Robert J Gillies

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6648917/publications.pdf

Version: 2024-02-01

185 papers 42,447 citations

74 h-index 176 g-index

207 all docs

207 docs citations

times ranked

207

39715 citing authors

#	Article	IF	CITATIONS
1	Radiomics: Images Are More than Pictures, They Are Data. Radiology, 2016, 278, 563-577.	3.6	5,341
2	Why do cancers have high aerobic glycolysis?. Nature Reviews Cancer, 2004, 4, 891-899.	12.8	4,181
3	Radiomics: Extracting more information from medical images using advanced feature analysis. European Journal of Cancer, 2012, 48, 441-446.	1.3	3,846
4	Decoding tumour phenotype by noninvasive imaging using a quantitative radiomics approach. Nature Communications, 2014, 5, 4006.	5.8	3,355
5	The Image Biomarker Standardization Initiative: Standardized Quantitative Radiomics for High-Throughput Image-based Phenotyping. Radiology, 2020, 295, 328-338.	3.6	1,869
6	Radiomics: the process and the challenges. Magnetic Resonance Imaging, 2012, 30, 1234-1248.	1.0	1,675
7	Acidity Generated by the Tumor Microenvironment Drives Local Invasion. Cancer Research, 2013, 73, 1524-1535.	0.4	1,036
8	Artificial intelligence in cancer imaging: Clinical challenges and applications. Ca-A Cancer Journal for Clinicians, 2019, 69, 127-157.	157.7	965
9	Imaging biomarker roadmap for cancer studies. Nature Reviews Clinical Oncology, 2017, 14, 169-186.	12.5	792
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10	Adaptive Therapy. Cancer Research, 2009, 69, 4894-4903.	0.4	701
10	Adaptive Therapy. Cancer Research, 2009, 69, 4894-4903. Acid-Mediated Tumor Invasion: a Multidisciplinary Study. Cancer Research, 2006, 66, 5216-5223.	0.4	701 674
11	Acid-Mediated Tumor Invasion: a Multidisciplinary Study. Cancer Research, 2006, 66, 5216-5223.	0.4	674
11 12	Acid-Mediated Tumor Invasion: a Multidisciplinary Study. Cancer Research, 2006, 66, 5216-5223. A microenvironmental model of carcinogenesis. Nature Reviews Cancer, 2008, 8, 56-61. Bicarbonate Increases Tumor pH and Inhibits Spontaneous Metastases. Cancer Research, 2009, 69,	0.4	674 651
11 12 13	Acid-Mediated Tumor Invasion: a Multidisciplinary Study. Cancer Research, 2006, 66, 5216-5223. A microenvironmental model of carcinogenesis. Nature Reviews Cancer, 2008, 8, 56-61. Bicarbonate Increases Tumor pH and Inhibits Spontaneous Metastases. Cancer Research, 2009, 69, 2260-2268. Evolutionary dynamics of carcinogenesis and why targeted therapy does not work. Nature Reviews	0.4	674 651 574
11 12 13	Acid-Mediated Tumor Invasion: a Multidisciplinary Study. Cancer Research, 2006, 66, 5216-5223. A microenvironmental model of carcinogenesis. Nature Reviews Cancer, 2008, 8, 56-61. Bicarbonate Increases Tumor pH and Inhibits Spontaneous Metastases. Cancer Research, 2009, 69, 2260-2268. Evolutionary dynamics of carcinogenesis and why targeted therapy does not work. Nature Reviews Cancer, 2012, 12, 487-493. Hypoxia: Importance in tumor biology, noninvasive measurement by imaging, and value of its measurement in the management of cancer therapy. International Journal of Radiation Biology, 2006,	0.4 12.8 0.4	674 651 574 573
11 12 13 14	Acid-Mediated Tumor Invasion: a Multidisciplinary Study. Cancer Research, 2006, 66, 5216-5223. A microenvironmental model of carcinogenesis. Nature Reviews Cancer, 2008, 8, 56-61. Bicarbonate Increases Tumor pH and Inhibits Spontaneous Metastases. Cancer Research, 2009, 69, 2260-2268. Evolutionary dynamics of carcinogenesis and why targeted therapy does not work. Nature Reviews Cancer, 2012, 12, 487-493. Hypoxia: Importance in tumor biology, noninvasive measurement by imaging, and value of its measurement in the management of cancer therapy. International Journal of Radiation Biology, 2006, 82, 699-757. Causes and Consequences of Increased Glucose Metabolism of Cancers. Journal of Nuclear Medicine,	0.4 12.8 0.4 12.8	674 651 574 573

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19	pH sensing and regulation in cancer. Frontiers in Physiology, 2013, 4, 370.	1.3	443
20	Deep learning for lung cancer prognostication: A retrospective multi-cohort radiomics study. PLoS Medicine, 2018, 15, e1002711.	3.9	385
21	Quantitative Imaging in Cancer Evolution and Ecology. Radiology, 2013, 269, 8-14.	3.6	354
22	Stability of FDG-PET Radiomics features: An integrated analysis of test-retest and inter-observer variability. Acta $Oncol\tilde{A}^3$ gica, 2013, 52, 1391-1397.	0.8	353
23	The effect of SUV discretization in quantitative FDG-PET Radiomics: the need for standardized methodology in tumor texture analysis. Scientific Reports, 2015, 5, 11075.	1.6	318
24	Somatic Mutations Drive Distinct Imaging Phenotypes in Lung Cancer. Cancer Research, 2017, 77, 3922-3930.	0.4	307
25	Radiomics in Brain Tumor: Image Assessment, Quantitative Feature Descriptors, and Machine-Learning Approaches. American Journal of Neuroradiology, 2018, 39, 208-216.	1.2	281
26	Systems analysis of intracellular pH vulnerabilities for cancer therapy. Nature Communications, 2018, 9, 2997.	5.8	277
27	Radiomic Features Are Associated With EGFR Mutation Status in Lung Adenocarcinomas. Clinical Lung Cancer, 2016, 17, 441-448.e6.	1.1	264
28	Exploiting evolutionary principles to prolong tumor control in preclinical models of breast cancer. Science Translational Medicine, 2016, 8, 327ra24.	5.8	260
29	Reproducibility and Prognosis of Quantitative Features Extracted from CT Images. Translational Oncology, 2014, 7, 72-87.	1.7	258
30	Defining the biological basis of radiomic phenotypes in lung cancer. ELife, 2017, 6, .	2.8	258
31	Impact of Metabolic Heterogeneity on Tumor Growth, Invasion, and Treatment Outcomes. Cancer Research, 2015, 75, 1567-1579.	0.4	256
32	The role of carbonic anhydrase IX in cancer development: links to hypoxia, acidosis, and beyond. Cancer and Metastasis Reviews, 2019, 38, 65-77.	2.7	252
33	The Biological Meaning of Radiomic Features. Radiology, 2021, 298, 505-516.	3.6	242
34	Causes and Effects of Heterogeneous Perfusion in Tumors. Neoplasia, 1999, 1, 197-207.	2.3	233
35	Changes in Water Mobility Measured by Diffusion MRI Predict Response of Metastatic Breast Cancer to Chemotherapy. Neoplasia, 2004, 6, 831-837.	2.3	230
36	Imaging pH and metastasis. NMR in Biomedicine, 2011, 24, 582-591.	1.6	226

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37	Predicting Malignant Nodules from Screening CT Scans. Journal of Thoracic Oncology, 2016, 11, 2120-2128.	0.5	226
38	Chronic Autophagy Is a Cellular Adaptation to Tumor Acidic pH Microenvironments. Cancer Research, 2012, 72, 3938-3947.	0.4	224
39	Test–Retest Reproducibility Analysis of Lung CT Image Features. Journal of Digital Imaging, 2014, 27, 805-823.	1.6	216
40	Quantitative Computed Tomographic Descriptors Associate Tumor Shape Complexity and Intratumor Heterogeneity with Prognosis in Lung Adenocarcinoma. PLoS ONE, 2015, 10, e0118261.	1.1	207
41	Darwinian Dynamics of Intratumoral Heterogeneity: Not Solely Random Mutations but Also Variable Environmental Selection Forces. Cancer Research, 2016, 76, 3136-3144.	0.4	205
42	Adaptive landscapes and emergent phenotypes: why do cancers have high glycolysis?. Journal of Bioenergetics and Biomembranes, 2007, 39, 251-257.	1.0	201
43	Causes, consequences, and therapy of tumors acidosis. Cancer and Metastasis Reviews, 2019, 38, 205-222.	2.7	200
44	Hypoxia and adaptive landscapes in the evolution of carcinogenesis. Cancer and Metastasis Reviews, 2007, 26, 311-317.	2.7	188
45	CT Features Associated with Epidermal Growth Factor Receptor Mutation Status in Patients with Lung Adenocarcinoma. Radiology, 2016, 280, 271-280.	3.6	180
46	Acid treatment of melanoma cells selects for invasive phenotypes. Clinical and Experimental Metastasis, 2008, 25, 411-425.	1.7	174
47	Acid Suspends the Circadian Clock in Hypoxia through Inhibition of mTOR. Cell, 2018, 174, 72-87.e32.	13.5	172
48	The future of personalised radiotherapy for head and neck cancer. Lancet Oncology, The, 2017, 18, e266-e273.	5.1	168
49	Hypoxia and acidosis: immune suppressors and therapeutic targets. Immunology, 2018, 154, 354-362.	2.0	167
50	Chronic acidosis in the tumour microenvironment selects for overexpression of LAMP2 in the plasma membrane. Nature Communications, 2015, 6, 8752.	5.8	151
51	Voxel size and gray level normalization of CT radiomic features in lung cancer. Scientific Reports, 2018, 8, 10545.	1.6	150
52	Non-invasive decision support for NSCLC treatment using PET/CT radiomics. Nature Communications, 2020, 11, 5228.	5.8	149
53	pH and drug resistance. I. functional expression of plasmalemmal V-type H+-ATPase in drug-resistant human breast carcinoma cell lines. Biochemical Pharmacology, 1999, 57, 1037-1046.	2.0	140
54	Automated delineation of lung tumors from CT images using a single click ensemble segmentation approach. Pattern Recognition, 2013, 46, 692-702.	5.1	138

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55	Deep Feature Transfer Learning in Combination with Traditional Features Predicts Survival among Patients with Lung Adenocarcinoma. Tomography, 2016, 2, 388-395.	0.8	128
56	Quantitative imaging of cancer in the postgenomic era: Radio(geno)mics, deep learning, and habitats. Cancer, 2018, 124, 4633-4649.	2.0	125
57	Radiomics of 18F-FDG PET/CT images predicts clinical benefit of advanced NSCLC patients to checkpoint blockade immunotherapy. European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 1168-1182.	3.3	115
58	Novel clinical and radiomic predictors of rapid disease progression phenotypes among lung cancer patients treated with immunotherapy: An early report. Lung Cancer, 2019, 129, 75-79.	0.9	113
59	Systemic Buffers Inhibit Carcinogenesis in TRAMP Mice. Journal of Urology, 2012, 188, 624-631.	0.2	111
60	Prostate cancer radiomics and the promise of radiogenomics. Translational Cancer Research, 2016, 5, 432-447.	0.4	111
61	Defining Cancer Subpopulations by Adaptive Strategies Rather Than Molecular Properties Provides Novel Insights into Intratumoral Evolution. Cancer Research, 2017, 77, 2242-2254.	0.4	110
62	Radiomics of Lung Nodules: A Multi-Institutional Study of Robustness and Agreement of Quantitative Imaging Features. Tomography, 2016, 2, 430-437.	0.8	108
63	Cancer-associated mesenchymal stroma fosters the stemness of osteosarcoma cells in response to intratumoral acidosis via NF- $^{\circ}$ B activation. International Journal of Cancer, 2017, 140, 1331-1345.	2.3	107
64	Combining radiomic features with a miRNA classifier may improve prediction of malignant pathology for pancreatic intraductal papillary mucinous neoplasms. Oncotarget, 2016, 7, 85785-85797.	0.8	106
65	Eco-evolutionary causes and consequences of temporal changes in intratumoural blood flow. Nature Reviews Cancer, 2018, 18, 576-585.	12.8	106
66	Predicting Outcomes of Nonsmall Cell Lung Cancer Using CT Image Features. IEEE Access, 2014, 2, 1418-1426.	2.6	104
67	A semiautomatic CT-based ensemble segmentation of lung tumors: Comparison with oncologists' delineations and with the surgical specimen. Radiotherapy and Oncology, 2012, 105, 167-173.	0.3	99
68	Carbonic Anhydrase IX as an Imaging and Therapeutic Target for Tumors and Metastases. Sub-Cellular Biochemistry, 2014, 75, 221-254.	1.0	93
69	Association of multiparametric MRI quantitative imaging features with prostate cancer gene expression in MRI-targeted prostate biopsies. Oncotarget, 2016, 7, 53362-53376.	0.8	90
70	Acid-Mediated Tumor Proteolysis: Contribution of Cysteine Cathepsins. Neoplasia, 2013, 15, 1125-IN9.	2.3	88
71	Reduction of metastasis using a non-volatile buffer. Clinical and Experimental Metastasis, 2011, 28, 841-849.	1.7	87
72	Associations between radiologist-defined semantic and automatically computed radiomic features in non-small cell lung cancer. Scientific Reports, 2017, 7, 3519.	1.6	87

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73	Acidity promotes tumour progression by altering macrophage phenotype in prostate cancer. British Journal of Cancer, 2019, 121, 556-566.	2.9	86
74	Radiologically Defined Ecological Dynamics and Clinical Outcomes in Glioblastoma Multiforme: Preliminary Results. Translational Oncology, 2014, 7, 5-13.	1.7	82
75	The harsh microenvironment in early breast cancer selects for a Warburg phenotype. Proceedings of the National Academy of Sciences of the United States of America, $2021, 118, \ldots$	3.3	78
76	T-cells produce acidic niches in lymph nodes to suppress their own effector functions. Nature Communications, 2020, 11, 4113.	5.8	77
77	Radiological Image Traits Predictive of Cancer Status in Pulmonary Nodules. Clinical Cancer Research, 2017, 23, 1442-1449.	3.2	76
78	Non-invasive measurement of PD-L1 status and prediction of immunotherapy response using deep learning of PET/CT images., 2021, 9, e002118.		75
79	Janus-Faced Tumor Microenvironment and Redox. Antioxidants and Redox Signaling, 2014, 21, 723-729.	2.5	72
80	Metabolic Profiling of healthy and cancerous tissues in 2D and 3D. Scientific Reports, 2017, 7, 15285.	1.6	72
81	Delta Radiomics Improves Pulmonary Nodule Malignancy Prediction in Lung Cancer Screening. IEEE Access, 2018, 6, 77796-77806.	2.6	72
82	Targeting acidity in cancer and diabetes. Biochimica Et Biophysica Acta: Reviews on Cancer, 2019, 1871, 273-280.	3.3	70
83	Pyruvate sensitizes pancreatic tumors to hypoxia-activated prodrug TH-302. Cancer & Metabolism, 2015, 3, 2.	2.4	69
84	Evaluation of CAIX and CAXII Expression in Breast Cancer at Varied O2 Levels: CAIX is the Superior Surrogate Imaging Biomarker of Tumor Hypoxia. Molecular Imaging and Biology, 2016, 18, 219-231.	1.3	69
85	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
86	Predicting malignant nodules by fusing deep features with classical radiomics features. Journal of Medical Imaging, $2018, 5, 1$.	0.8	68
87	Radiomics Improves Cancer Screening and Early Detection. Cancer Epidemiology Biomarkers and Prevention, 2020, 29, 2556-2567.	1.1	67
88	Metabolism and Its Sequelae in Cancer Evolution and Therapy. Cancer Journal (Sudbury, Mass), 2015, 21, 88-96.	1.0	65
89	Intermittent Hypoxia Selects for Genotypes and Phenotypes That Increase Survival, Invasion, and Therapy Resistance. PLoS ONE, 2015, 10, e0120958.	1.1	65
90	CT imaging features associated with recurrence in non-small cell lung cancer patients after stereotactic body radiotherapy. Radiation Oncology, 2017, 12, 158.	1.2	63

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91	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.	1.6	60
92	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.	3.6	58
93	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
94	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.	1.6	53
95	Phenotypic changes of acid-adapted cancer cells push them toward aggressiveness in their evolution in the tumor microenvironment. Cell Cycle, 2017, 16, 1739-1743.	1.3	51
96	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
97	A Mammaglobin-A Targeting Agent for Noninvasive Detection of Breast Cancer Metastasis in Lymph Nodes. Cancer Research, 2011, 71, 1050-1059.	0.4	48
98	Delineation of Tumor Habitats based on Dynamic Contrast Enhanced MRI. Scientific Reports, 2017, 7, 9746.	1.6	48
99	Improving survival prediction of high-grade glioma via machine learning techniques based on MRI radiomic, genetic and clinical risk factors. European Journal of Radiology, 2019, 120, 108609.	1.2	48
100	Macrophage-Derived Cholesterol Contributes to Therapeutic Resistance in Prostate Cancer. Cancer Research, 2021, 81, 5477-5490.	0.4	48
101	Multiparametric MRI and Coregistered Histology Identify Tumor Habitats in Breast Cancer Mouse Models. Cancer Research, 2019, 79, 3952-3964.	0.4	46
102	Peritumoral and intratumoral radiomic features predict survival outcomes among patients diagnosed in lung cancer screening. Scientific Reports, 2020, 10, 10528.	1.6	46
103	Application of Radiomics and Artificial Intelligence for Lung Cancer Precision Medicine. Cold Spring Harbor Perspectives in Medicine, 2021, 11, a039537.	2.9	46
104	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.	1.1	46
105	Diffusion MRI and Novel Texture Analysis in Osteosarcoma Xenotransplants Predicts Response to Anti-Checkpoint Therapy. PLoS ONE, 2013, 8, e82875.	1.1	45
106	Heterogeneity in intratumoral regions with rapid gadolinium washout correlates with estrogen receptor status and nodal metastasis. Journal of Magnetic Resonance Imaging, 2015, 42, 1421-1430.	1.9	44
107	<scp>Tris</scp> â€"base buffer: a promising new inhibitor for cancer progression and metastasis. Cancer Medicine, 2017, 6, 1720-1729.	1.3	44
108	Vascular measurements correlate with estrogen receptor status. BMC Cancer, 2014, 14, 279.	1.1	43

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109	Semiquantitative Computed Tomography Characteristics for Lung Adenocarcinoma and Their Association With Lung Cancer Survival. Clinical Lung Cancer, 2015, 16, e141-e163.	1.1	43
110	Metabolic and Physiologic Imaging Biomarkers of the Tumor Microenvironment Predict Treatment Outcome with Radiation or a Hypoxia-Activated Prodrug in Mice. Cancer Research, 2018, 78, 3783-3792.	0.4	42
111	Molecular imaging and targeted therapies. Biochemical Pharmacology, 2010, 80, 731-738.	2.0	38
112	Mutationâ€"selection balance and compensatory mechanisms in tumour evolution. Nature Reviews Genetics, 2021, 22, 251-262.	7.7	38
113	A systematic review and quality of reporting checklist for repeatability and reproducibility of radiomic features. Physics and Imaging in Radiation Oncology, 2021, 20, 69-75.	1.2	37
114	Integrated Biomarkers for the Management of Indeterminate Pulmonary Nodules. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 1306-1316.	2.5	36
115	Quantitative Imaging features Improve Discrimination of Malignancy in Pulmonary nodules. Scientific Reports, 2019, 9, 8528.	1.6	35
116	Intratumoral acidosis fosters cancer-induced bone pain through the activation of the mesenchymal tumor-associated stroma in bone metastasis from breast carcinoma. Oncotarget, 2017, 8, 54478-54496.	0.8	35
117	Predicting Nodule Malignancy using a CNN Ensemble Approach. , 2018, 2018, .		32
118	Autophagy on acid. Autophagy, 2012, 8, 1688-1689.	4.3	31
119	Revealing Tumor Habitats from Texture Heterogeneity Analysis for Classification of Lung Cancer Malignancy and Aggressiveness. Scientific Reports, 2019, 9, 4500.	1.6	31
120	Identification of novel pancreatic adenocarcinoma cell-surface targets by gene expression profiling and tissue microarray. Biochemical Pharmacology, 2010, 80, 748-754.	2.0	30
121	Clinical and CT characteristics of surgically resected lung adenocarcinomas harboring ALK rearrangements or EGFR mutations. European Journal of Radiology, 2016, 85, 1934-1940.	1.2	27
122	Delta radiomic features improve prediction for lung cancer incidence: A nested case–control analysis of the National Lung Screening Trial. Cancer Medicine, 2018, 7, 6340-6356.	1.3	27
123	Free Base Lysine Increases Survival and Reduces Metastasis in Prostate Cancer Model. Journal of Cancer Science & Therapy, 2011, Suppl 1, .	1.7	27
124	Evaluation of the "Steal―Phenomenon on the Efficacy of Hypoxia Activated Prodrug TH-302 in Pancreatic Cancer. PLoS ONE, 2014, 9, e113586.	1.1	26
125	Mechanisms of buffer therapy resistance. Neoplasia, 2014, 16, 354-364.e3.	2.3	26
126	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.	0.8	26

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127	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.	1.6	26
128	Translating preclinical MRI methods to clinical oncology. Journal of Magnetic Resonance Imaging, 2019, 50, 1377-1392.	1.9	24
129	Radiomics of ¹⁸ F Fluorodeoxyglucose PET/CT Images Predicts Severe Immune-related Adverse Events in Patients with NSCLC. Radiology: Artificial Intelligence, 2020, 2, e190063.	3.0	24
130	Explaining Deep Features Using Radiologist-Defined Semantic Features and Traditional Quantitative Features. Tomography, 2019, 5, 192-200.	0.8	24
131	Imaging biomarkers to monitor response to the hypoxia-activated prodrug TH-302 in the MiaPaCa2 flank xenograft model. Magnetic Resonance Imaging, 2012, 30, 1002-1009.	1.0	23
132	Hypoxia-Related Radiomics and Immunotherapy Response: A Multicohort Study of Non-Small Cell Lung Cancer. JNCI Cancer Spectrum, 2021, 5, pkab048.	1.4	23
133	Multiâ€site quality and variability analysis of 3D FDG PET segmentations based on phantom and clinical image data. Medical Physics, 2017, 44, 479-496.	1.6	22
134	Convolutional Neural Network ensembles for accurate lung nodule malignancy prediction 2 years in the future. Computers in Biology and Medicine, 2020, 122, 103882.	3.9	22
135	Cancer heterogeneity and metastasis: life at the edge. Clinical and Experimental Metastasis, 2022, 39, 15-19.	1.7	22
136	Delta radiomics analysis of Magnetic Resonance guided radiotherapy imaging data can enable treatment response prediction in pancreatic cancer. Radiation Oncology, 2021, 16, 237.	1.2	22
137	Frequency-dependent interactions determine outcome of competition between two breast cancer cell lines. Scientific Reports, 2021, 11, 4908.	1.6	21
138	Radiomics predicts risk of cachexia in advanced NSCLC patients treated with immune checkpoint inhibitors. British Journal of Cancer, 2021, 125, 229-239.	2.9	21
139	MR Imaging Biomarkers to Monitor Early Response to Hypoxia-Activated Prodrug TH-302 in Pancreatic Cancer Xenografts. PLoS ONE, 2016, 11, e0155289.	1.1	21
140	Imaging hemodynamics. Cancer and Metastasis Reviews, 2008, 27, 589-613.	2.7	20
141	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.	1.1	20
142	Mitigating Adversarial Attacks on Medical Image Understanding Systems. , 2020, , .		20
143	¹⁸ F-FDG PET/CT Habitat Radiomics Predicts Outcome of Patients with Cervical Cancer Treated with Chemoradiotherapy. Radiology: Artificial Intelligence, 2020, 2, e190218.	3.0	19
144	PET and MRI: Is the Whole Greater than the Sum of Its Parts?. Cancer Research, 2016, 76, 6163-6166.	0.4	18

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145	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.	1.2	18
146	Cereblon harnesses Myc-dependent bioenergetics and activity of CD8+ T lymphocytes. Blood, 2020, 136, 857-870.	0.6	18
147	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.	1.1	17
148	A unifying theory of carcinogenesis, and why targeted therapy doesn't work. European Journal of Radiology, 2012, 81, S48-S50.	1.2	16
149	Cycling hypoxia selects for constitutive HIF stabilization. Scientific Reports, 2021, 11, 5777.	1.6	16
150	Mix and Match: Phenotypic Coexistence as a Key Facilitator of Cancer Invasion. Bulletin of Mathematical Biology, 2020, 82, 15.	0.9	13
151	Lipogenesis mediated by OGR1 regulates metabolic adaptation to acid stress in cancer cells via autophagy. Cell Reports, 2022, 39, 110796.	2.9	13
152	Lysosomal protein relocation as an adaptation mechanism to extracellular acidosis. Cell Cycle, 2016, 15, 1659-1660.	1.3	12
153	Perfusion MR Imaging of Breast Cancer: Insights Using "Habitat Imaging― Radiology, 2018, 288, 36-37.	3.6	12
154	Heterogeneity analysis of MRI T2 maps for measurement of early tumor response to radiotherapy. NMR in Biomedicine, 2021, 34, e4454.	1.6	12
155	Habitats in DCE-MRI to Predict Clinically Significant Prostate Cancers. Tomography, 2019, 5, 68-76.	0.8	12
156	Buffer Therapy for Cancer. Journal of Nutrition & Food Sciences, 2012, 2, 6.	1.0	12
157	Images Are Data: Challenges and Opportunities in the Clinical Translation of Radiomics. Cancer Research, 2022, 82, 2066-2068.	0.4	12
158	Collagen production and niche engineering: A novel strategy for cancer cells to survive acidosis in DCIS and evolve. Evolutionary Applications, 2020, 13, 2689-2703.	1.5	11
159	Deep-learning and MR images to target hypoxic habitats with evofosfamide in preclinical models of sarcoma. Theranostics, 2021, 11, 5313-5329.	4.6	11
160	Coevolution of Tumor Cells and Their Microenvironment: "Niche Construction in Cancer― , 2017, , 111-117.		10
161	Coupled Source-Sink Habitats Produce Spatial and Temporal Variation of Cancer Cell Molecular Properties as an Alternative to Branched Clonal Evolution and Stem Cell Paradigms. Frontiers in Ecology and Evolution, 2021, 9, .	1.1	10
162	Pseudohypoxia: Life at the Edge. , 2017, , 57-68.		9

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163	Extracellular Acidification Induces Lysosomal Dysregulation. Cells, 2021, 10, 1188.	1.8	9
164	Acid-Induced Inflammatory Cytokines in Osteoblasts: A Guided Path to Osteolysis in Bone Metastasis. Frontiers in Cell and Developmental Biology, 2021, 9, 678532.	1.8	8
165	Targeting of Evolutionarily Acquired Cancer Cell Phenotype by Exploiting pHi-Metabolic Vulnerabilities. Cancers, 2021, 13, 64.	1.7	8
166	Whole-tumor radiomics analysis of DKI and DTI may improve the prediction of genotypes for astrocytomas: A preliminary study. European Journal of Radiology, 2020, 124, 108785.	1.2	7
167	Proton export upregulates aerobic glycolysis. BMC Biology, 2022, 20, .	1.7	7
168	Direct and indirect assessment of cancer metabolism explored by MRI. NMR in Biomedicine, 2019, 32, e3966.	1.6	6
169	Artificial selection for host resistance to tumour growth and subsequent cancer cell adaptations: an evolutionary arms race. British Journal of Cancer, 2021, 124, 455-465.	2.9	6
170	Deep Feature Stability Analysis Using CT Images of a Physical Phantom across Scanner Manufacturers, Cartridges, Pixel Sizes, and Slice Thickness. Tomography, 2020, 6, 250-260.	0.8	6
171	Improving malignancy prediction through feature selection informed by nodule size ranges in NLST. , 2016, 2016, 001939-1944.		5
172	Causes and Consequences of Variable Tumor Cell Metabolism on Heritable Modifications and Tumor Evolution. Frontiers in Oncology, 2020, 10, 373.	1.3	5
173	Lung Nodule Sizes Are Encoded When Scaling CT Image for CNN's. Tomography, 2020, 6, 209-215.	0.8	5
174	Noninvasive Quantitative Imaging–based Biomarkers and Lung Cancer Screening. American Journal of Respiratory and Critical Care Medicine, 2015, 192, 654-656.	2.5	4
175	Al-Radiomics Can Improve Inclusion Criteria and Clinical Trial Performance. Tomography, 2022, 8, 341-355.	0.8	4
176	Volume doubling time and radiomic features predict tumor behavior of screen-detected lung cancers. Cancer Biomarkers, 2022, 33, 489-501.	0.8	4
177	<p>Multi-Window CT Based Radiological Traits for Improving Early Detection in Lung Cancer Screening</p> . Cancer Management and Research, 2020, Volume 12, 12225-12238.	0.9	3
178	Hybrid models for lung nodule malignancy prediction utilizing convolutional neural network ensembles and clinical data. Journal of Medical Imaging, 2020, 7, 1.	0.8	3
179	Representation of Deep Features using Radiologist defined Semantic Features. , 2018, 2018, .		2
180	The World Molecular Imaging Society (WMIS). Molecular Imaging and Biology, 2012, 14, 1-3.	1.3	1

ROBERT J GILLIES

#	Article	IF	CITATIONS
181	Abstract 3250: Survival of patients with incident lung cancer following screening by computed tomography in the National Lung Screening Trial. , 2014, , .		1
182	Towards deep radiomics: nodule malignancy prediction using CNNs on feature images. , 2019, , .		1
183	Modeling Tumor: Lymphatic Interactions in Lymphatic Metastasis of Triple Negative Breast Cancer. Cancers, 2021, 13, 6044.	1.7	1
184	Preface. Cancer and Metastasis Reviews, 2019, 38, 3-3.	2.7	0
185	Predicting the results of competition between two breast cancer lines grown in 3-D spheroid culture. Mathematical Biosciences, 2021, 336, 108575.	0.9	0