Sandy Napel

List of Publications by Year
in descending order

128 papers	10,696 citations	50170 46 h-index	32761 100 g-index
129 all docs	129 docs citations	129 times ranked	10599 citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning approach to differentiation of peripheral schwannomas and neurofibromas: A multi-center study. Neuro-Oncology, 2022, 24, 601-609.	0.6	8
2	Radiomic features quantifying pixel-level characteristics of breast tumors from magnetic resonance imaging predict risk factors in triple-negative breast cancer.. Journal of Clinical Oncology, 2022, 40, e12612-e12612.	0.8	0
3	The Medical Segmentation Decathlon. Nature Communications, 2022, 13, .	5.8	252
4	MRI-based radiomics for prognosis of pediatric diffuse intrinsic pontine glioma: an international study. Neuro-Oncology Advances, 2021, 3, vdab042.	0.4	14
5	Machine Learning Radiomics Model for Early Identification of Small-Cell Lung Cancer on Computed Tomography Scans. JCO Clinical Cancer Informatics, 2021, 5, 746-757.	1.0	7
6	Machine-Learning Approach to Differentiation of Benign and Malignant Peripheral Nerve Sheath Tumors: A Multicenter Study. Neurosurgery, 2021, 89, 509-517.	0.6	7
7	Quantitative image features from radiomic biopsy differentiate oncocytoma from chromophobe renal cell carcinoma. Journal of Medical Imaging, 2021, 8, 054501.	0.8	3
8	Lung Nodule Malignancy Prediction in Sequential CT Scans: Summary of ISBI 2018 Challenge. IEEE Transactions on Medical Imaging, 2021, 40, 3748-3761.	5.4	13
9	Pipelines in Image Analysis. , 2021, , 1-16.		0
10	Radiomics Signatures of Cardiovascular Risk Factors in Cardiac MRI: Results From the UK Biobank. Frontiers in Cardiovascular Medicine, 2020, 7, 591368.	1.1	32
11	Interreader Variability in Semantic Annotation of Microvascular Invasion in Hepatocellular Carcinoma on Contrast-enhanced Triphasic CT Images. Radiology Imaging Cancer, 2020, 2, e190062.	0.7	7
12	The Image Biomarker Standardization Initiative: Standardized Quantitative Radiomics for High-Throughput Image-based Phenotyping. Radiology, 2020, 295, 328-338.	3.6	1,869
13	A shallow convolutional neural network predicts prognosis of lung cancer patients in multi-institutional computed tomography image datasets. Nature Machine Intelligence, 2020, 2, 274-282.	8.3	54
14	Quantitative imaging feature pipeline: a web-based tool for utilizing, sharing, and building image-processing pipelines. Journal of Medical Imaging, 2020, 7, 1.	0.8	19
15	Stanford DRO Toolkit: Digital Reference Objects for Standardization of Radiomic Features. Tomography, 2020, 6, 111-117.	0.8	13
16	The utility of three-dimensional models in complex microsurgical reconstruction. Archives of Plastic Surgery, 2020, 47, 428-434.	0.4	16
17	A Radiomics Approach to Analyze Cardiac Alterations in Hypertension. , 2019, , .		11
18	Stability and reproducibility of computed tomography radiomic features extracted from peritumoral regions of lung cancer lesions. Medical Physics, 2019, 46, 5075-5085.	1.6	49

#	Article	IF	Citations
19	Bone Marrow and Tumor Radiomics at ^{18}F-FDG PET/CT: Impact on Outcome Prediction in Non–Small Cell Lung Cancer. Radiology, 2019, 293, 451-459.	3.6	48
20	[18F] FDG Positron Emission Tomography (PET) Tumor and Penumbra Imaging Features Predict Recurrence in Non–Small Cell Lung Cancer. Tomography, 2019, 5, 145-153.	0.8	29
21	Semi–automated pulmonary nodule interval segmentation using the NLST data. Medical Physics, 2018, 45, 1093-1107.	1.6	17
22	Intratumoral Spatial Heterogeneity at Perfusion MR Imaging Predicts Recurrence-free Survival in Locally Advanced Breast Cancer Treated with Neoadjuvant Chemotherapy. Radiology, 2018, 288, 26-35.	3.6	102
23	Non–Small Cell Lung Cancer Radiogenomics Map Identifies Relationships between Molecular and Imaging Phenotypes with Prognostic Implications. Radiology, 2018, 286, 307-315.	3.6	140
24	Radiomics in Brain Tumor: Image Assessment, Quantitative Feature Descriptors, and Machine-Learning Approaches. American Journal of Neuroradiology, 2018, 39, 208-216.	1.2	281
25	Quantitative Image Feature Engine (QIFE): an Open-Source, Modular Engine for 3D Quantitative Feature Extraction from Volumetric Medical Images. Journal of Digital Imaging, 2018, 31, 403-414.	1.6	39
26	A radiogenomic dataset of non-small cell lung cancer. Scientific Data, 2018, 5, 180202.	2.4	167
27	Quantitative imaging of cancer in the postgenomic era: Radio(geno)mics, deep learning, and habitats. Cancer, 2018, 124, 4633-4649.	2.0	125
28	Magnetic resonance imaging and molecular features associated with tumor-infiltrating lymphocytes in breast cancer. Breast Cancer Research, 2018, 20, 101.	2.2	44
29	*GFPT2*-Expressing Cancer-Associated Fibroblasts Mediate Metabolic Reprogramming in Human Lung Adenocarcinoma. Cancer Research, 2018, 78, 3445-3457.	0.4	75
30	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. IEEE Transactions on Medical Imaging, 2018, 37, 2514-2525.	5.4	926
31	Radiogenomics is the future of treatment response assessment in clinical oncology. Medical Physics, 2018, 45, 4325-4328.	1.6	8
32	Adaptive local window for level set segmentation of CT and MRI liver lesions. Medical Image Analysis, 2017, 37, 46-55.	7.0	59
33	Predictive radiogenomics modeling of EGFR mutation status in lung cancer. Scientific Reports, 2017, 7, 41674.	1.6	124
34	Variations in the functional visual field for detection of lung nodules on chest computed tomography: Impact of nodule size, distance, and local lung complexity. Medical Physics, 2017, 44, 3483-3490.	1.6	15
35	Heterogeneous Enhancement Patterns of Tumor-adjacent Parenchyma at MR Imaging Are Associated with Dysregulated Signaling Pathways and Poor Survival in Breast Cancer. Radiology, 2017, 285, 401-413.	3.6	92
36	Noninvasive radiomics signature based on quantitative analysis of computed tomography images as a surrogate for microvascular invasion in hepatocellular carcinoma: a pilot study. Journal of Medical Imaging, 2017, 4, 1.	0.8	57

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37	Prediction of EGFR and KRAS mutation in non-small cell lung cancer using quantitative 18F FDG-PET/CT metrics. Oncotarget, 2017, 8, 52792-52801.	0.8	32
38	Radiomics of Lung Nodules: A Multi-Institutional Study of Robustness and Agreement of Quantitative Imaging Features. Tomography, 2016, 2, 430-437.	0.8	108
39	A Rapid Segmentation-Insensitive "Digital Biopsy" Method for Radiomic Feature Extraction: Method and Pilot Study Using CT Images of Non–Small Cell Lung Cancer. Tomography, 2016, 2, 283-294.	0.8	20
40	Robust Intratumor Partitioning to Identify High-Risk Subregions in Lung Cancer: A Pilot Study. International Journal of Radiation Oncology Biology Physics, 2016, 95, 1504-1512.	0.4	71
41	A Comparison of Lung Nodule Segmentation Algorithms: Methods and Results from a Multi-institutional Study. Journal of Digital Imaging, 2016, 29, 476-487.	1.6	68
42	Special Section Guest Editorial:Radiomics and Imaging Genomics: Quantitative Imaging for Precision Medicine. Journal of Medical Imaging, 2015, 2, 041001.	0.8	17
43	Core samples for radiomics features that are insensitive to tumor segmentation: method and pilot study using CT images of hepatocellular carcinoma. Journal of Medical Imaging, 2015, 2, 041011.	0.8	50
44	Characterizing Search, Recognition, and Decision in the Detection of Lung Nodules on CT Scans: Elucidation with Eye Tracking. Radiology, 2015, 274, 276-286.	3.6	77
45	Content-based image retrieval in radiology: analysis of variability in human perception of similarity. Journal of Medical Imaging, 2015, 2, 025501.	0.8	12
46	Magnetic resonance image features identify glioblastoma phenotypic subtypes with distinct molecular pathway activities. Science Translational Medicine, 2015, 7, 303ra138.	5.8	227
47	NCI Workshop Report: Clinical and Computational Requirements for Correlating Imaging Phenotypes with Genomics Signatures. Translational Oncology, 2014, 7, 556-569.	1.7	69
48	A hierarchical knowledge-based approach for retrieving similar medical images described with semantic annotations. Journal of Biomedical Informatics, 2014, 49, 227-244.	2.5	33
49	Glioblastoma Multiforme: Exploratory Radiogenomic Analysis by Using Quantitative Image Features. Radiology, 2014, 273, 168-174.	3.6	265
50	Predicting Visual Semantic Descriptive Terms From Radiological Image Data: Preliminary Results With Liver Lesions in CT. IEEE Transactions on Medical Imaging, 2014, 33, 1669-1676.	5.4	40
51	On combining image-based and ontological semantic dissimilarities for medical image retrieval applications. Medical Image Analysis, 2014, 18, 1082-1100.	7.0	40
52	CT Angiography after 20 Years: A Transformation in Cardiovascular Disease Characterization Continues to Advance. Radiology, 2014, 271, 633-652.	3.6	98
53	Modeling Perceptual Similarity Measures in CT Images of Focal Liver Lesions. Journal of Digital Imaging, 2013, 26, 714-720.	1.6	7
54	Quantifying the margin sharpness of lesions on radiological images for content‐based image retrieval. Medical Physics, 2012, 39, 5405-5418.	1.6	28

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55	Accuracy of a Remote Eye Tracker for Radiologic Observer Studies. Academic Radiology, 2012, 19, 196-202.	1.3	8
56	Prognostic PET 18F-FDG Uptake Imaging Features Are Associated with Major Oncogenomic Alterations in Patients with Resected Non–Small Cell Lung Cancer. Cancer Research, 2012, 72, 3725-3734.	0.4	111
57	Non–Small Cell Lung Cancer: Identifying Prognostic Imaging Biomarkers by Leveraging Public Gene Expression Microarray Data—Methods and Preliminary Results. Radiology, 2012, 264, 387-396.	3.6	384
58	A Comprehensive Descriptor of Shape: Method and Application to Content-Based Retrieval of Similar Appearing Lesions in Medical Images. Journal of Digital Imaging, 2012, 25, 121-128.	1.6	27
59	On the Feasibility of Predicting Radiological Observations from Computational Imaging Features of Liver Lesions in CT Scans. , 2011, , .		9
60	Content-Based Image Retrieval in Radiology: Current Status and Future Directions. Journal of Digital Imaging, 2011, 24, 208-222.	1.6	321
61	Managing Biomedical Image Metadata for Search and Retrieval of Similar Images. Journal of Digital Imaging, 2011, 24, 739-748.	1.6	29
62	Automated Tracing of the Adventitial Contour of Aortoiliac and Peripheral Arterial Walls in CT Angiography (CTA) to Allow Calculation of Non-calcified Plaque Burden. Journal of Digital Imaging, 2011, 24, 1078-1086.	1.6	6
63	Automated temporal tracking and segmentation of lymphoma on serial CT examinations. Medical Physics, 2011, 38, 5879-5886.	1.6	15
64	Computer-aided detection (CAD) of lung nodules in CT scans: radiologist performance and reading time with incremental CAD assistance. European Radiology, 2010, 20, 549-557.	2.3	62
65	Assessing operating characteristics of CAD algorithms in the absence of a gold standard. Medical Physics, 2010, 37, 1788-1795.	1.6	5
66	Automated Quantification of Aortoaortic and Aortoiliac Angulation for Computed Tomographic Angiography of Abdominal Aortic Aneurysms before Endovascular Repair: Preliminary Study. Journal of Vascular and Interventional Radiology, 2010, 21, 1746-1750.	0.2	7
67	Uncluttered single–image visualization of the abdominal aortic vessel tree: Method and evaluation. Medical Physics, 2009, 36, 5245-5260.	1.6	7
68	Dual-energy CT Discrimination of Iodine and Calcium. Academic Radiology, 2009, 16, 160-171.	1.3	82
69	Lower Extremity CT Angiography (CTA). Academic Radiology, 2009, 16, 646-653.	1.3	8
70	Learning-enhanced simulated annealing: method, evaluation, and application to lung nodule registration. Applied Intelligence, 2008, 28, 83-99.	3.3	12
71	Adaptive border marching algorithm: Automatic lung segmentation on chest CT images. Computerized Medical Imaging and Graphics, 2008, 32, 452-462.	3.5	164
72	Semiautomated Quantification of the Mass and Distribution of Vascular Calcification with Multidetector CT: Method and Evaluation. Radiology, 2008, 247, 241-250.	3.6	8

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73	An improved algorithm for femoropopliteal artery centerline restoration using prior knowledge of shapes and image space data. Medical Physics, 2008, 35, 3372-3382.	1.6	1
74	Improved Speed of Bone Removal in Computed Tomographic Angiography Using Automated Targeted Morphological Separation. Journal of Computer Assisted Tomography, 2008, 32, 485-491.	0.5	6
75	Femoropopliteal artery centerline interpolation using contralateral shape. Medical Physics, 2007, 34, 3428-3435.	1.6	3
76	A directional distance aided method for medical image segmentation. Medical Physics, 2007, 34, 4962-4976.	1.6	1
77	Transparent Rendering of Intraluminal Contrast for 3D Polyp Visualization at CT Colonography. Journal of Computer Assisted Tomography, 2007, 31, 773-779.	0.5	0
78	Registration of lung nodules using a semi-rigid model: Method and preliminary results. Medical Physics, 2007, 34, 613-626.	1.6	10
79	Polyp Enhancing Level Set Evolution of Colon Wall: Method and Pilot Study. IEEE Transactions on Medical Imaging, 2007, 26, 1649-1656.	5.4	23
80	Knowledge-based interpolation of curves: Application to femoropopliteal arterial centerline restoration. Medical Image Analysis, 2007, 11, 157-168.	7.0	7
81	CT Colonography: Influence of 3D Viewing and Polyp Candidate Features on Interpretation with Computer-aided Detection. Radiology, 2006, 239, 768-776.	3.6	26
82	An abdominal aortic aneurysm segmentation method: Level set with region and statistical information. Medical Physics, 2006, 33, 1440-1453.	1.6	60
83	Targeted 2D/3D registration using ray normalization and a hybrid optimizer. Medical Physics, 2006, 33, 4730-4738.	1.6	16
84	"Flying through" and "flying around" a PET/CT scan: Pilot study and development of 3D integrated 18F-FDG PET/CT for virtual bronchoscopy and colonoscopy. Journal of Nuclear Medicine, 2006, 47, 1081-7.	2.8	19
85	Pulmonary Nodules on Multi–Detector Row CT Scans: Performance Comparison of Radiologists and Computer-aided Detection. Radiology, 2005, 234, 274-283.	3.6	244
86	Alternative Input Devices for Efficient Navigation of Large CT Angiography Data Sets. Radiology, 2005, 234, 391-398.	3.6	24
87	Registration of central paths and colonic polyps between supine and prone scans in computed tomography colonography: Pilot study. Medical Physics, 2004, 31, 2912-2923.	1.6	42
88	Automatic detection and classification of hypodense hepatic lesions on contrast-enhanced venous-phase CT. Medical Physics, 2004, 31, 2584-2593.	1.6	56
89	Surface Normal Overlap: A Computer-Aided Detection Algorithm With Application to Colonic Polyps and Lung Nodules in Helical CT. IEEE Transactions on Medical Imaging, 2004, 23, 661-675.	5.4	221
90	Computed Tomography Colonography. Journal of Computer Assisted Tomography, 2004, 28, 318-326.	0.5	64

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91	Semiautomated segmentation of blood vessels using ellipse-overlap criteria: Method and comparison to manual editing. Medical Physics, 2003, 30, 2572-2583.	1.6	0
92	CT colonography: Does improvedzresolution help computer-aided polyp detection?. Medical Physics, 2003, 30, 2663-2674.	1.6	9
93	Curved-Slab Maximum Intensity Projection: Method and Evaluation. Radiology, 2003, 229, 255-260.	3.6	28
94	Quantification of Distention in CT Colonography: Development and Validation of Three Computer Algorithms. Radiology, 2002, 222, 543-554.	3.6	11
95	Automated Generation of Curved Planar Reformations from Volume Data: Method and Evaluation. Radiology, 2002, 223, 275-280.	3.6	51
96	Carotid Disease: Automated Analysis with Cardiac-gated Three-dimensional US—Technique and Preliminary Results. Radiology, 2002, 222, 560-563.	3.6	6
97	Edge displacement field-based classification for improved detection of polyps in CT colonography. IEEE Transactions on Medical Imaging, 2002, 21, 1461-1467.	5.4	86
98	Prediction of Aortoiliac Stent-Graft Length: Comparison of Measurement Methods. Radiology, 2001, 220, 475-483.	3.6	37
99	Cost Identification of Abdominal Aortic Aneurysm Imaging by Using Time and Motion Analyses. Radiology, 2000, 215, 63-70.	3.6	45
100	Stair-Step Artifacts with Single versus Multiple Detector-Row Helical CT. Radiology, 2000, 216, 185-196.	3.6	95
101	Automated Polyp Detector for CT Colonography: Feasibility Study. Radiology, 2000, 216, 284-290.	3.6	214
102	Computed tomography and magnetic resonance colonography (Virtual colonoscopy). Techniques in Gastrointestinal Endoscopy, 2000, 2, 30-36.	0.3	2
103	Visualization Modes for CT Colonography Using Cylindrical and Planar Map Projections. Journal of Computer Assisted Tomography, 2000, 24, 179-188.	0.5	81
104	Display Modes for CT Colonography. Radiology, 1999, 212, 195-201.	3.6	35
105	Display Modes for CT Colonography. Radiology, 1999, 212, 203-212.	3.6	117
106	Spatially varying longitudinal aliasing and resolution in spiral computed tomography. Medical Physics, 1999, 26, 2617-2625.	1.6	22
107	Modeling of polychromatic attenuation using computed tomography reconstructed images. Medical Physics, 1999, 26, 631-642.	1.6	20
108	Fast 3D Cardiac Cine MR Imaging. Journal of Magnetic Resonance Imaging, 1999, 9, 751-755.	1.9	39

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109	Automated flight path planning for virtual endoscopy. Medical Physics, 1998, 25, 629-637.	1.6	145
110	A new frame-based registration algorithm. Medical Physics, 1998, 25, 121-128.	1.6	6
111	Detection of Colonic Polyps in a Phantom Model: Implications for Virtual Colonoscopy Data Acquisition. Journal of Computer Assisted Tomography, 1998, 22, 656-663.	0.5	45
112	Virtual Endoscopy of the Paranasal Sinuses Using Perspective Volume Rendered Helical Sinus Computed Tomography. Laryngoscope, 1997, 107, 25-29.	1.1	59
113	Comparison and Evaluation of Retrospective Intermodality Brain Image Registration Techniques. Journal of Computer Assisted Tomography, 1997, 21, 554-568.	0.5	743
114	Mr geometric distortion correction for improved frame-based stereotaxic target localization accuracy. Magnetic Resonance in Medicine, 1995, 34, 106-113.	1.9	52
115	Registration error quantification of a surface-based multimodality image fusion system. Medical Physics, 1995, 22, 1049-1056.	1.6	34
116	A Versatile System for Multimodality Image Fusion. Computer Aided Surgery, 1995, 1, 35-45.	1.8	2
117	Method for Correcting Magnetic Resonance Image Distortion for Frame-Based Stereotactic Surgery, with Preliminary Results. Computer Aided Surgery, 1995, 1, 151-157.	1.8	1
118	A versatile system for multimodality image fusion. Journal of Image Guided Surgery, 1995, 1, 35-45.	0.4	9
119	Method for correcting magnetic resonance image distortion for frame-based stereotactic surgery, with preliminary results. Journal of Image Guided Surgery, 1995, 1, 151-157.	0.4	19
120	Quantifying MRI geometric distortion in tissue. Magnetic Resonance in Medicine, 1994, 31, 40-47.	1.9	125
121	Characterization of Spatial Distortion in Magnetic Resonance Imaging and Its Implications for Stereotactic Surgery. Neurosurgery, 1994, 35, 696-704.	0.6	257
122	Single Breath-Hold Pulmonary Magnetic Resonance Angiography. Investigative Radiology, 1994, 29, 766-772.	3.5	21
123	Noise reduction in three-dimensional phase-contrast MR velocity measurementsl. Journal of Magnetic Resonance Imaging, 1993, 3, 587-596.	1.9	45
124	Artifacts and illusions in surface and volume rendering. , 1992, , .		1
125	Visualizing three-dimensional flow with simulated streamlines and three-dimensional phase-contrast MR imaging. Journal of Magnetic Resonance Imaging, 1992, 2, 143-153.	1.9	103
126	Fast Fourier projection for MR angiography. Magnetic Resonance in Medicine, 1991, 19, 393-405.	1.9	19

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127	Measurement of Cardiac Output by Computed Transmission Tomography. Investigative Radiology, 1982, 17, 550-553.	3.5	16
128	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. , 0, .		1