Yoganand Balagurunathan

List of Publications by Year
in descending order

95 papers	7,168 citations	117625 34 h-index	62596 80 g-index
99 all docs	99 docs citations	99 times ranked	10284 citing authors

#	Article	IF	Citations
1	Radiomics: the process and the challenges. Magnetic Resonance Imaging, 2012, 30, 1234-1248.	1.8	1,675
2	Acidity Generated by the Tumor Microenvironment Drives Local Invasion. Cancer Research, 2013, 73, 1524-1535.	0.9	1,036
3	Intrinsic dependencies of <scp>CT</scp> radiomic features on voxel size and number of gray levels. Medical Physics, 2017, 44, 1050-1062.	3.0	428
4	Radiomic Features Are Associated With EGFR Mutation Status in Lung Adenocarcinomas. Clinical Lung Cancer, 2016, 17, 441-448.e6.	2.6	264
5	Reproducibility and Prognosis of Quantitative Features Extracted from CT Images. Translational Oncology, 2014, 7, 72-87.	3.7	258
6	Predicting Malignant Nodules from Screening CT Scans. Journal of Thoracic Oncology, 2016, 11, 2120-2128.	1.1	226
7	Testâ€"Retest Reproducibility Analysis of Lung CT Image Features. Journal of Digital Imaging, 2014, 27, 805-823.	2.9	216
8	Quantitative Computed Tomographic Descriptors Associate Tumor Shape Complexity and Intratumor Heterogeneity with Prognosis in Lung Adenocarcinoma. PLoS ONE, 2015, 10, e0118261.	2.5	207
9	CT Features Associated with Epidermal Growth Factor Receptor Mutation Status in Patients with Lung Adenocarcinoma. Radiology, 2016, 280, 271-280.	7.3	180
10	Estrogen induces apoptosis in estrogen deprivation-resistant breast cancer through stress responses as identified by global gene expression across time. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18879-18886.	7.1	151
11	High metabolic tumor volume is associated with decreased efficacy of axicabtagene ciloleucel in large B-cell lymphoma. Blood Advances, 2020, 4, 3268-3276.	5.2	134
12	Deep Feature Transfer Learning in Combination with Traditional Features Predicts Survival among Patients with Lung Adenocarcinoma. Tomography, 2016, 2, 388-395.	1.8	128
13	Comparison of Established and Emerging Biodosimetry Assays. Radiation Research, 2013, 180, 111-119.	1.5	123
14	Prostate cancer radiomics and the promise of radiogenomics. Translational Cancer Research, 2016, 5, 432-447.	1.0	111
15	Defining Cancer Subpopulations by Adaptive Strategies Rather Than Molecular Properties Provides Novel Insights into Intratumoral Evolution. Cancer Research, 2017, 77, 2242-2254.	0.9	110
16	Radiomics of Lung Nodules: A Multi-Institutional Study of Robustness and Agreement of Quantitative Imaging Features. Tomography, 2016, 2, 430-437.	1.8	108
17	Predicting Outcomes of Nonsmall Cell Lung Cancer Using CT Image Features. IEEE Access, 2014, 2, 1418-1426.	4.2	104
18	Acidity promotes tumour progression by altering macrophage phenotype in prostate cancer. British Journal of Cancer, 2019, 121, 556-566.	6.4	86

#	Article	IF	Citations
19	Radiologically Defined Ecological Dynamics and Clinical Outcomes in Glioblastoma Multiforme: Preliminary Results. Translational Oncology, 2014, 7, 5-13.	3.7	82
20	Radiological Image Traits Predictive of Cancer Status in Pulmonary Nodules. Clinical Cancer Research, 2017, 23, 1442-1449.	7.0	76
21	Laboratory Intercomparison of Gene Expression Assays. Radiation Research, 2013, 180, 138-148.	1.5	74
22	Intermittent Hypoxia Selects for Genotypes and Phenotypes That Increase Survival, Invasion, and Therapy Resistance. PLoS ONE, 2015, 10, e0120958.	2.5	65
23	CT imaging features associated with recurrence in non-small cell lung cancer patients after stereotactic body radiotherapy. Radiation Oncology, 2017, 12, 158.	2.7	63
24	Epigenetic Transdifferentiation of Normal Melanocytes by a Metastatic Melanoma Microenvironment. Cancer Research, 2005, 65, 10164-10169.	0.9	61
25	Standardization in Quantitative Imaging: A Multicenter Comparison of Radiomic Features from Different Software Packages on Digital Reference Objects and Patient Data Sets. Tomography, 2020, 6, 118-128.	1.8	61
26	Linc-ing Circulating Long Non-coding RNAs to the Diagnosis and Malignant Prediction of Intraductal Papillary Mucinous Neoplasms of the Pancreas. Scientific Reports, 2017, 7, 10484.	3.3	60
27	Radiologic Features of Small Pulmonary Nodules and Lung Cancer Risk in the National Lung Screening Trial: A Nested Case-Control Study. Radiology, 2018, 286, 298-306.	7.3	58
28	Unraveling gene-gene interactions regulated by ligands of the aryl hydrocarbon receptor.. Environmental Health Perspectives, 2004, 112, 403-412.	6.0	54
29	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.	16.0	54
30	Imaging features from pretreatment <scp>CT</scp> scans are associated with clinical outcomes in nonsmallâ€cell lung cancer patients treated with stereotactic body radiotherapy. Medical Physics, 2017, 44, 4341-4349.	3.0	53
31	Delineation of Tumor Habitats based on Dynamic Contrast Enhanced MRI. Scientific Reports, 2017, 7, 9746.	3.3	48
32	Peritumoral and intratumoral radiomic features predict survival outcomes among patients diagnosed in lung cancer screening. Scientific Reports, 2020, 10, 10528.	3.3	46
33	Differences in Patient Outcomes of Prevalence, Interval, and Screen-Detected Lung Cancers in the CT Arm of the National Lung Screening Trial. PLoS ONE, 2016, 11, e0159880.	2.5	46
34	Simulation of cDNA microarrays via a parameterized random signal model. Journal of Biomedical Optics, 2002, 7, 507.	2.6	44
35	Integrated Biomarkers for the Management of Indeterminate Pulmonary Nodules. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 1306-1316.	5.6	36
36	Quantitative Imaging features Improve Discrimination of Malignancy in Pulmonary nodules. Scientific Reports, 2019, 9, 8528.	3.3	35

#	Article	IF	Citations
37	Genomic profiles and predictive biological networks in oxidant-induced atherogenesis. Physiological Genomics, 2003, 13, 263-275.	2.3	34
38	Multiphase computed tomography radiomics of pancreatic intraductal papillary mucinous neoplasms to predict malignancy. World Journal of Gastroenterology, 2020, 26, 3458-3471.	3.3	34
39	Requirements and reliability of AI in the medical context. Physica Medica, 2021, 83, 72-78.	0.7	30
40	Multiparameter MRI Predictors of Long-Term Survival in Glioblastoma Multiforme. Tomography, 2019, 5, 135-144.	1.8	28
41	Delta radiomic features improve prediction for lung cancer incidence: A nested caseâ€“control analysis of the National Lung Screening Trial. Cancer Medicine, 2018, 7, 6340-6356.	2.8	27
42	Mechanisms of buffer therapy resistance. Neoplasia, 2014, 16, 354-364.e3.	5.3	26
43	Radial gradient and radial deviation radiomic features from pre-surgical CT scans are associated with survival among lung adenocarcinoma patients. Oncotarget, 2017, 8, 96013-96026.	1.8	26
44	Prediction of pathological nodal involvement by <scp>CT</scp>â€based Radiomic features of the primary tumor in patients with clinically nodeâ€negative peripheral lung adenocarcinomas. Medical Physics, 2018, 45, 2518-2526.	3.0	26
45	Gene expression profiling-based identification of cell-surface targets for developing multimeric ligands in pancreatic cancer. Molecular Cancer Therapeutics, 2008, 7, 3071-3080.	4.1	25
46	Explaining Deep Features Using Radiologist-Defined Semantic Features and Traditional Quantitative Features. Tomography, 2019, 5, 192-200.	1.8	24
47	Noise factor analysis for cDNA microarrays. Journal of Biomedical Optics, 2004, 9, 663.	2.6	21
48	Comparison Between Radiological Semantic Features and Lung-RADS in Predicting Malignancy of Screen-Detected Lung Nodules in the National Lung Screening Trial. Clinical Lung Cancer, 2018, 19, 148-156.e3.	2.6	20
49	Predicting clinically significant prostate cancer using DCE-MRI habitat descriptors. Oncotarget, 2018, 9, 37125-37136.	1.8	20
50	¹⁸F-FDG PET/CT Habitat Radiomics Predicts Outcome of Patients with Cervical Cancer Treated with Chemoradiotherapy. Radiology: Artificial Intelligence, 2020, 2, e190218.	5.8	19
51	Multi-window CT based Radiomic signatures in differentiating indolent versus aggressive lung cancers in the National Lung Screening Trial: a retrospective study. Cancer Imaging, 2019, 19, 45.	2.8	18
52	Association Between Computed Tomographic Features and Kirsten Rat Sarcoma Viral Oncogene Mutations in Patients With Stage I Lung Adenocarcinoma and Their Prognostic Value. Clinical Lung Cancer, 2016, 17, 271-278.	2.6	17
53	Semiâ€automated pulmonary nodule interval segmentation using the <scp>NLST</scp> data. Medical Physics, 2018, 45, 1093-1107.	3.0	17
54	Quantitative Measures of Background Parenchymal Enhancement Predict Breast Cancer Risk. American Journal of Roentgenology, 2021, 217, 64-75.	2.2	17

#	Article	IF	Citations
55	Radiomic biomarkers from PET/CT multi-modality fusion images for the prediction of immunotherapy response in advanced non-small cell lung cancer patients. , 2018, , .		16
56	Normalization Benefits Microarray-Based Classification. Eurasip Journal on Bioinformatics and Systems Biology, 2006, 2006, 1-13.	1.4	14
57	Lung Nodule Malignancy Prediction in Sequential CT Scans: Summary of ISBI 2018 Challenge. IEEE Transactions on Medical Imaging, 2021, 40, 3748-3761.	8.9	13
58	Perfusion MR Imaging of Breast Cancer: Insights Using â€œHabitat Imagingâ€• Radiology, 2018, 288, 36-37.	7.3	12
59	Habitats in DCE-MRI to Predict Clinically Significant Prostate Cancers. Tomography, 2019, 5, 68-76.	1.8	12
60	Application of image-based granulometry to siliceous and calcareous estuarine and marine sediments. Estuarine, Coastal and Shelf Science, 2003, 58, 227-239.	2.1	10
61	Morphological quantification of surface roughness. Optical Engineering, 2003, 42, 1795.	1.0	10
62	Repeatability of Quantitative Imaging Features in Prostate Magnetic Resonance Imaging. Frontiers in Oncology, 2020, 10, 551.	2.8	9
63	Radiological semantics discriminate clinically significant grade prostate cancer. Cancer Imaging, 2019, 19, 81.	2.8	7
64	MORPHOLOGICAL GRANULOMETRIC ANALYSIS OF SEDIMENT IMAGES. Image Analysis and Stereology, 2001, 20, 87.	0.9	7
65	Insight into redox-regulated gene networks in vascular cells. Bioinformation, 2007, 1, 379-383.	0.5	7
66	Improving malignancy prediction through feature selection informed by nodule size ranges in NLST. , 2016, 2016, 001939-1944.		5
67	MO-DE-207B-04: Impact of Reconstruction Field of View On Radiomics Features in Computed Tomography (CT) Using a Texture Phantom. Medical Physics, 2016, 43, 3705-3705.	3.0	5
68	Granulometric parametric estimation for the random Boolean model using optimal linear filters and optimal structuring elements. Pattern Recognition Letters, 2003, 24, 283-293.	4.2	4
69	Radiomics of lung cancer. Journal of Thoracic Oncology, 2016, 11, S5-S6.	1.1	4
70	Volume doubling time and radiomic features predict tumor behavior of screen-detected lung cancers. Cancer Biomarkers, 2022, 33, 489-501.	1.7	4
71	Identification of Pancreatic Cancer-Specific Cell-Surface Markers for Development of Targeting Ligands. Methods in Molecular Biology, 2010, 624, 195-210.	0.9	3
72	P1.01-041 Quantitative Imaging Features Predict Response of Immunotherapy in Non-Small Cell Lung Cancer Patients. Journal of Thoracic Oncology, 2017, 12, S474-S475.	1.1	3

#	Article	IF	Citations
73	Multi-Window CT Based Radiological Traits for Improving Early Detection in Lung Cancer Screening . Cancer Management and Research, 2020, Volume 12, 12225-12238.	1.9	3
74	Asymptotic joint normality of the granulometric moments. Pattern Recognition Letters, 2001, 22, 1537-1543.	4.2	2
75	Optimal linear granulometric estimation for random sets. Pattern Recognition, 2002, 35, 1315-1325.	8.1	2
76	A pilot study of radiologic measures of abdominal adiposity: weighty contributors to early pancreatic carcinogenesis worth evaluating?. Cancer Biology and Medicine, 2017, 14, 66-73.	3.0	2
77	Representation of Deep Features using Radiologist defined Semantic Features. , 2018, 2018, .		2
78	Semiautomated Measure of Abdominal Adiposity Using Computed Tomography Scan Analysis. Journal of Surgical Research, 2019, 237, 12-21.	1.6	2
79	Quantitative imaging features to predict cancer status in lung nodules. , 2016, , .		1
80	Diagnostic and predictive quantitative-imaging features in lung cancer screening. Journal of Thoracic Oncology, 2016, 11, S41-S42.	1.1	1
81	PUB063 Epidemiologic and Radiomic Analysis of Hyperprogressers of Lung Cancer Patients Treated with Immunotherapy. Journal of Thoracic Oncology, 2017, 12, S2386.	1.1	1
82	OA02.08 Peritumoral and Intratumoral Radiomic Features Identify Aggressive Screen-Detected Early-Stage Lung Cancers. Journal of Thoracic Oncology, 2019, 14, S1130.	1.1	1
83	Abstract 3250: Survival of patients with incident lung cancer following screening by computed tomography in the National Lung Screening Trial. , 2014, , .		1
84	‹title›Random signal model for cDNA microarrays‹/title›. , 2001, 4266, 163.		0
85	Effect of normalization on microarray-based classification. , 2006, , .		0
86	siRNA screening: A process model to evaluate hit rate discovery. , 2008, , .		0
87	Change descriptors for determining nodule malignancy in national lung screening trial CT screening images. , 2016, , .		0
88	Performance comparison of quantitative semantic features and lung-RADS in the National Lung Screening Trial. , 2016, , .		0
89	P1.03-063 Quantitative Imaging Features Predict Incidence Lung Cancer in Low-Dose Computed Tomography (LDCT) Screening. Journal of Thoracic Oncology, 2017, 12, S582.	1.1	0
90	Abstract 2744: Loss of VAV3 expression as a novel biomarker and indicator of chemosensitivity in basal-like breast cancer. , 2010, , .		0

#	Article	IF	Citations
91	Abstract P2-09-23: Investigating VAV3 Expression as a Novel Biomarker and Indicator of Chemosensitivity in Basal-Like Breast Cancer. , 2010, , .		0
92	SU-E-QI-17: Dependence of 3D/4D PET Quantitative Image Features On Noise. Medical Physics, 2014, 41, 380-380.	3.0	0
93	SU-E-QI-16: Reproducibility of Computed Tomography Quantitative Structural Features Using the FDA Thoracic Phantom Image Database. Medical Physics, 2014, 41, 380-380.	3.0	0
94	Abstract 3634: PET/CT imaging prediction of response to checkpoint blockade in advanced non-small cell lung cancer patients. , 2018, , .		0
95	Abstract B10: Radiomics signatures on the region defined by using multi-window CT to improve detection lung cancer screening. , 2018, , .		0