Robert J Gillies

List of Publications by Citations

187 papers	28,433 citations	67 h-index	168 g-index
207 ext. papers	35,879 ext. citations	8.8 avg, IF	7.55 L-index

#	Paper	IF	Citations
187	Why do cancers have high aerobic glycolysis?. *Nature Reviews Cancer*, **2004**, 4, 891-9	31.3	3535
186	Radiomics: Images Are More than Pictures, They Are Data. *Radiology*, **2016**, 278, 563-77	20.5	3149
185	Decoding tumour phenotype by noninvasive imaging using a quantitative radiomics approach. *Nature Communications*, **2014**, 5, 4006	17.4	2330
184	Radiomics: extracting more information from medical images using advanced feature analysis. *European Journal of Cancer*, **2012**, 48, 441-6	7.5	2278
183	Radiomics: the process and the challenges. *Magnetic Resonance Imaging*, **2012**, 30, 1234-48	3.3	1156
182	Acidity generated by the tumor microenvironment drives local invasion. *Cancer Research*, **2013**, 73, 1524-35	10.1	792
181	The Image Biomarker Standardization Initiative: Standardized Quantitative Radiomics for High-Throughput Image-based Phenotyping. *Radiology*, **2020**, 295, 328-338	20.5	734
180	Acid-mediated tumor invasion: a multidisciplinary study. *Cancer Research*, **2006**, 66, 5216-23	10.1	561
179	A microenvironmental model of carcinogenesis. *Nature Reviews Cancer*, **2008**, 8, 56-61	31.3	548
178	Imaging biomarker roadmap for cancer studies. *Nature Reviews Clinical Oncology*, **2017**, 14, 169-186	19.4	532
177	Adaptive therapy. *Cancer Research*, **2009**, 69, 4894-903	10.1	524
176	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	2.9	506
175	Evolutionary dynamics of carcinogenesis and why targeted therapy does not work. *Nature Reviews Cancer*, **2012**, 12, 487-93	31.3	467
174	Causes and consequences of increased glucose metabolism of cancers. *Journal of Nuclear Medicine*, **2008**, 49 Suppl 2, 24S-42S	8.9	466
173	Bicarbonate increases tumor pH and inhibits spontaneous metastases. *Cancer Research*, **2009**, 69, 2260-8	10.1	459
172	pH sensing and regulation in cancer. *Frontiers in Physiology*, **2013**, 4, 370	4.6	336
171	Artificial intelligence in cancer imaging: Clinical challenges and applications. *Ca-A Cancer Journal for Clinicians*, **2019**, 69, 127-157	220.7	319

170	Repeatability and Reproducibility of Radiomic Features: A Systematic Review. *International Journal of Radiation Oncology Biology Physics*, **2018**, 102, 1143-1158	4	318
169	Neutralization of Tumor Acidity Improves Antitumor Responses to Immunotherapy. *Cancer Research*, **2016**, 76, 1381-90	10.1	307
168	Stability of FDG-PET Radiomics features: an integrated analysis of test-retest and inter-observer variability. *Acta Oncologica*, **2013**, 52, 1391-7	3.2	284
167	Quantitative imaging in cancer evolution and ecology. *Radiology*, **2013**, 269, 8-15	20.5	270
166	The effect of SUV discretization in quantitative FDG-PET Radiomics: the need for standardized methodology in tumor texture analysis. *Scientific Reports*, **2015**, 5, 11075	4.9	246
165	Deep learning for lung cancer prognostication: A retrospective multi-cohort radiomics study. *PLoS Medicine*, **2018**, 15, e1002711	11.6	218
164	Reproducibility and Prognosis of Quantitative Features Extracted from CT Images. *Translational Oncology*, **2014**, 7, 72-87	4.9	217
163	Changes in water mobility measured by diffusion MRI predict response of metastatic breast cancer to chemotherapy. *Neoplasia*, **2004**, 6, 831-7	6.4	210
162	Somatic Mutations Drive Distinct Imaging Phenotypes in Lung Cancer. *Cancer Research*, **2017**, 77, 3922-3930	10.1	200
161	Imaging pH and metastasis. *NMR in Biomedicine*, **2011**, 24, 582-91	4.4	200
160	Causes and effects of heterogeneous perfusion in tumors. *Neoplasia*, **1999**, 1, 197-207	6.4	198
159	Exploiting evolutionary principles to prolong tumor control in preclinical models of breast cancer. *Science Translational Medicine*, **2016**, 8, 327ra24	17.5	189
158	Impact of metabolic heterogeneity on tumor growth, invasion, and treatment outcomes. *Cancer Research*, **2015**, 75, 1567-79	10.1	180
157	Radiomics in Brain Tumor: Image Assessment, Quantitative Feature Descriptors, and Machine-Learning Approaches. *American Journal of Neuroradiology*, **2018**, 39, 208-216	4.4	176
156	Chronic autophagy is a cellular adaptation to tumor acidic pH microenvironments. *Cancer Research*, **2012**, 72, 3938-47	10.1	176
155	Adaptive landscapes and emergent phenotypes: why do cancers have high glycolysis?. *Journal of Bioenergetics and Biomembranes*, **2007**, 39, 251-7	3.7	174
154	Radiomic Features Are Associated With EGFR Mutation Status in Lung Adenocarcinomas. *Clinical Lung Cancer*, **2016**, 17, 441-448.e6	4.9	167
153	Quantitative computed tomographic descriptors associate tumor shape complexity and intratumor heterogeneity with prognosis in lung adenocarcinoma. *PLoS ONE*, **2015**, 10, e0118261	3.7	167

152	Predicting Malignant Nodules from Screening CT Scans. *Journal of Thoracic Oncology*, **2016**, 11, 2120-2128	8.9	165
151	Test-retest reproducibility analysis of lung CT image features. *Journal of Digital Imaging*, **2014**, 27, 805-23	3.3	163
150	Defining the biological basis of radiomic phenotypes in lung cancer. *ELife*, **2017**, 6,	8.9	158
149	Hypoxia and adaptive landscapes in the evolution of carcinogenesis. *Cancer and Metastasis Reviews*, **2007**, 26, 311-7	9.6	158
148	Darwinian Dynamics of Intratumoral Heterogeneity: Not Solely Random Mutations but Also Variable Environmental Selection Forces. *Cancer Research*, **2016**, 76, 3136-44	10.1	154
147	Systems analysis of intracellular pH vulnerabilities for cancer therapy. *Nature Communications*, **2018**, 9, 2997	17.4	151
146	Acid treatment of melanoma cells selects for invasive phenotypes. *Clinical and Experimental Metastasis*, **2008**, 25, 411-25	4.7	140
145	The role of carbonic anhydrase IX in cancer development: links to hypoxia, acidosis, and beyond. *Cancer and Metastasis Reviews*, **2019**, 38, 65-77	9.6	134
144	CT Features Associated with Epidermal Growth Factor Receptor Mutation Status in Patients with Lung Adenocarcinoma. *Radiology*, **2016**, 280, 271-80	20.5	127
143	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, 1037-46	6	123
142	Causes, consequences, and therapy of tumors acidosis. *Cancer and Metastasis Reviews*, **2019**, 38, 205-222	9.6	120
141	Automated Delineation of Lung Tumors from CT Images Using a Single Click Ensemble Segmentation Approach. *Pattern Recognition*, **2013**, 46, 692-702	7.7	112
140	Chronic acidosis in the tumour microenvironment selects for overexpression of LAMP2 in the plasma membrane. *Nature Communications*, **2015**, 6, 8752	17.4	108
139	The future of personalised radiotherapy for head and neck cancer. *Lancet Oncology, The*, **2017**, 18, e266-e273	27.7	107
138	Acid Suspends the Circadian Clock in Hypoxia through Inhibition of mTOR. *Cell*, **2018**, 174, 72-87.e32	56.2	104
137	Voxel size and gray level normalization of CT radiomic features in lung cancer. *Scientific Reports*, **2018**, 8, 10545	4.9	95
136	Deep Feature Transfer Learning in Combination with Traditional Features Predicts Survival Among Patients with Lung Adenocarcinoma. *Tomography*, **2016**, 2, 388-395	3.1	95
135	Hypoxia and acidosis: immune suppressors and therapeutic targets. *Immunology*, **2018**, 154, 354-362	7.8	83

134	Systemic buffers inhibit carcinogenesis in TRAMP mice. *Journal of Urology*, **2012**, 188, 624-31	2.5	81
133	Carbonic anhydrase IX as an imaging and therapeutic target for tumors and metastases. *Sub-Cellular Biochemistry*, **2014**, 75, 221-54	5.5	80
132	Prostate cancer radiomics and the promise of radiogenomics. *Translational Cancer Research*, **2016**, 5, 432-447	0.3	80
131	Radiomics of Lung Nodules: A Multi-Institutional Study of Robustness and Agreement of Quantitative Imaging Features. *Tomography*, **2016**, 2, 430-437	3.1	79
130	Eco-evolutionary causes and consequences of temporal changes in intratumoural blood flow. *Nature Reviews Cancer*, **2018**, 18, 576-585	31.3	77
129	Cancer-associated mesenchymal stroma fosters the stemness of osteosarcoma cells in response to intratumoral acidosis via NF-Ƀ activation. *International Journal of Cancer*, **2017**, 140, 1331-1345	7.5	76
128	Combining radiomic features with a miRNA classifier may improve prediction of malignant pathology for pancreatic intraductal papillary mucinous neoplasms. *Oncotarget*, **2016**, 7, 85785-85797	3.3	76
127	Defining Cancer Subpopulations by Adaptive Strategies Rather Than Molecular Properties Provides Novel Insights into Intratumoral Evolution. *Cancer Research*, **2017**, 77, 2242-2254	10.1	75
126	Acid-mediated tumor proteolysis: contribution of cysteine cathepsins. *Neoplasia*, **2013**, 15, 1125-37	6.4	73
125	A semiautomatic CT-based ensemble segmentation of lung tumors: comparison with oncologists' delineations and with the surgical specimen. *Radiotherapy and Oncology*, **2012**, 105, 167-73	5.3	73
124	Association of multiparametric MRI quantitative imaging features with prostate cancer gene expression in MRI-targeted prostate biopsies. *Oncotarget*, **2016**, 7, 53362-53376	3.3	73
123	. *IEEE Access*, **2014**, 2, 1418-1426	3.5	69
122	Radiologically defined ecological dynamics and clinical outcomes in glioblastoma multiforme: preliminary results. *Translational Oncology*, **2014**, 7, 5-13	4.9	68
121	Reduction of metastasis using a non-volatile buffer. *Clinical and Experimental Metastasis*, **2011**, 28, 841-9	4.7	67
120	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	5.9	64
119	Quantitative imaging of cancer in the postgenomic era: Radio(geno)mics, deep learning, and habitats. *Cancer*, **2018**, 124, 4633-4649	6.4	64
118	The Biological Meaning of Radiomic Features. *Radiology*, **2021**, 298, 505-516	20.5	59
117	Radiomics of F-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	8.8	58

116	Metabolism and its sequelae in cancer evolution and therapy. *Cancer Journal (Sudbury, Mass)*, **2015**, 21, 88-96	2.2	56
115	Radiological Image Traits Predictive of Cancer Status in Pulmonary Nodules. *Clinical Cancer Research*, **2017**, 23, 1442-1449	12.9	56
114	Associations between radiologist-defined semantic and automatically computed radiomic features in non-small cell lung cancer. *Scientific Reports*, **2017**, 7, 3519	4.9	55
113	Non-invasive decision support for NSCLC treatment using PET/CT radiomics. *Nature Communications*, **2020**, 11, 5228	17.4	53
112	Pyruvate sensitizes pancreatic tumors to hypoxia-activated prodrug TH-302. *Cancer & Metabolism*, **2015**, 3, 2	5.4	52
111	Intermittent hypoxia selects for genotypes and phenotypes that increase survival, invasion, and therapy resistance. *PLoS ONE*, **2015**, 10, e0120958	3.7	52
110	A Comparison of Lung Nodule Segmentation Algorithms: Methods and Results from a Multi-institutional Study. *Journal of Digital Imaging*, **2016**, 29, 476-87	5.3	50
109	Metabolic Profiling of healthy and cancerous tissues in 2D and 3D. *Scientific Reports*, **2017**, 7, 15285	4.9	50
108	Janus-faced tumor microenvironment and redox. *Antioxidants and Redox Signaling*, **2014**, 21, 723-9	8.4	49
107	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, 219-31	3.8	47
106	CT imaging features associated with recurrence in non-small cell lung cancer patients after stereotactic body radiotherapy. *Radiation Oncology*, **2017**, 12, 158	4.2	47
105	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	20.5	44
104	A mammaglobin-A targeting agent for noninvasive detection of breast cancer metastasis in lymph nodes. *Cancer Research*, **2011**, 71, 1050-9	10.1	44
103	Predicting malignant nodules by fusing deep features with classical radiomics features. *Journal of Medical Imaging*, **2018**, 5, 011021	2.6	44
102	Imaging features from pretreatment CT scans are associated with clinical outcomes in nonsmall-cell lung cancer patients treated with stereotactic body radiotherapy. *Medical Physics*, **2017**, 44, 4341-4349	4.4	43
101	Targeting acidity in cancer and diabetes. *Biochimica Et Biophysica Acta: Reviews on Cancer*, **2019**, 1871, 273-280	11.2	42
100	Acidity promotes tumour progression by altering macrophage phenotype in prostate cancer. *British Journal of Cancer*, **2019**, 121, 556-566	8.7	40
99	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	4.9	40

98	Heterogeneity in intratumoral regions with rapid gadolinium washout correlates with estrogen receptor status and nodal metastasis. *Journal of Magnetic Resonance Imaging*, **2015**, 42, 1421-30	5.6	37
97	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	3.7	37
96	Semiquantitative Computed Tomography Characteristics for Lung Adenocarcinoma and Their Association With Lung Cancer Survival. *Clinical Lung Cancer*, **2015**, 16, e141-63	4.9	36
95	Vascular measurements correlate with estrogen receptor status. *BMC Cancer*, **2014**, 14, 279	4.8	35
94	Diffusion MRI and novel texture analysis in osteosarcoma xenotransplants predicts response to anti-checkpoint therapy. *PLoS ONE*, **2013**, 8, e82875	3.7	35
93	Delineation of Tumor Habitats based on Dynamic Contrast Enhanced MRI. *Scientific Reports*, **2017**, 7, 9746	4.9	34
92	Phenotypic changes of acid-adapted cancer cells push them toward aggressiveness in their evolution in the tumor microenvironment. *Cell Cycle*, **2017**, 16, 1739-1743	4.7	34
91	Molecular imaging and targeted therapies. *Biochemical Pharmacology*, **2010**, 80, 731-8	6	34
90	Stability and reproducibility of computed tomography radiomic features extracted from peritumoral regions of lung cancer lesions. *Medical Physics*, **2019**, 46, 5075-5085	4.4	30
89	Delta Radiomics Improves Pulmonary Nodule Malignancy Prediction in Lung Cancer Screening. *IEEE Access*, **2018**, 6, 77796-77806	3.5	30
88	T-cells produce acidic niches in lymph nodes to suppress their own effector functions. *Nature Communications*, **2020**, 11, 4113	17.4	28
87	Multiparametric MRI and Coregistered Histology Identify Tumor Habitats in Breast Cancer Mouse Models. *Cancer Research*, **2019**, 79, 3952-3964	10.1	27
86	Free Base Lysine Increases Survival and Reduces Metastasis in Prostate Cancer Model. *Journal of Cancer Science & Therapy*, **2011**, Suppl 1,	5	27
85	Identification of novel pancreatic adenocarcinoma cell-surface targets by gene expression profiling and tissue microarray. *Biochemical Pharmacology*, **2010**, 80, 748-54	6	26
84	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	3.3	26
83	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	10.1	26
82	Quantitative Imaging features Improve Discrimination of Malignancy in Pulmonary nodules. *Scientific Reports*, **2019**, 9, 8528	4.9	25
81	Autophagy on acid. *Autophagy*, **2012**, 8, 1688-9	10.2	25

80	Tris-base buffer: a promising new inhibitor for cancer progression and metastasis. *Cancer Medicine*, **2017**, 6, 1720-1729	4.8	23
79	Revealing Tumor Habitats from Texture Heterogeneity Analysis for Classification of Lung Cancer Malignancy and Aggressiveness. *Scientific Reports*, **2019**, 9, 4500	4.9	21
78	Clinical and CT characteristics of surgically resected lung adenocarcinomas harboring ALK rearrangements or EGFR mutations. *European Journal of Radiology*, **2016**, 85, 1934-1940	4.7	21
77	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	4.7	20
76	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	3.3	20
75	Radiomics Improves Cancer Screening and Early Detection. *Cancer Epidemiology Biomarkers and Prevention*, **2020**, 29, 2556-2567	4	20
74	Translating preclinical MRI methods to clinical oncology. *Journal of Magnetic Resonance Imaging*, **2019**, 50, 1377-1392	5.6	19
73	Prediction of pathological nodal involvement by CT-based Radiomic features of the primary tumor in patients with clinically node-negative peripheral lung adenocarcinomas. *Medical Physics*, **2018**, 45, 2518-2526	4.4	19
72	Mechanisms of buffer therapy resistance. *Neoplasia*, **2014**, 16, 354-64.e1-3	6.4	19
71	Imaging biomarkers to monitor response to the hypoxia-activated prodrug TH-302 in the MiaPaCa2 flank xenograft model. *Magnetic Resonance Imaging*, **2012**, 30, 1002-9	3.3	19
70	Predicting Nodule Malignancy using a CNN Ensemble Approach **2018**, 2018,		19
69	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,	11.5	18
68	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	4.8	18
67	Multi-site quality and variability analysis of 3D FDG PET segmentations based on phantom and clinical image data. *Medical Physics*, **2017**, 44, 479-496	4.4	17
66	PET and MRI: Is the Whole Greater than the Sum of Its Parts?. *Cancer Research*, **2016**, 76, 6163-6166	10.1	17
65	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, 148-158.e3	4.9	16
64	Evaluation of the "steal" phenomenon on the efficacy of hypoxia activated prodrug TH-302 in pancreatic cancer. *PLoS ONE*, **2014**, 9, e113586	3.7	16
63	MR Imaging Biomarkers to Monitor Early Response to Hypoxia-Activated Prodrug TH-302 in Pancreatic Cancer Xenografts. *PLoS ONE*, **2016**, 11, e0155289	3.7	16

62	Explaining Deep Features Using Radiologist-Defined Semantic Features and Traditional Quantitative Features. *Tomography*, **2019**, 5, 192-200	3.1	16
61	Mutation-selection balance and compensatory mechanisms in tumour evolution. *Nature Reviews Genetics*, **2021**, 22, 251-262	30.1	16
60	Imaging hemodynamics. *Cancer and Metastasis Reviews*, **2008**, 27, 589-613	9.6	15
59	Convolutional Neural Network ensembles for accurate lung nodule malignancy prediction 2 years in the future. *Computers in Biology and Medicine*, **2020**, 122, 103882	7	14
58	A Shallow Convolutional Neural Network Predicts Prognosis of Lung Cancer Patients in Multi-Institutional CT-Image Data. *Nature Machine Intelligence*, **2020**, 2, 274-282	22.5	14
57	Non-invasive measurement of PD-L1 status and prediction of immunotherapy response using deep learning of PET/CT images **2021**, 9,		14
56	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, 271-8	4.9	14
55	Application of Radiomics and Artificial Intelligence for Lung Cancer Precision Medicine. *Cold Spring Harbor Perspectives in Medicine*, **2021**, 11,	5.4	12
54	A unifying theory of carcinogenesis, and why targeted therapy doesn't work. *European Journal of Radiology*, **2012**, 81 Suppl 1, S48-50	4.7	11
53	Peritumoral and intratumoral radiomic features predict survival outcomes among patients diagnosed in lung cancer screening. *Scientific Reports*, **2020**, 10, 10528	4.9	9
52	Buffer Therapy for Cancer. *Journal of Nutrition & Food Sciences*, **2012**, 2, 6	0.5	9
51	Mix and Match: Phenotypic Coexistence as a Key Facilitator of Cancer Invasion. *Bulletin of Mathematical Biology*, **2020**, 82, 15	2.1	8
50	Coevolution of Tumor Cells and Their Microenvironment: Niche Construction in Cancer **2017**, 111-117		8
49	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	5.6	8
48	Habitats in DCE-MRI to Predict Clinically Significant Prostate Cancers. *Tomography*, **2019**, 5, 68-76	3.1	8
47	Cereblon harnesses Myc-dependent bioenergetics and activity of CD8+ T lymphocytes. *Blood*, **2020**, 136, 857-870	2.2	8
46	Frequency-dependent interactions determine outcome of competition between two breast cancer cell lines. *Scientific Reports*, **2021**, 11, 4908	4.9	8
45	Cancer heterogeneity and metastasis: life at the edge. *Clinical and Experimental Metastasis*, **2021**, 1	4.7	8

44	Macrophage-Derived Cholesterol Contributes to Therapeutic Resistance in Prostate Cancer. *Cancer Research*, **2021**, 81, 5477-5490	10.1	8
43	Mitigating Adversarial Attacks on Medical Image Understanding Systems **2020**,		7
42	Radiomics of F Fluorodeoxyglucose PET/CT Images Predicts Severe Immune-related Adverse Events in Patients with NSCLC. *Radiology: Artificial Intelligence*, **2020**, 2, e190063	8.7	6
41	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	3.1	6
40	Perfusion MR Imaging of Breast Cancer: Insights Using "Habitat Imaging". *Radiology*, **2018**, 288, 36-37	20.5	5
39	Author response: Defining the biological basis of radiomic phenotypes in lung cancer **2017**,		5
38	Collagen production and niche engineering: A novel strategy for cancer cells to survive acidosis in DCIS and evolve. *Evolutionary Applications*, **2020**, 13, 2689-2703	4.8	5
37	Cycling hypoxia selects for constitutive HIF stabilization. *Scientific Reports*, **2021**, 11, 5777	4.9	5
36	Noninvasive Quantitative Imaging-based Biomarkers and Lung Cancer Screening. *American Journal of Respiratory and Critical Care Medicine*, **2015**, 192, 654-6	10.2	4
35	Pseudohypoxia: Life at the Edge **2017**, 57-68		4
34	Targeting of Evolutionarily Acquired Cancer Cell Phenotype by Exploiting pHi-Metabolic Vulnerabilities. *Cancers*, **2020**, 13,	6.6	4
33	Acidity promotes tumor progression by altering macrophage phenotype in prostate cancer		4
32	Lymph Nodes Inhibit T-cell Effector Functions Locally by Establishing Acidic Niches		4
31	Radiomics predicts risk of cachexia in advanced NSCLC patients treated with immune checkpoint inhibitors. *British Journal of Cancer*, **2021**, 125, 229-239	8.7	4
30	Direct and indirect assessment of cancer metabolism explored by MRI. *NMR in Biomedicine*, **2019**, 32, e3966	4.4	4
29	Heterogeneity analysis of MRI T2 maps for measurement of early tumor response to radiotherapy. *NMR in Biomedicine*, **2021**, 34, e4454	4.4	4
28	Delta radiomics analysis of Magnetic Resonance guided radiotherapy imaging data can enable treatment response prediction in pancreatic cancer.. *Radiation Oncology*, **2021**, 16, 237	4.2	4
27	F-FDG PET/CT Habitat Radiomics Predicts Outcome of Patients with Cervical Cancer Treated with Chemoradiotherapy. *Radiology: Artificial Intelligence*, **2020**, 2, e190218	8.7	3

26	Lung Nodule Sizes Are Encoded When Scaling CT Image for CNN's. *Tomography*, **2020**, 6, 209-215	3.1	3
25	Combining radiomics and mathematical modeling to elucidate mechanisms of resistance to immune checkpoint blockade in non-small cell lung cancer		3
24	Hypoxia-related radiomics predict immunotherapy response: A multi-cohort study of NSCLC		3
23	Collagen Production and Niche Engineering: A Novel Strategy for Cancer Cells to Survive Acidosis and Evolve		3
22	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	4.7	3
21	Hypoxia-Related Radiomics and Immunotherapy Response: A Multicohort Study of Non-Small Cell Lung Cancer. *JNCI Cancer Spectrum*, **2021**, 5, pkab048	4.6	3
20	Improving malignancy prediction through feature selection informed by nodule size ranges in NLST. *Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics*, **2016**, 2016, 001939-1944	2	2
19	Causes and Consequences of Variable Tumor Cell Metabolism on Heritable Modifications and Tumor Evolution. *Frontiers in Oncology*, **2020**, 10, 373	5.3	2
18	Hybrid models for lung nodule malignancy prediction utilizing convolutional neural network ensembles and clinical data. *Journal of Medical Imaging*, **2020**, 7, 024502	2.6	2
17	Frequency-dependent interactions determine outcome of competition between two breast cancer cell lines		2
16	Extracellular Acidification Induces Lysosomal Dysregulation. *Cells*, **2021**, 10,	7.9	2
15	Acid-Induced Inflammatory Cytokines in Osteoblasts: A Guided Path to Osteolysis in Bone Metastasis. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 678532	5.7	2
14	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	3.1	1
13	Towards deep radiomics: nodule malignancy prediction using CNNs on feature images **2019**,		1
12	T2 heterogeneity provides a sensitive measure of early tumor response to radiotherapy		1
11	Mix & Match: Phenotypic coexistence as a key facilitator of solid tumour invasion		1
10	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	8.7	1
9	Deep-learning and MR images to target hypoxic habitats with evofosfamide in preclinical models of sarcoma. *Theranostics*, **2021**, 11, 5313-5329	12.1	1

8	Representation of Deep Features using Radiologist defined Semantic Features **2018**, 2018,		1
7	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,	3.7	1
6	Integrated Biomarkers for the Management of Indeterminate Pulmonary Nodules. *American Journal of Respiratory and Critical Care Medicine*, **2021**, 204, 1306-1316	10.2	1
5	Lipogenesis mediated by OGR1 regulates metabolic adaptation to acid stress in cancer cells via autophagy.. *Cell Reports*, **2022**, 39, 110796	10.6	1
4	Multi-Window CT Based Radiological Traits for Improving Early Detection in Lung Cancer Screening. *Cancer Management and Research*, **2020**, 12, 12225-12238	3.6	0
3	AI-Radiomics Can Improve Inclusion Criteria and Clinical Trial Performance.. *Tomography*, **2022**, 8, 341-355	3.1	0
2	Volume doubling time and radiomic features predict tumor behavior of screen-detected lung cancers.. *Cancer Biomarkers*, **2022**, 33, 489-501	3.8	0
1	Predicting the results of competition between two breast cancer lines grown in 3-D spheroid culture. *Mathematical Biosciences*, **2021**, 336, 108575	3.9	