

Contents

About the Special Issue Editors	vii
Hideyuki Hasegawa and Chris L. de Korte	
Special Issue on Ultrafast Ultrasound Imaging and Its Applications	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 1110, doi: 10.3390/app8071110	1
Michiya Mozumi and Hideyuki Hasegawa	
Adaptive Beamformer Combined with Phase Coherence Weighting Applied to Ultrafast Ultrasound	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 204, doi: 10.3390/app8020204	5
Anne E. C. M. Saris, Stein Fekkes, Maartje M. Nillesen, Hendrik H. G. Hansen and Chris L. de Korte	
A PSF-Shape-Based Beamforming Strategy for Robust 2D Motion Estimation in Ultrafast Data	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 429, doi: 10.3390/app8030429	18
Gijs A.G.M. Hendriks, Chuan Chen, Hendrik H.G. Hansen and Chris L. De Korte	
Quasi-Static Elastography and Ultrasound Plane-Wave Imaging: The Effect of Beam-Forming Strategies on the Accuracy of Displacement Estimations	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 319, doi: 10.3390/app8030319	37
Anthony S. Podkowa, Michael L. Oelze and Jeffrey A. Ketterling	
High-Frame-Rate Doppler Ultrasound Using a Repeated Transmit Sequence	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 227, doi: 10.3390/app8020227	53
John Albinsson, Hideyuki Hasegawa, Hiroki Takahashi, Enrico Boni, Alessandro Ramalli, Åsa Rydén Ahlgren and Magnus Cinthio	
Iterative 2D Tissue Motion Tracking in Ultrafast Ultrasound Imaging	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 662, doi: 10.3390/app8050662	69
Annette Caenen, Mathieu Pernot, Ingvald Kinn Ekroll, Darya Shcherbakova, Luc Mertens, Abigail Swillens and Patrick Segers	
Effect of Ultrafast Imaging on Shear Wave Visualization and Characterization: An Experimental and Computational Study in a Pediatric Ventricular Model	
Reprinted from: <i>Appl. Sci.</i> 2017 , <i>7</i> , 840, doi: 10.3390/app7080840	85
Alejandra Ortega, João Pedrosa, Brecht Heyde, Ling Tong and Jan D'hooge	
Automatic Definition of an Anatomic Field of View for Volumetric Cardiac Motion Estimation at High Temporal Resolution	
Reprinted from: <i>Appl. Sci.</i> 2017 , <i>7</i> , 752, doi: 10.3390/app7070752	102
Stein Fekkes, Anne E. C. M. Saris, Jan Menssen, Maartje M. Nillesen, Hendrik H. G. Hansen and Chris L. de Korte	
Multi-Plane Ultrafast Compound 3D Strain Imaging: Experimental Validation in a Carotid Bifurcation Phantom	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 637, doi: 10.3390/app8040637	114
Lorena Petrusca, François Varray, Rémi Souchon, Adeline Bernard, Jean-Yves Chapelon, Hervé Liebgott, William Apoutou N'Djin and Magalie Viallon	
Fast Volumetric Ultrasound B-Mode and Doppler Imaging with a New High-Channels Density Platform for Advanced 4D Cardiac Imaging/Therapy	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 200, doi: 10.3390/app8020200	132

Yurong Huang, Jinhua Yu, Yusheng Tong, Shuying Li, Liang Chen, Yuanyuan Wang and Qi Zhang	
Contrast-Enhanced Ultrasound Imaging Based on Bubble Region Detection	
Reprinted from: <i>Appl. Sci.</i> 2017 , <i>7</i> , 1098, doi: 10.3390/app7101098	147
Jason S. Au, Richard L. Hughson and Alfred C. H. Yu	
Riding the Plane Wave: Considerations for In Vivo Study Designs Employing High Frame Rate Ultrasound	
Reprinted from: <i>Appl. Sci.</i> 2018 , <i>8</i> , 286, doi: 10.3390/app8020286	162