Mirabela Rusu

List of Publications by Year
in descending order

43 papers	4,176 citations	471509 17 h-index	395702 33 g-index
45 all docs	45 docs citations	45 times ranked	7643 citing authors

#	Article	IF	Citations
1	A Mammalian microRNA Expression Atlas Based on Small RNA Library Sequencing. Cell, 2007, 129, 1401-1414.	28.9	3,390
2	Radiomics Analysis on FLT-PET/MRI for Characterization of Early Treatment Response in Renal Cell Carcinoma: A Proof-of-Concept Study. Translational Oncology, 2016, 9, 155-162.	3.7	94
3	Using Sculptor and Situs for simultaneous assembly of atomic components into low-resolution shapes. Journal of Structural Biology, 2011, 173, 428-435.	2.8	75
4	Evolutionary bidirectional expansion for the tracing of alpha helices in cryo-electron microscopy reconstructions. Journal of Structural Biology, 2012, 177, 410-419.	2.8	48
5	Automated tracing of filaments in 3D electron tomography reconstructions using Sculptor and Situs. Journal of Structural Biology, 2012, 178, 121-128.	2.8	47
6	ProsRegNet: A deep learning framework for registration of MRI and histopathology images of the prostate. Medical Image Analysis, 2021, 68, 101919.	11.6	46
7	An Assembly Model of Rift Valley Fever Virus. Frontiers in Microbiology, 2012, 3, 254.	3.5	32
8	Registration of presurgical MRI and histopathology images from radical prostatectomy via RAPSODI. Medical Physics, 2020, 47, 4177-4188.	3.0	28
9	Biomolecular pleiomorphism probed by spatial interpolation of coarse models. Bioinformatics, 2008, 24, 2460-2466.	4.1	27
10	Identifying in vivo DCE MRI markers associated with microvessel architecture and gleason grades of prostate cancer. Journal of Magnetic Resonance Imaging, 2016, 43, 149-158.	3.4	27
11	Automated detection of aggressive and indolent prostate cancer on magnetic resonance imaging. Medical Physics, 2021, 48, 2960-2972.	3.0	27
12	3D Registration of pre-surgical prostate MRI and histopathology images via super-resolution volume reconstruction. Medical Image Analysis, 2021, 69, 101957.	11.6	26
13	Multiscale, multimodal analysis of tumor heterogeneity in IDH1 mutant vs wild-type diffuse gliomas. PLoS ONE, 2019, 14, e0219724.	2.5	25
14	Selective identification and localization of indolent and aggressive prostate cancers via CorrSigNIA: an MRI-pathology correlation and deep learning framework. Medical Image Analysis, 2022, 75, 102288.	11.6	25
15	Co-registration of pre-operative CT with ex vivo surgically excised ground glass nodules to define spatial extent of invasive adenocarcinoma on in vivo imaging: a proof-of-concept study. European Radiology, 2017, 27, 4209-4217.	4.5	20
16	An Application of Generative Adversarial Networks for Super Resolution Medical Imaging. , 2018, , .		19
17	Image quality assessment for machine learning tasks using meta-reinforcement learning. Medical Image Analysis, 2022, 78, 102427.	11.6	19
18	Co-Registration of ex vivo Surgical Histopathology and in vivo T2 weighted MRI of the Prostate via multi-scale spectral embedding representation. Scientific Reports, 2017, 7, 8717.	3.3	18

#	Article	IF	Citations
19	Identifying quantitative in vivo multi-parametric MRI features for treatment related changes after laser interstitial thermal therapy of prostate cancer. Neurocomputing, 2014, 144, 13-23.	5.9	17
20	Evolutionary tabu search strategies for the simultaneous registration of multiple atomic structures in cryo-EM reconstructions. Journal of Structural Biology, 2010, 170, 164-171.	2.8	16
21	Deep Learning Improves Speed and Accuracy of Prostate Gland Segmentations on Magnetic Resonance Imaging for Targeted Biopsy. Journal of Urology, 2021, 206, 604-612.	0.4	16
22	Framework for 3D histologic reconstruction and fusion with in vivo MRI: Preliminary results of characterizing pulmonary inflammation in a mouse model. Medical Physics, 2015, 42, 4822-4832.	3.0	14
23	Prostate shapes on pre-treatment MRI between prostate cancer patients who do and do not undergo biochemical recurrence are different: Preliminary Findings. Scientific Reports, 2017, 7, 15829.	3.3	11
24	Developing a denoising filter for electron microscopy and tomography data in the cloud. Biophysical Reviews, 2012, 4, 223-229.	3.2	10
25	Prostatome: A combined anatomical and disease based MRI atlas of the prostate. Medical Physics, 2014, 41, 072301.	3.0	10
26	Computational imaging reveals shape differences between normal and malignant prostates on MRI. Scientific Reports, 2017, 7, 41261.	3.3	10
27	CorrSigNet: Learning CORRelated Prostate Cancer SIGnatures from Radiology and Pathology Images for Improved Computer Aided Diagnosis. Lecture Notes in Computer Science, 2020, , 315-325.	1.3	10
28	Bridging the gap between prostate radiology and pathology through machine learning. Medical Physics, 2022, 49, 5160-5181.	3.0	10
29	Geodesic density regression for correcting 4DCT pulmonary respiratory motion artifacts. Medical Image Analysis, 2021, 72, 102140.	11.6	8
30	AutoStitcher: An Automated Program for Efficient and Robust Reconstruction of Digitized Whole Histological Sections from Tissue Fragments. Scientific Reports, 2016, 6, 29906.	3.3	7
31	Weakly Supervised Registration ofÂProstate MRI and Histopathology Images. Lecture Notes in Computer Science, 2021, , 98-107.	1.3	7
32	Computational Detection of Extraprostatic Extension of Prostate Cancer on Multiparametric MRI Using Deep Learning. Cancers, 2022, 14, 2821.	3.7	7
33	Statistical 3D prostate imaging atlas construction via anatomically constrained registration. , 2013, 8669, .		5
34	Anisotropic smoothing regularization (AnSR) in Thirion's Demons registration evaluates brain MRI tissue changes post-laser ablation. , 2013, 2013, 4006-9.		5
35	Adaptable Image Quality Assessment Using Meta-Reinforcement Learning of Task Amenability. Lecture Notes in Computer Science, 2021, , 191-201.	1.3	4
36	Framework for the co-registration of MRI and histology images in prostate cancer patients with radical prostatectomy. , 2019, , .		4

#	Article	IF	Citations
37	Intensity normalization of prostate MRIs using conditional generative adversarial networks for cancer detection. , 2021, , .		3
38	Clinically significant prostate cancer detection on MRI with self-supervised learning using image context restoration. , 2021, , .		2
39	ProGNet: prostate gland segmentation on MRI with deep learning. , 2021, , .		2
40	Spectral embedding-based registration (SERg) for multimodal fusion of prostate histology and MRI. , 2014, , .		1
41	Detecting invasive breast carcinoma on dynamic contrast-enhanced MRI. , 2021, , .		1
42	Spatial integration of radiology and pathology images to characterize breast cancer aggressiveness on pre-surgical MRI. , 2019, , .		1
43	VITA - An Interactive 3-D Visualization System to Enhance Student Understanding of Mathematical Concepts in Medical Decision-Making. , 2008, , .		0