Ruud J G Van Sloun

List of Publications by Year
in descending order

70	2,220	411340 20	274796 44
papers	citations	h-index	g-index

72	72	72	2272
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dynamic Probabilistic Pruning: A General Framework for Hardware-Constrained Pruning at Different Granularities. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 733-744.	7.2	2
2	KalmanNet: Neural Network Aided Kalman Filtering for Partially Known Dynamics. IEEE Transactions on Signal Processing, 2022, 70, 1532-1547.	3.2	88
3	B/A Measurement of Clear Cell Renal Cell Carcinoma versus Healthy Kidney Tissue. Ultrasound in Medicine and Biology, 2022, , .	0.7	0
4	Unfolding Model-Based Beamforming for High Quality Ultrasound Imaging. , 2022, , .		2
5	Deep Proximal Unfolding For Image Recovery from Under-Sampled Channel Data in Intravascular Ultrasound. , 2022, , .		0
6	Accelerated Intravascular Ultrasound Imaging using Deep Reinforcement Learning. , 2022, , .		1
7	Deep Unfolding With Normalizing Flow Priors for Inverse Problems. IEEE Transactions on Signal Processing, 2022, 70, 2962-2971.	3.2	11
8	Certainty about uncertainty in sleep staging: a theoretical framework. Sleep, 2022, 45, .	0.6	11
9	Super-Resolution Ultrasound Localization Microscopy Through Deep Learning. IEEE Transactions on Medical Imaging, 2021, 40, 829-839.	5.4	77
10	Blood flow patterns estimation in the left ventricle with low-rate 2D and 3D dynamic contrast-enhanced ultrasound. Computer Methods and Programs in Biomedicine, 2021, 198, 105810.	2.6	5
11	Deep Learning for Real-time, Automatic, and Scanner-adapted Prostate (Zone) Segmentation of Transrectal Ultrasound, for Example, Magnetic Resonance Imagingâ€“transrectal Ultrasound Fusion Prostate Biopsy. European Urology Focus, 2021, 7, 78-85.	1.6	35
12	Deep Learning for Ultrasound Image Formation: CUBDL Evaluation Framework and Open Datasets. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 3466-3483.	1.7	45
13	A review on B/A measurement methods with a clinical perspective. Journal of the Acoustical Society of America, 2021, 149, 2200-2237.	0.5	15
14	A dilated inception CNN-LSTM network for fetal heart rate estimation. Physiological Measurement, 2021, 42, 045007.	1.2	25
15	Kalmannet: Data-Driven Kalman Filtering. , 2021, , .		19
16	Experimental acoustic characterisation of an endoskeletal antibubble contrast agent: first results. Medical Physics, 2021, 48, 6765-6780.	1.6	3
17	Data-Driven Kalman-Based Velocity Estimation for Autonomous Racing. , 2021, , .		9
18	Model-based Deep Learning on Ultrasound Channel Data for Fast Ultrasound Localization Microscopy. , 2021, , .		2

#	Article	IF	Citations
19	Simulation study on practical choices for B / A measurement by the generalized finite amplitude insert-substitution method. , 2021, , .		0
20	Performing Aperture Domain Model Image REconstruction (ADMIRE) Using a Deep Neural Network Sparse Encoder. , 2021, , .		0
21	Deep Unfolded Robust PCA With Application to Clutter Suppression in Ultrasound. IEEE Transactions on Medical Imaging, 2020, 39, 1051-1063.	5.4	117
22	Automated multiparametric localization of prostate cancer based on B-mode, shear-wave elastography, and contrast-enhanced ultrasound radiomics. European Radiology, 2020, 30, 806-815.	2.3	65
23	Localizing B-Lines in Lung Ultrasonography by Weakly Supervised Deep Learning, In-Vivo Results. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 957-964.	3.9	81
24	Deep Learning in Ultrasound Imaging. Proceedings of the IEEE, 2020, 108, 11-29.	16.4	164
25	Artificial intelligence in multiparametric prostate cancer imaging with focus on deep-learning methods. Computer Methods and Programs in Biomedicine, 2020, 189, 105316.	2.6	44
26	Learning Sub-Sampling and Signal Recovery With Applications in Ultrasound Imaging. IEEE Transactions on Medical Imaging, 2020, 39, 3955-3966.	5.4	30
27	Adaptive Ultrasound Beamforming Using Deep Learning. IEEE Transactions on Medical Imaging, 2020, 39, 3967-3978.	5.4	107
28	Learning Sampling and Model-Based Signal Recovery for Compressed Sensing MRI. , 2020, , .		19
29	Deep Learning in Medical Ultrasoundâ€"From Image Formation to Image Analysis. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2477-2480.	1.7	9
30	A Comparison of Single- and Multiple- Tracking Location Shear Wave Elastography (SWE) for Viscosity Mapping by System Identification (SI). , 2020, , .		1
31	Deep Learning for Classification and Localization of COVID-19 Markers in Point-of-Care Lung Ultrasound. IEEE Transactions on Medical Imaging, 2020, 39, 2676-2687.	5.4	422
32	Blind Source Separation for Clutter and Noise Suppression in Ultrasound Imaging: Review for Different Applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1497-1512.	1.7	22
33	Synthetic Elastography Using B-Mode Ultrasound Through a Deep Fully Convolutional Neural Network. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2640-2648.	1.7	12
34	Contrast-enhanced ultrasound with dispersion analysis for the localization of prostate cancer: correlation with radical prostatectomy specimens. World Journal of Urology, 2020, 38, 2811-2818.	1.2	8
35	An Angle-Independent Cross-Sectional Doppler Method for Flow Estimation in the Common Carotid Artery. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1513-1524.	1.7	5
36	Super-resolution Ultrasound Imaging. Ultrasound in Medicine and Biology, 2020, 46, 865-891.	0.7	253

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37	Detection of clinically significant prostate cancer in biopsyâ€naÃ¯ve men: direct comparison of systematic biopsy, multiparametric MRIâ€and contrastâ€ultrasoundâ€dispersion imagingâ€targeted biopsy. BJU International, 2020, 126, 481-493.	1.3	17
38	The generalized finite amplitude insert-substitution method for B/A measurement of tissues and liquids. Proceedings of Meetings on Acoustics, 2020, , .	0.3	2
39	High Resolution Plane Wave Compounding Through Deep Proximal Learning. , 2020, , .		3
40	Deep Learning Models for Fast Ultrasound Localization Microscopy. , 2020, , .		7
41	Exploiting Flow Dynamics for Superresolution in Contrast-Enhanced Ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1573-1586.	1.7	34
42	3-D Multi-parametric Contrast-Enhanced Ultrasound for the Prediction of Prostate Cancer. Ultrasound in Medicine and Biology, 2019, 45, 2713-2724.	0.7	15
43	Deep Learning for Super-resolution Vascular Ultrasound Imaging. , 2019, , .		43
44	Super-resolution Using Flow Estimation in Contrast Enhanced Ultrasound Imaging. , 2019, , .		0
45	Deep Learning for Fast Adaptive Beamforming. , 2019, , .		37
46	Deep Convolutional Robust PCA with Application to Ultrasound Imaging. , 2019, , .		12
47	Protocol of the SOMNIA project: an observational study to create a neurophysiological database for advanced clinical sleep monitoring. BMJ Open, 2019, 9, e030996.	0.8	32
48	In-vitro investigation of the relationship between microvascular structure and ultrasound contrast agent dynamics. , 2019, , .		1
49	Towards flow Estimation in the Common Carotid Artery Using Free-Hand Cross-Sectional Doppler. , 2019, , .		1
50	On the Relationship between Dynamic Contrast-Enhanced Ultrasound Parameters and the Underlying Vascular Architecture Extracted from Acoustic Angiography. Ultrasound in Medicine and Biology, 2019, 45, 539-548.	0.7	11
51	Multiparametric Ultrasound for Prostate Cancer Detection and Localization: Correlation of B-mode, Shear Wave Elastography and Contrast Enhanced Ultrasound with Radical Prostatectomy Specimens. Journal of Urology, 2019, 202, 1166-1173.	0.2	33
52	Reply by Authors. Journal of Urology, 2019, 202, 1172-1173.	0.2	0
53	Improved Plane-Wave Ultrasound Beamforming by Incorporating Angular Weighting and Coherent Compounding in Fourier Domain. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 749-765.	1.7	32
54	A fixed-distance plane wave method for estimating the ultrasound coefficient of nonlinearity. Proceedings of Meetings on Acoustics, 2018, , .	0.3	2

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55	Contrast-enhanced ultrasound tractography for 3D vascular imaging of the prostate. Scientific Reports, 2018, 8, 14640.	1.6	8
56	Accurate validation of ultrasound imaging of prostate cancer: a review of challenges in registration of imaging and histopathology. Journal of Ultrasound, 2018, 21, 197-207.	0.7	16
57	Convective-Dispersion Modeling in 3D Contrast-Ultrasound Imaging for the Localization of Prostate Cancer. IEEE Transactions on Medical Imaging, 2018, 37, 2593-2602.	5.4	17
58	Mammography: developing a smarter and safer alternative. Future Oncology, 2017, 13, 669-671.	1.1	0
59	The prostate cancer detection rates of CEUS-targeted versus MRI-targeted versus systematic TRUS-guided biopsies in biopsy-naÃ¯ve men: a prospective, comparative clinical trial using the same patients. BMC Urology, 2017, 17, 27.	0.6	15
60	Entropy of Ultrasound-Contrast-Agent Velocity Fields for Angiogenesis Imaging in Prostate Cancer. IEEE Transactions on Medical Imaging, 2017, 36, 826-837.	5.4	26
61	Ultrasound-contrast-agent dispersion and velocity imaging for prostate cancer localization. Medical Image Analysis, 2017, 35, 610-619.	7.0	45
62	Viscoelasticity Mapping by Identification of Local Shear Wave Dynamics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1666-1673.	1.7	21
63	Three-dimensional estimation of ultrasound-contrast-agent dispersion and convection in the prostate. , 2017, , .		0
64	Three-dimensional estimation of ultrasound-contrast-agent dispersion and convection in the prostate. , 2017, , .		0
65	Sparsity-driven super-resolution in clinical contrast-enhanced ultrasound. , 2017, , .		24
66	Sparsity-driven super-localization in clinical contrast-enhanced ultrasound. , 2017, , .		6
67	Towards Dynamic Contrast Specific Ultrasound Tomography. Scientific Reports, 2016, 6, 34458.	1.6	3
68	Effects of perfusion and vascular architecture on contrast dispersion: Validation in ex-vivo porcine liver under machine perfusion. , 2016, , .		0
69	Ultrasonic Array Doppler Sensing for Human Movement Classification. IEEE Sensors Journal, 2014, 14, 2782-2791.	2.4	4
70	Subjectively impaired bed mobility in Parkinson disease affects sleep efficiency. Sleep Medicine, 2013, 14, 668-674.	0.8	43