Marijn van Stralen

List of Publications by Year
in descending order

96 papers	1,279 citations	361413 20 h-index	454955 30 g-index
101 all docs	101 docs citations	101 times ranked	1475 citing authors

#	Article	IF	Citations
1	Three-Dimensional Characterization of Torsion and Asymmetry of the Intervertebral Discs Versus Vertebral Bodies in Adolescent Idiopathic Scoliosis. Spine, 2014, 39, E1159-E1166.	2.0	86
2	Deep learning–based MR-to-CT synthesis: The influence of varying gradient echo–based MR images as input channels. Magnetic Resonance in Medicine, 2020, 83, 1429-1441.	3.0	77
3	Dosimetric evaluation of synthetic CT for head and neck radiotherapy generated by a patch-based three-dimensional convolutional neural network. Medical Physics, 2019, 46, 4095-4104.	3.0	67
4	Upright, prone, and supine spinal morphology and alignment in adolescent idiopathic scoliosis. Scoliosis and Spinal Disorders, 2017, 12, 6.	2.3	52
5	Anterior Spinal Overgrowth Is the Result of the Scoliotic Mechanism and Is Located in the Disc. Spine, 2017, 42, 818-822.	2.0	44
6	Anterior Overgrowth in Primary Curves, Compensatory Curves and Junctional Segments in Adolescent Idiopathic Scoliosis. PLoS ONE, 2016, 11, e0160267.	2.5	42
7	Magnetic resonance imaging–based synthetic computed tomography of the lumbar spine for surgical planning: a clinical proof-of-concept. Neurosurgical Focus, 2021, 50, E13.	2.3	35
8	Targeted Vessel Ablation for More Efficient Magnetic Resonance-Guided High-Intensity Focused Ultrasound Ablation of Uterine Fibroids. CardioVascular and Interventional Radiology, 2012, 35, 1205-1210.	2.0	34
9	Deep learning-enabled MRI-only photon and proton therapy treatment planning for paediatric abdominal tumours. Radiotherapy and Oncology, 2020, 153, 220-227.	0.6	33
10	Time Continuous Detection of the Left Ventricular Long Axis and the Mitral Valve Plane in 3-D Echocardiography. Ultrasound in Medicine and Biology, 2008, 34, 196-207.	1.5	31
11	Deep learning enables automatic quantitative assessment of puborectalis muscle and urogenital hiatus in plane of minimal hiatal dimensions. Ultrasound in Obstetrics and Gynecology, 2019, 54, 270-275.	1.7	31
12	Left Ventricular Border Tracking Using Cardiac Motion Models and Optical Flow. Ultrasound in Medicine and Biology, 2011, 37, 605-616.	1.5	30
13	Evolution of the Ablation Region After Magnetic Resonance–Guided High-Intensity Focused Ultrasound Ablation in a Vx2 Tumor Model. Investigative Radiology, 2013, 48, 381-386.	6.2	30
14	Automated Tracking of the Mitral Valve Annulus Motion in Apical Echocardiographic Images Using Multidimensional Dynamic Programming. Ultrasound in Medicine and Biology, 2007, 33, 1389-1399.	1.5	28
15	MRI-based synthetic CT shows equivalence to conventional CT for the morphological assessment of the hip joint. Journal of Orthopaedic Research, 2022, 40, 954-964.	2.3	27
16	Magnetic Resonance Imaging Versus Computed Tomography for Three-Dimensional Bone Imaging of Musculoskeletal Pathologies: A Review. Journal of Magnetic Resonance Imaging, 2022, 56, 11-34.	3.4	27
17	Asymmetry of the Vertebral Body and Pedicles in the True Transverse Plane in Adolescent Idiopathic Scoliosis: A CT-Based Study. Spine Deformity, 2017, 5, 37-45.	1.5	25
18	Left Ventricular Volume Estimation in Cardiac Three-dimensional Ultrasound. Academic Radiology, 2005, 12, 1241-1249.	2.5	24

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19	Sparse Registration for Three-Dimensional Stress Echocardiography. IEEE Transactions on Medical Imaging, 2008, 27, 1568-1579.	8.9	24
20	Anterior-posterior length discrepancy of the spinal column in adolescent idiopathic scoliosis—a 3D CT study. Spine Journal, 2018, 18, 2259-2265.	1.3	23
21	Detailed imaging and genetic analysis reveal a secondary BRAF^L^{505H} resistance mutation and extensive intrapatient heterogeneity in metastatic BRAF mutant melanoma patients treated with vemurafenib. Pigment Cell and Melanoma Research, 2015, 28, 318-323.	3.3	20
22	Side-by-Side Viewing of Anatomically Aligned Left Ventricular Segments in Three-Dimensional Stress Echocardiography. Echocardiography, 2009, 26, 189-195.	0.9	19
23	Probabilistic framework for tracking in artifact-prone 3D echocardiograms. Medical Image Analysis, 2010, 14, 750-758.	11.6	19
24	Multi-organ comparison of flow-based arterial spin labeling techniques: Spatially non-selective labeling for cerebral and renal perfusion imaging. Magnetic Resonance in Medicine, 2021, 85, 2580-2594.	3.0	18
25	Automatic active appearance model segmentation of 3D echocardiograms. , 2010, , .		17
26	The time to progression ratio: a new individualized volumetric parameter for the early detection of clinical benefit of targeted therapies. Annals of Oncology, 2016, 27, 1638-1643.	1.2	17
27	Model driven quantification of left ventricular function from sparse single-beat 3D echocardiography. Medical Image Analysis, 2010, 14, 582-593.	11.6	16
28	Liver perfusion in dynamic contrast-enhanced magnetic resonance imaging (DCE-MRI): comparison of enhancement in Gd-BT-DO3A and Gd-EOB-DTPA in normal liver parenchyma. European Radiology, 2014, 24, 2146-2156.	4.5	16
29	Comparison of multi-delay FAIR and pCASL labeling approaches for renal perfusion quantification at 3T MRI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2020, 33, 81-94.	2.0	16
30	Simultaneous Multiresolution Strategies for Nonrigid Image Registration. IEEE Transactions on Image Processing, 2013, 22, 4905-4917.	9.8	15
31	Seeing More by Showing Less: Orientation-Dependent Transparency Rendering for Fiber Tractography Visualization. PLoS ONE, 2015, 10, e0139434.	2.5	14
32	Arterial and portal venous liver perfusion using selective spin labelling MRI. European Radiology, 2015, 25, 1529-1540.	4.5	13
33	Anterior lengthening in scoliosis occurs only in the disc and is similar in different types of scoliosis. Spine Journal, 2020, 20, 1653-1658.	1.3	13
34	The Height-Width-Depth Ratios of the Intervertebral Discs and Vertebral Bodies in Adolescent Idiopathic Scoliosis vs Controls in a Chinese Population. Scientific Reports, 2017, 7, 46448.	3.3	12
35	Validation of Exposure Visualization and Audible Distance Emission for Navigated Temporal Bone Drilling in Phantoms. PLoS ONE, 2012, 7, e41262.	2.5	12
36	The Changing Position of the Center of Mass of the Thorax During Growth in Relation to Pre-existent Vertebral Rotation. Spine, 2019, 44, 679-684.	2.0	11

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37	Surgical Outcomes of Anterior Versus Posterior Fusion in Lenke Type 1 Adolescent Idiopathic Scoliosis. Spine, 2019, 44, E823-E832.	2.0	11
38	Automatic segmentation of puborectalis muscle on three‐dimensional transperineal ultrasound. Ultrasound in Obstetrics and Gynecology, 2018, 52, 97-102.	1.7	10
39	Influence of labeling parameters and respiratory motion on velocity‐selective arterial spin labeling for renal perfusion imaging. Magnetic Resonance in Medicine, 2020, 84, 1919-1932.	3.0	10
40	Left Ventricle Segmentation from Contrast Enhanced Fast Rotating Ultrasound Images Using Three Dimensional Active Shape Models. Lecture Notes in Computer Science, 2009, , 295-302.	1.3	10
41	P2A-6 Automatic Segmentation of the Left Ventricle in 3D Echocardiography Using Active Appearance Models. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	9
42	Enabling free‐breathing background suppressed renal pCASL using fat imaging and retrospective motion correction. Magnetic Resonance in Medicine, 2019, 82, 276-288.	3.0	9
43	Predicting clinical benefit from everolimus in patients with advanced solid tumors, the CPCT-03 study. Oncotarget, 2017, 8, 55582-55592.	1.8	9
44	Synthetic CT for the planning of MR-HIFU treatment of bone metastases in pelvic and femoral bones: a feasibility study. European Radiology, 2022, , 1.	4.5	9
45	Multiframe registration of real-time three-dimensional echocardiography time series. Journal of Medical Imaging, 2014, 1, 014004.	1.5	8
46	CT-based study of vertebral and intravertebral rotation in right thoracic adolescent idiopathic scoliosis. European Spine Journal, 2019, 28, 3044-3052.	2.2	8
47	Feasibility of Velocity‐Selective Arterial Spin Labeling in Breast Cancer Patients for Noncontrast‐Enhanced Perfusion Imaging. Journal of Magnetic Resonance Imaging, 2021, 54, 1282-1291.	3.4	8
48	Prospective Evaluation of Local Sustained Release of Celecoxib in Dogs with Low Back Pain. Pharmaceutics, 2021, 13, 1178.	4.5	8
49	Semi-automatic border detection method for left ventricular volume estimation in 4D ultrasound data. , 2005, , .		7
50	Novel spatiotemporal voxel interpolation with multibeat fusion for 3D echocardiography with irregular data distribution. , 2006, 6147, 234.		7
51	Registration of 2D cardiac images to real-time 3D ultrasound volumes for 3D stress echocardiography. , 2006, 6144, 405.		7
52	Improving 3D active appearance model segmentation of the left ventricle with Jacobian tuning. Proceedings of SPIE, 2008, , .	0.8	7
53	Automated analysis of three-dimensional stress echocardiography. Netherlands Heart Journal, 2011, 19, 307-310.	0.8	7
54	Determination of a Facial Nerve Safety Zone for Navigated Temporal Bone Surgery. Operative Neurosurgery, 2012, 70, ons50-ons60.	0.8	7

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55	Improved Segmentation of Multiple Cavities of the Heart in Wide-View 3-D Transesophageal Echocardiograms. Ultrasound in Medicine and Biology, 2015, 41, 1991-2000.	1.5	7
56	What Is the Actual 3D Representation of the Rib Vertebra Angle Difference (Mehta Angle)?. Spine, 2018, 43, E92-E97.	2.0	7
57	Tracking left ventricular borders in 3D echocardiographic sequences using motion-guided optical flow. , 2009, , .		6
58	A transoesophageal echocardiographic image acquisition protocol for wide-view fusion of three-dimensional datasets to support atrial fibrillation catheter ablation. Journal of Interventional Cardiac Electrophysiology, 2013, 37, 21-26.	1.3	6
59	Fluid filling of the digestive tract for improved proton resonance frequency shift‐based MR thermometry in the pancreas. Journal of Magnetic Resonance Imaging, 2018, 47, 692-701.	3.4	6
60	A computed tomography-based spatial reference for pedicle screw placement in adolescent idiopathic scoliosis. Spine Deformity, 2020, 8, 67-76.	1.5	6
61	Exploring label dynamics of velocity‐selective arterial spin labeling in the kidney. Magnetic Resonance in Medicine, 2021, 86, 131-142.	3.0	6
62	Workflow for automatic renal perfusion quantification using ASL‐MRI and machine learning. Magnetic Resonance in Medicine, 2022, 87, 800-809.	3.0	6
63	Efficient cascaded V‐net optimization for lower extremity CT segmentation validated using bone morphology assessment. Journal of Orthopaedic Research, 2022, , .	2.3	6
64	CT to MR registration of complex deformations in the knee joint through dual quaternion interpolation of rigid transforms. Physics in Medicine and Biology, 2021, 66, 175024.	3.0	5
65	Atlas-Based Mosaicing of Left Atrial 3-D Transesophageal Echocardiography Images. Ultrasound in Medicine and Biology, 2017, 43, 765-774.	1.5	4
66	Benchmarking Distance Control and Virtual Drilling for Lateral Skull Base Surgery. World Neurosurgery, 2018, 109, e217-e228.	1.3	4
67	Improved spatiotemporal voxel space interpolation for 3D echocardiography with irregular sampling and multibeat fusion. , 0, , .		3
68	Rapid 3D Transesophageal Echocardiography using a fast-rotating multiplane transducer. , 2008, , .		3
69	Optimal discrete multi-resolution deformable image registration. , 2009, , .		3
70	Model driven quantification of left ventricular function from sparse single-beat 3D echocardiography. Proceedings of SPIE, 2009, , .	0.8	3
71	Spatiotemporal interpolation by normalized convolution for 4D transesophageal echocardiography. , 2011, , .		3
72	Intra-temporal facial nerve centerline segmentation for navigated temporal bone surgery. , 2011, , .		3

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73	Full-cycle left ventricular segmentation and tracking in 3D echocardiography using active appearance models. , 2015, , .		3
74	What a stranded whale with scoliosis can teach us about human idiopathic scoliosis. Scientific Reports, 2021, 11, 7218.	3.3	3
75	Automatic 3D left ventricular border detection using active appearance models. , 2010, , .		2
76	Segmentation of Multi-Center 3D Left Ventricular Echocardiograms by Active Appearance Models. , 2014, , .		2
77	A semi-automatic endocardial border detection method for the left ventricle in 4D ultrasound data sets. International Congress Series, 2004, 1268, 1078-1083.	0.2	1
78	Artifact aware tracking of left ventricular contours in 3D ultrasound. , 2010, , .		1
79	Registration of multi-view apical 3D echocardiography images. Proceedings of SPIE, 2011, , .	0.8	1
80	Optimal kernel sizes for 4D image reconstruction using normalized convolution from sparse fast-rotating transesophageal 2D ultrasound images. , 2012, , .		1
81	Comparison of spatiotemporal interpolators for 4D image reconstruction from 2D transesophageal ultrasound. Proceedings of SPIE, 2012, , .	0.8	1
82	A patient specific 4D MRI liver motion model based on sparse imaging and registration. , 2013, , .		1
83	Atlas-based mosaicing of 3D transesophageal echocardiography images of the left atrium. , 2015, , .		1
84	Anterior lengthening in scoliosis occurs only in the disc and is similar in different types of scoliosis. Studies in Health Technology and Informatics, 2021, 280, 58-62.	0.3	1
85	A Semi-automatic Endocardial Border Detection Method for 4D Ultrasound Data. Lecture Notes in Computer Science, 2004, , 43-50.	1.3	1
86	A novel dynamic programming based semi-automatic endocardial border detection method for 4D cardiac ultrasound. , 0, , .		0
87	PS-8 Sparse Appearance Model Based Registration and Segmentation of 3D Echocardiographic Images. , 2006, , .		0
88	P2A-8 Fully Automatic Detection of Left Ventricular Long Axis and Mitral Valve Plane in 3D Echocardiography. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	0
89	Tracking the endocardial border in artifact-prone 3D images. , 2009, , .		0
90	Improving neuronavigation through workflow and sound feedback and interactive brainshift correction. Proceedings of SPIE, 2011, , .	0.8	0

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91	Supervised segmentation methods for the hippocampus in MR images. , 2011, , .		0
92	Simultaneous pairwise registration for image mosaicing of TEE data. , 2013, , .		0
93	Segmentation of multiple heart cavities in wide-view fused 3D transesophageal echocardiograms. , 2014, , .		0
94	Selection Strategies for Atlas-Based Mosaicing of Left Atrial 3-D Transesophageal Echocardiography Data. Ultrasound in Medicine and Biology, 2018, 44, 1533-1543.	1.5	0
95	OC-0515 Synthetic CT generation for Head and Neck radiotherapy by a 3D convolutional neural network. Radiotherapy and Oncology, 2019, 133, S268-S269.	0.6	0
96	Perfusion imaging of neuroblastoma and nephroblastoma in a paediatric population using pseudo-continuous arterial spin-labelling magnetic resonance imaging. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, , 1.	2.0	0