# Matilda Larsson

List of Publications by Year
in descending order

| 55 papers | 723 citations | 516215 16 h-index | 580395 25 g-index |
|---|---|---|---|
| 57 all docs | 57 docs citations | 57 times ranked | 892 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Osteoprotegerin is a marker of cardiovascularÂmortalityÂin patients with chronic kidney disease stages 3â€"5. Scientific Reports, 2021, 11, 2473. | 1.6 | 18 |
| 2 | Non-invasive estimation of relative pressure in turbulent flow using virtual work-energy. Medical Image Analysis, 2020, 60, 101627. | 7.0 | 20 |
| 3 | Combined spatiotemporal and frequency-dependent shear wave elastography enables detection of vulnerable carotid plaques as validated by MRI. Scientific Reports, 2020, 10, 403. | 1.6 | 17 |
| 4 | Estimation of Cardiovascular Relative Pressure Using Virtual Work-Energy. Scientific Reports, 2019, 9, 1375. | 1.6 | 25 |
| 5 | Comparison of in vivo vs. ex situ obtained material properties of sheep common carotid artery. Medical Engineering and Physics, 2018, 55, 16-24. | 0.8 | 4 |
| 6 | Circumferential strain by velocity vector imaging and speckleâ€tracking echocardiography: validation against sonomicrometry in an aortic phantom. Clinical Physiology and Functional Imaging, 2018, 38, 269-277. | 0.5 | 15 |
| 7 | Plaque characterization using shear wave elastographyâ€"evaluation of differentiability and accuracy using a combined <i>ex vivo</i> and <i>in vitro</i> setup. Physics in Medicine and Biology, 2018, 63, 235008. | 1.6 | 10 |
| 8 | Method comparison for cardiac image registration of coronary computed tomography angiography and 3-D echocardiography. Journal of Medical Imaging, 2018, 5, 1. | 0.8 | 2 |
| 9 | Influence of wall thickness and diameter on arterial shear wave elastography: a phantom and finite element study. Physics in Medicine and Biology, 2017, 62, 2694-2718. | 1.6 | 29 |
| 10 | Estimation of left ventricular blood flow parameters: clinical application of patient-specific CFD simulations from 4D echocardiography. Proceedings of SPIE, 2017, , . | 0.8 | 0 |
| 11 | Patient-Specific Left Ventricular Flow Simulations From Transthoracic Echocardiography: Robustness Evaluation and Validation Against Ultrasound Doppler and Magnetic Resonance Imaging. IEEE Transactions on Medical Imaging, 2017, 36, 2261-2275. | 5.4 | 17 |
| 12 | Altered patterns of displacement within the Achilles tendon following surgical repair. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 1857-1865. | 2.3 | 22 |
| 13 | Strain and strain rate generated by shear wave elastography in an ex vivo porcine aorta. , 2017, , . | | 0 |
| 14 | Multimodal validation of patient-specific intraventricular flow simulations from 4D echocardiography. , 2016, , . | | 3 |
| 15 | Shear Wave Elastography Quantifies Stiffness in ExÂVivo Porcine Artery with Stiffened Arterial Region. Ultrasound in Medicine and Biology, 2016, 42, 2423-2435. | 0.7 | 48 |
| 16 | An ex-vivo setup for characterization of atherosclerotic plaque using shear wave elastography and micro-computed tomography. , 2016, , . | | 0 |
| 17 | High variability in strain estimation errors when using a commercial ultrasound speckle tracking algorithm on tendon tissue. Acta Radiologica, 2016, 57, 1223-1229. | 0.5 | 6 |
| 18 | Arterial Stiffness Estimation by Shear Wave Elastography: Validation in Phantoms with Mechanical Testing. Ultrasound in Medicine and Biology, 2016, 42, 308-321. | 0.7 | 99 |

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|---|---------|-----|-----------|
| 19 | Evaluating arterial and plaque elasticity with shear wave elastography in an ex vivo porcine model. , 2015, , . | | 0 |
| 20 | Patient-specific flow simulation of the left ventricle from 4D echocardiography - feasibility and robustness evaluation. , 2015, , . | | 4 |
| 21 | Algorithm comparison for cardiac image fusion of coronary computed tomography angiography and 3D echocardiography. , 2015, , . | | 2 |
| 22 | Ultrasound speckle tracking for radial, longitudinal and circumferential strain estimation of the carotid artery â€" An in vitro validation via sonomicrometry using clinical and high-frequency ultrasound. Ultrasonics, 2015, 56, 399-408. | 2.1 | 56 |
| 23 | Strain assessment in the carotid artery wall using ultrasound speckle tracking: validation in a sheep model. Physics in Medicine and Biology, 2015, 60, 1107-1123. | 1.6 | 16 |
| 24 | Ultrasound Speckle Tracking Strain Estimation of inÂVivo Carotid Artery Plaque with inÂVitro Sonomicrometry Validation. Ultrasound in Medicine and Biology, 2015, 41, 77-88. | 0.7 | 37 |
| 25 | Abstract 139: Future Clinical Tools: Carotid Plaque Characterization via Shear Wave Elastography - A Phantom Study. Stroke, 2015, 46, . | 1.0 | 0 |
| 26 | Feasibility of shear wave elastography for plaque characterization. , 2014, , . | | 4 |
| 27 | In vivo radial and longitudinal carotid artery plaque strain estimation via ultrasound-based speckle tracking. , 2014, , . | | 0 |
| 28 | Endocardial border delineation capability of a novel multimodal polymer-shelled contrast agent. Cardiovascular Ultrasound, 2014, 12, 24. | 0.5 | 4 |
| 29 | Visualization of multimodal polymer-shelled contrast agents using ultrasound contrast sequences: an experimental study in a tissue mimicking flow phantom. Cardiovascular Ultrasound, 2013, 11, 33. | 0.5 | 8 |
| 30 | Speckle tracking strain estimation of a carotid artery plaque phantom - Validation via sonomicrometry. , 2013, , . | | 4 |
| 31 | Assessment of longitudinal strain in the carotid artery wall using ultrasound-based Speckle tracking - Validation in a sheep model. , 2013, , . | | 0 |
| 32 | Left ventricular mechanical dyssynchrony in patients with different stages of chronic kidney disease and the effects of hemodialysis. Hemodialysis International, 2013, 17, 346-358. | 0.4 | 10 |
| 33 | Automatic three-dimensional registration of intravascular optical coherence tomography images. Journal of Biomedical Optics, 2012, 17, 026005. | 1.4 | 22 |
| 34 | Shear wave elastography for characterization of carotid artery plaques - A feasibility study in an experimental setup. , 2012, , . | | 4 |
| 35 | Carotid strain estimation using an ultrasound-based speckle tracking algorithm. , 2012, , . | | 0 |
| 36 | A novel method to generate synthetic ultrasound data of the carotid artery based on in vivo observation as a tool to validate algorithm accuracy. , 2012, , . | | 0 |

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| 37 | A novel method to generate synthetic ultrasound data of the carotid artery based on in vivo observation as a tool to validate algorithm accuracy. , 2012, , . | | 0 |
| 38 | Automatic three-dimensional registration of intra-vascular optical coherence tomography images for the clinical evaluation of stent implantation over time. Proceedings of SPIE, 2012, , . | 0.8 | 2 |
| 39 | Ultrasound-based Speckle Tracking for 3D Strain estimation of the Arterial wall &amp;#x2014; An experimental validation study in a tissue mimicking phantom. , 2011, , . | | 9 |
| 40 | Recognition of facially expressed emotions and visual search strategies in adults with Asperger syndrome. Research in Autism Spectrum Disorders, 2011, 5, 210-217. | 0.8 | 29 |
| 41 | The influences of static and interactive dynamic facial stimuli on visual strategies in persons with Asperger syndrome. Research in Autism Spectrum Disorders, 2011, 5, 935-940. | 0.8 | 16 |
| 42 | Ultrasound-based radial and longitudinal strain estimation of the carotid artery: a feasibility study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2244-2251. | 1.7 | 57 |
| 43 | Effects of hemodialysis on the cardiovascular system: quantitative analysis using wave intensity wall analysis and tissue velocity imaging. Heart and Vessels, 2011, 26, 289-297. | 0.5 | 15 |
| 44 | A new ultrasound-based approach to visualize target specific polymeric contrast agent. , 2011, , . | | 0 |
| 45 | A novel measure to express tracking quality in ultrasound block matching. , 2010, , . | | 0 |
| 46 | Spatial compounding for 2D strain estimation in the mouse heart: A pilot study. , 2010, , . | | 1 |
| 47 | The importance of the eye area in face identification abilities and visual search strategies in persons with Asperger syndrome. Research in Autism Spectrum Disorders, 2010, 4, 724-730. | 0.8 | 11 |
| 48 | In-vivo assessment of radial and longitudinal strain in the carotid artery using speckle tracking. , 2010, , . | | 2 |
| 49 | Wave intensity wall analysis: a novel noninvasive method to measure wave intensity. Heart and Vessels, 2009, 24, 357-365. | 0.5 | 16 |
| 50 | State diagrams of the heart â€" a new approach to describing cardiac mechanics. Cardiovascular Ultrasound, 2009, 7, 22. | 0.5 | 6 |
| 51 | Velocity tracking, a new and user independent method for detecting regional function of the left ventricle. Clinical Physiology and Functional Imaging, 2009, 29, 24-31. | 0.5 | 0 |
| 52 | Differences in myocardial velocities during supine and upright exercise stress echocardiography in healthy adults. Clinical Physiology and Functional Imaging, 2009, 29, 216-223. | 0.5 | 7 |
| 53 | Ultrasound-based 2D strain estimation of the carotid artery: an in-silico feasibility study. , 2009, , . | | 7 |
| 54 | Fixation Identification in Centroid versus Start-Point Modes Using Eye-Tracking Data. Perceptual and Motor Skills, 2008, 106, 710-724. | 0.6 | 33 |

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| 55 | Velocity Tracking—A Novel Method for Quantitative Analysis of Longitudinal Myocardial Function. Journal of the American Society of Echocardiography, 2007, 20, 847-856. | 1.2 | 3 |