Raymond H Mak

List of Publications by Year
in descending order

77 papers	6,396 citations	136740 32 h-index	74018 75 g-index
78 all docs	78 docs citations	78 times ranked	7757 citing authors

#	Article	IF	Citations
1	Artificial intelligence in cancer imaging: Clinical challenges and applications. Ca-A Cancer Journal for Clinicians, 2019, 69, 127-157.	157.7	965
2	CT-based radiomic signature predicts distant metastasis in lung adenocarcinoma. Radiotherapy and Oncology, 2015, 114, 345-350.	0.3	576
3	Robust Radiomics Feature Quantification Using Semiautomatic Volumetric Segmentation. PLoS ONE, 2014, 9, e102107.	1.1	488
4	Deep learning for lung cancer prognostication: A retrospective multi-cohort radiomics study. PLoS Medicine, 2018, 15, e1002711.	3.9	385
5	Deep Learning Predicts Lung Cancer Treatment Response from Serial Medical Imaging. Clinical Cancer Research, 2019, 25, 3266-3275.	3.2	364
6	Somatic Mutations Drive Distinct Imaging Phenotypes in Lung Cancer. Cancer Research, 2017, 77, 3922-3930.	0.4	307
7	Exploratory Study to Identify Radiomics Classifiers for Lung Cancer Histology. Frontiers in Oncology, 2016, 6, 71.	1.3	306
8	Radiomic phenotype features predict pathological response in non-small cell lung cancer. Radiotherapy and Oncology, 2016, 119, 480-486.	0.3	266
9	Radiomic-Based Pathological Response Prediction from Primary Tumors and Lymph Nodes in NSCLC. Journal of Thoracic Oncology, 2017, 12, 467-476.	0.5	171
10	Volumetric CT-based segmentation of NSCLC using 3D-Slicer. Scientific Reports, 2013, 3, 3529.	1.6	168
11	Artificial intelligence in radiation oncology. Nature Reviews Clinical Oncology, 2020, 17, 771-781.	12.5	167
12	Cardiac Radiation Dose, Cardiac Disease, and Mortality in Patients With Lung Cancer. Journal of the American College of Cardiology, 2019, 73, 2976-2987.	1.2	163
13	CT-based radiomic analysis of stereotactic body radiation therapy patients with lung cancer. Radiotherapy and Oncology, 2016, 120, 258-266.	0.3	159
14	Definitive Primary Therapy in Patients Presenting With Oligometastatic Non-Small Cell Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2014, 89, 880-887.	0.4	136
15	Associations Between Somatic Mutations and Metabolic Imaging Phenotypes in Non–Small Cell Lung Cancer. Journal of Nuclear Medicine, 2017, 58, 569-576.	2.8	131
16	Durvalumab plus tremelimumab alone or in combination with low-dose or hypofractionated radiotherapy in metastatic non-small-cell lung cancer refractory to previous PD(L)-1 therapy: an open-label, multicentre, randomised, phase 2 trial. Lancet Oncology, The, 2022, 23, 279-291.	5.1	118
17	Peritumoral radiomics features predict distant metastasis in locally advanced NSCLC. PLoS ONE, 2018, 13, e0206108.	1.1	113
18	Association of Left Anterior Descending Coronary Artery Radiation Dose With Major Adverse Cardiac Events and Mortality in Patients With Non–Small Cell Lung Cancer. JAMA Oncology, 2021, 7, 206.	3.4	101

#	Article	IF	Citations
19	Deep learning classification of lung cancer histology using CT images. Scientific Reports, 2021, 11, 5471.	1.6	96
20	Associations of Radiomic Data Extracted from Static and Respiratory-Gated CT Scans with Disease Recurrence in Lung Cancer Patients Treated with SBRT. PLoS ONE, 2017, 12, e0169172.	1.1	87
21	Aggressive therapy for patients with non-small cell lung carcinoma and synchronous brain-only oligometastatic disease is associated with long-term survival. Lung Cancer, 2014, 85, 239-244.	0.9	82
22	Radiation Resistance in KRAS-Mutated Lung Cancer Is Enabled by Stem-like Properties Mediated by an Osteopontinâ€"EGFR Pathway. Cancer Research, 2017, 77, 2018-2028.	0.4	80
23	Updated patterns of failure after multimodality therapy for malignant pleural mesothelioma. Journal of Thoracic and Cardiovascular Surgery, 2015, 149, 1374-1381.	0.4	75
24	Outcomes by Tumor Histology and KRAS Mutation Status After Lung Stereotactic BodyÂRadiation Therapy for Early-Stage Nonâ€"Small-Cell Lung Cancer. Clinical Lung Cancer, 2015, 16, 24-32.	1.1	67
25	A Randomized Phase 2 Study of Pembrolizumab With or Without Radiation in Patients With Recurrent or Metastatic Adenoid Cystic Carcinoma. International Journal of Radiation Oncology Biology Physics, 2021, 109, 134-144.	0.4	61
26	Handcrafted versus deep learning radiomics for prediction of cancer therapy response. The Lancet Digital Health, 2019, 1, e106-e107.	5.9	59
27	Targeted Therapy as an Alternative to Whole-Brain Radiotherapy in EGFR-Mutant or ALK-Positive Nonâ€"Small-Cell Lung Cancer With Brain Metastases. JAMA Oncology, 2017, 3, 1274.	3.4	46
28	Image-guided radiotherapy platform using single nodule conditional lung cancer mouse models. Nature Communications, 2014, 5, 5870.	5.8	44
29	Impact of experimental design on PET radiomics in predicting somatic mutation status. European Journal of Radiology, 2017, 97, 8-15.	1.2	44
30	Bladder preservation: optimizing radiotherapy and integrated treatment strategies. BJU International, 2008, 102, 1345-1353.	1.3	42
31	Approaching autonomy in medical artificial intelligence. The Lancet Digital Health, 2020, 2, e447-e449.	5.9	41
32	Use of frailty to predict survival in elderly patients with early stage non-small-cell lung cancer treated with stereotactic body radiation therapy. Journal of Geriatric Oncology, 2018, 9, 130-137.	0.5	36
33	Low Incidence of Chest Wall Pain with a Risk-Adapted Lung Stereotactic Body Radiation Therapy Approach Using Three or Five Fractions Based on Chest Wall Dosimetry. PLoS ONE, 2014, 9, e94859.	1.1	35
34	Mean Heart Dose Is an Inadequate Surrogate for Left Anterior Descending Coronary Artery Dose and the Risk of Major Adverse Cardiac Events in Lung Cancer Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2021, 110, 1473-1479.	0.4	33
35	Clinical Natural Language Processing for Radiation Oncology: A Review and Practical Primer. International Journal of Radiation Oncology Biology Physics, 2021, 110, 641-655.	0.4	30
36	Substrate Modification Using Stereotactic Radioablation to Treat Refractory Ventricular Tachycardia in Patients With Ischemic Cardiomyopathy. JACC: Clinical Electrophysiology, 2022, 8, 49-58.	1.3	29

#	Article	IF	Citations
37	An initial study on the estimation of time-varying volumetric treatment images and 3D tumor localization from single MV cine EPID images. Medical Physics, 2014, 41, 081713.	1.6	23
38	Radiographic patterns of symptomatic radiation pneumonitis in lung cancer patients: Imaging predictors for clinical severity and outcome. Lung Cancer, 2020, 145, 132-139.	0.9	20
39	Radiologic-pathologic correlation of response to chemoradiation in resectable locally advanced NSCLC. Lung Cancer, 2016, 102, 1-8.	0.9	18
40	Changes in Length and Complexity of Clinical Practice Guidelines in Oncology, 1996-2019. JAMA Network Open, 2020, 3, e200841.	2.8	18
41	EGFR mutant locally advanced non-small cell lung cancer is at increased risk of brain metastasis. Clinical and Translational Radiation Oncology, 2019, 18, 32-38.	0.9	17
42	Statin Use, Heart Radiation Dose, and Survival in Locally Advanced Lung Cancer. Practical Radiation Oncology, 2021, 11, e459-e467.	1.1	16
43	Master Protocol Trial Design for Efficient and Rational Evaluation of Novel Therapeutic Oncology Devices. Journal of the National Cancer Institute, 2020, 112, 229-237.	3.0	15
44	Advanced nodal stage predicts venous thromboembolism in patients with locally advanced non-small cell lung cancer. Lung Cancer, 2016, 96, 41-47.	0.9	14
45	Deep-learning system to improve the quality and efficiency of volumetric heart segmentation for breast cancer. Npj Digital Medicine, 2021, 4, 43.	5.7	13
46	Non-invasive ablation of arrhythmias with stereotactic ablative radiotherapy. Trends in Cardiovascular Medicine, 2022, 32, 287-296.	2.3	13
47	Radiation toxicity in patients with collagen vascular disease and intrathoracic malignancy treated with modern radiation techniques. Radiotherapy and Oncology, 2017, 125, 301-309.	0.3	11
48	Non-invasive Stereotactic Radioablation: A New Option for the Treatment of Ventricular Arrhythmias. Arrhythmia and Electrophysiology Review, 2020, 8, 285-293.	1.3	11
49	T-staging pulmonary oncology from radiological reports using natural language processing: translating into a multi-language setting. Insights Into Imaging, 2021, 12, 77.	1.6	10
50	The Nordic-HILUS Trial: Ultracentral Lung Stereotactic Ablative Radiotherapy and a Narrow Therapeutic Window. Journal of Thoracic Oncology, 2021, 16, e79-e80.	0.5	10
51	Noninvasive Stereotactic Radioablation for Ventricular Tachycardia. Circulation, 2019, 139, 322-324.	1.6	9
52	Elevated Coronary Artery Calcium Quantified by a Validated Deep Learning Model From Lung Cancer Radiotherapy Planning Scans Predicts Mortality. JCO Clinical Cancer Informatics, 2022, 6, e2100095.	1.0	9
53	Major adverse cardiac event risk prediction model incorporating baseline Cardiac disease, Hypertension, and Logarithmic Left anterior descending coronary artery radiation dose in lung cancer (CHyLL). Radiotherapy and Oncology, 2022, 169, 105-113.	0.3	9
54	Deep Learning-based Detection of Intravenous Contrast Enhancement on CT Scans. Radiology: Artificial Intelligence, 2022, 4, .	3.0	9

#	Article	IF	Citations
55	Cardiac stereotactic body radiation therapy for ventricular tachycardia: Current experience and technical gaps. Journal of Cardiovascular Electrophysiology, 2021, 32, 2901-2914.	0.8	8
56	Lymph node volume predicts survival but not nodal clearance in Stage IIIA-IIIB NSCLC. PLoS ONE, 2017, 12, e0174268.	1.1	7
57	The impact of quantitative CT-based tumor volumetric features on the outcomes of patients with limited stage small cell lung cancer. Radiation Oncology, 2020, 15, 14.	1.2	7
58	Integration of multiomic annotation data to prioritize and characterize inflammation and immune‐related risk variants in squamous cell lung cancer. Genetic Epidemiology, 2021, 45, 99-114.	0.6	7
59	Recurrent ventricular tachycardia arising at the treatment borderzone after stereotactic radioablation in a patient with ischemic cardiomyopathy. Europace, 2020, 22, 1053-1053.	0.7	6
60	Outcomes by EGFR, KRAS, and ALK Genotype After Combined Modality Therapy for Locally Advanced Non‐Small-Cell Lung Cancer. JCO Precision Oncology, 2018, 2, 1-18.	1.5	5
61	Noninvasive Cardiac Radioablation for Ventricular Arrhythmias. Current Cardiovascular Risk Reports, 2019, 13, 1.	0.8	5
62	Radiation Safety and Cardiovascular Implantable Electronic Devices. International Journal of Radiation Oncology Biology Physics, 2018, 102, 243-246.	0.4	4
63	Phase I/II Study of Stereotactic Body Radiation Therapy for Pulmonary Metastases in Pediatric Patients. Advances in Radiation Oncology, 2020, 5, 1267-1273.	0.6	4
64	Dosimetric Planning Tradeoffs to Reduce Heart Dose Using Machine Learning-Guided Decision Support Software in Patients with Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2022, 112, 996-1003.	0.4	4
65	Technical note: Toward implementation of MR‐guided radiation therapy for laryngeal cancer with healthy volunteer imaging and a custom MR‐CT larynx phantom. Medical Physics, 2022, 49, 1814-1821.	1.6	4
66	Inter‐scan and inter‐observer tumour volume delineation variability on cone beam computed tomography in patients treated with stereotactic body radiation therapy for early‐stage non‐small cell lung cancer. Journal of Medical Imaging and Radiation Oncology, 2017, 61, 93-98.	0.9	3
67	Development and Implementation of an Online Adaptive Stereotactic Body Radiation Therapy Workflow for Treatment of Intracardiac Metastasis. Practical Radiation Oncology, 2021, 11, e395-e401.	1.1	3
68	Are Artificial Intelligence Challenges Becoming Radiology's New "Bee's Knees"?. Radiology: Artificial Intelligence, 2021, 3, e210056.	3.0	3
69	Rates of invasive disease and outcomes in NSCLC patients with biopsy suggestive of carcinoma in situ. Lung Cancer, 2021, 157, 17-20.	0.9	3
70	Use of a healthy volunteer imaging program to optimize clinical implementation of stereotactic MR-guided adaptive radiotherapy. Technical Innovations and Patient Support in Radiation Oncology, 2020, 16, 70-76.	0.6	2
71	Case report of tracheobronchial squamous cell carcinoma treated with radiation therapy and concurrent chemotherapy. Advances in Radiation Oncology, 2016, 1, 127-131.	0.6	1
72	Prophylactic cranial irradiation in patients with extensive-stage small cell lung cancer. Neuro-Oncology, 2017, 19, 1015-1016.	0.6	1

#	Article	IF	Citations
73	Abstract 761: Body composition and overall survival in esophageal cancer patients. Cancer Research, 2021, 81, 761-761.	0.4	1
74	Impact of aggressive therapy in patients with non-small cell lung carcinoma presenting with brain-only oligometastatic disease.. Journal of Clinical Oncology, 2013, 31, 8069-8069.	0.8	1
75	Surgical complications and clinical outcomes after dose-escalated trimodality therapy for non-small cell lung cancer in the era of intensity-modulated radiotherapy. Radiotherapy and Oncology, 2021, 165, 44-51.	0.3	1
76	Factors associated with survival in non-small cell lung cancer (NSCLC) patients with a solitary metastasis.. Journal of Clinical Oncology, 2013, 31, e19121-e19121.	0.8	0
77	Cost of cardiac stereotactic body radioablation therapy versus catheter ablation for treatment of ventricular tachycardia. PACE - Pacing and Clinical Electrophysiology, 0, , .	0.5	0