure factor size and attenuation estimator during and after cardiopulmonary bypass surgery in swine. , 2010, , .		0
38	Multimodality vascular imaging phantoms: A new material for the fabrication of realistic 3D vessel geometries. Medical Physics, 2009, 36, 3758-3763.	1.6	17
39	Ultrasonic parametric imaging of erythrocyte aggregation using the structure factor size estimator. Biorheology, 2009, 46, 343-363.	1.2	31
40	Performance evaluation of a medical robotic 3D-ultrasound imaging system. Medical Image Analysis, 2008, 12, 275-290.	7.0	38
41	Effect of depth of correlation on cross-correlation blood flow measurements in glass microchannels. , 2008, , .		2
42	Projected Valve Area at Normal Flow Rate Improves the Assessment of Stenosis Severity in Patients With Low-Flow, Low-Gradient Aortic Stenosis. Circulation, 2006, 113, 711-721.	1.6	237
43	Estimation of aortic valve effective orifice area by Doppler echocardiography: effects of valve inflow shape and flow rate. Journal of the American Society of Echocardiography, 2004, 17, 756-765.	1.2	69