Amir Abdollahi

List of Articles by Year
in descending order

121 PR articles	5,018 PR citations	78865 37 PR h-index	89431 67 g-index
127 documents	5527 doc citations	82451 39 h-index	13952 citing authors

#	Article	IF	Citations
1	Ultrahigh Dose Rate Helium Ion Beams: Minimizing Brain Tissue Damage while Preserving Tumor Control. Molecular Cancer Therapeutics, 2025, 24, 763-771.	1.9	3
2	Evolving Paradigms in the Treatment of Oligometastatic Pancreatic Ductal Adenocarcinoma. Journal of Gastrointestinal Cancer, 2025, 56, .	1.2	0
3	HyperSHArc: Single-Isocenter Stereotactic Radiosurgery of Multiple Brain Metastases Using Proton, Helium, and Carbon Ion Arc Therapy. Advances in Radiation Oncology, 2025, 10, 101763.	1.3	1
4	Exploring Helium Ionsâ€™ Potential for Post-Mastectomy Left-Sided Breast Cancer Radiotherapy. Cancers, 2024, 16, 410.	3.8	7
5	Validation of a methylation-based signature for subventricular zone involvement in glioblastoma. Journal of Neuro-Oncology, 2024, 167, 89-97.	2.5	1
6	Pharmacological Landscape of FDA-Approved Anticancer Drugs Reveals Sensitivities to Ixabepilone, Romidepsin, Omacetaxine, and Carfilzomib in Aggressive Meningiomas. Clinical Cancer Research, 2023, 29, 233-243.	6.8	15
7	MR Intensity Normalization Methods Impact Sequence Specific Radiomics Prognostic Model Performance in Primary and Recurrent High-Grade Glioma. Cancers, 2023, 15, 965.	3.8	11
8	Do We Preserve Tumor Control Probability (TCP) in FLASH Radiotherapy? A Model-Based Analysis. International Journal of Molecular Sciences, 2023, 24, 5118.	4.4	5
9	MR-Class: A Python Tool for Brain MR Image Classification Utilizing One-vs-All DCNNs to Deal with the Open-Set Recognition Problem. Cancers, 2023, 15, 1820.	3.8	3
10	DNA-Methylomeâ€“Based Tumor Hypoxia Classifier Identifies HPV-Negative Head and Neck Cancer Patients at Risk for Locoregional Recurrence after Primary Radiochemotherapy. Clinical Cancer Research, 2023, 29, 3051-3064.	6.8	7
11	Effective Reprogramming of Patient-Derived M2-Polarized Glioblastoma-Associated Microglia/Macrophages by Treatment with GW2580. Clinical Cancer Research, 2023, 29, 4685-4697.	6.8	28
12	Radioresistance and Transcriptional Reprograming of Invasive Glioblastoma Cells. International Journal of Radiation Oncology Biology Physics, 2022, 112, 499-513.	1.5	17
13	Combined DNA Damage Repair Interference and Ion Beam Therapy: Development, Benchmark, and Clinical Implications of a Mechanistic Biological Model. International Journal of Radiation Oncology Biology Physics, 2022, 112, 802-817.	1.5	13
14	Tumor <scp>DNAâ€methylome</scp> derived epigenetic fingerprint identifies <scp>HPV</scp>â€negative head and neck patients at risk for locoregional recurrence after postoperative radiochemotherapy. International Journal of Cancer, 2022, 150, 603-616.	4.3	3
15	Highâ€Complexity cellular barcoding and clonal tracing reveals stochastic and deterministic parameters of radiation resistance. International Journal of Cancer, 2022, 150, 663-677.	4.3	3
16	Ultra-High Dose Rate (FLASH) Carbon Ion Irradiation:ÂDosimetry and First Cell Experiments. International Journal of Radiation Oncology Biology Physics, 2022, 112, 1012-1022.	1.5	87
17	Analyses of molecular subtypes and their association to mechanisms of radioresistance in patients with HPV-negative HNSCC treated by postoperative radiochemotherapy. Radiotherapy and Oncology, 2022, 167, 300-307.	2.0	6
18	Evolution of a Paradigm Switch in Diagnosis and Treatment of HPV-Driven Head and Neck Cancerâ€”Striking the Balance Between Toxicity and Cure. Frontiers in Pharmacology, 2022, 12, .	3.8	23

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19	Deep Learningâ€“based Automatic Lung Segmentation on Multiresolution CT Scans from Healthy and Fibrotic Lungs in Mice. Radiology: Artificial Intelligence, 2022, 4, .	8.0	9
20	Whole Blood Transcriptional Fingerprints of High-Grade Glioma and Longitudinal Tumor Evolution under Carbon Ion Radiotherapy. Cancers, 2022, 14, 684.	3.8	7
21	How can we consider variable RBE and LETd prediction during clinical practice? A pediatric case report at the Normandy Proton Therapy Centre using an independent dose engine. Radiation Oncology, 2022, 17, .	2.7	7
22	Neuroprotective Effects of Ultra-High Dose Rate FLASH Bragg Peak Proton Irradiation. International Journal of Radiation Oncology Biology Physics, 2022, 113, 614-623.	1.5	53
23	The Impact of Sub-Millisecond Damage Fixation Kinetics on the In Vitro Sparing Effect at Ultra-High Dose Rate in UNIVERSE. International Journal of Molecular Sciences, 2022, 23, 2954.	4.4	10
24	Cetuximab, gemcitabine and radiotherapy in locally advanced pancreatic cancer: Long-term results of the randomized controlled phase II PARC trial. Clinical and Translational Radiation Oncology, 2022, 34, 15-22.	0.9	7
25	Development and validation of a 6-gene signature for the prognosis of loco-regional control in patients with HPV-negative locally advanced HNSCC treated by postoperative radio(chemo)therapy. Radiotherapy and Oncology, 2022, 171, 91-100.	2.0	8
26	FLASH with carbon ions: Tumor control, normal tissue sparing, and distal metastasis in a mouse osteosarcoma model. Radiotherapy and Oncology, 2022, 175, 185-190.	2.0	111
27	Biological Dose Optimization for Particle Arc Therapy Using Helium and Carbon Ions. International Journal of Radiation Oncology Biology Physics, 2022, 114, 334-348.	1.5	18
28	Impact of DNA Repair Kinetics and Dose Rate on RBE Predictions in the UNIVERSE. International Journal of Molecular Sciences, 2022, 23, 6268.	4.4	6
29	DNA-methylome-assisted classification of patients with poor prognostic subventricular zone associated IDH-wildtype glioblastoma. Acta Neuropathologica, 2022, 144, 129-142.	9.2	12
30	AAMP is a binding partner of costimulatory human B7-H3. Neuro-Oncology Advances, 2022, 4, .	0.9	7
31	Carbon ion irradiation plus CTLA4 blockade elicits therapeutic immune responses in a murine tumor model. Cancer Letters, 2022, 550, 215928.	8.6	19
32	Differential transcriptome response to proton versus X-ray radiation reveals novel candidate targets for combinatorial PT therapy in lymphoma. Radiotherapy and Oncology, 2021, 155, 293-303.	2.0	7
33	Charged Particle and Conventional Radiotherapy: Current Implications as Partner for Immunotherapy. Cancers, 2021, 13, 1468.	3.8	41
34	Prognostic Value of microRNA-221/2 and 17-92 Families in Primary Glioblastoma Patients Treated with Postoperative Radiotherapy. International Journal of Molecular Sciences, 2021, 22, 2960.	4.4	6
35	KIF11 inhibitors filanesib and ispinesib inhibit meningioma growth in vitro and in vivo. Cancer Letters, 2021, 506, 1-10.	8.6	26
36	Spot-Scanning Hadron Arc (SHArc) Therapy: A Study With Light and Heavy Ions. Advances in Radiation Oncology, 2021, 6, 100661.	1.3	29

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37	Deciphering Time-Dependent DNA Damage Complexity, Repair, and Oxygen Tension: A Mechanistic Model for FLASH-Dose-Rate Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2021, 110, 574-586.	1.5	35
38	FLASH Dose Rate Helium Ion Beams: First In Vitro Investigations. International Journal of Radiation Oncology Biology Physics, 2021, 111, 1011-1022.	1.5	71
39	Uncovering cancer vulnerabilities by machine learning prediction of synthetic lethality. Molecular Cancer, 2021, 20, .	29.2	29
40	Simultaneous targeting of TGF-Î²/PD-L1 synergizes with radiotherapy by reprogramming the tumor microenvironment to overcome immune evasion. Cancer Cell, 2021, 39, 1388-1403.e10.	33.0	163
41	Sarcoma classification by DNA methylation profiling. Nature Communications, 2021, 12, .	13.7	448
42	C-MORE: A high-content single-cell morphology recognition methodology for liquid biopsies toward personalized cardiovascular medicine. Cell Reports Medicine, 2021, 2, 100436.	6.6	10
43	Receptor-Tyrosine Kinase Inhibitor Ponatinib Inhibits Meningioma Growth In Vitro and In Vivo. Cancers, 2021, 13, 5898.	3.8	12
44	Assessment of Normal Tissue Radiosensitivity by Evaluating DNA Damage and Repair Kinetics in Human Brain Organoids. International Journal of Molecular Sciences, 2021, 22, 13195.	4.4	6
45	Development and Validation of Single Field Multi-Ion Particle Therapy Treatments. International Journal of Radiation Oncology Biology Physics, 2020, 106, 194-205.	1.5	55
46	Isolation of timeâ€dependent DNA damage induced by energetic carbon ions and their fragments using fluorescent nuclear track detectors. Medical Physics, 2020, 47, 272-281.	3.1	15
47	An R package for an integrated evaluation of statistical approaches to cancer incidence projection. BMC Medical Research Methodology, 2020, 20, .	2.5	258
48	FRoG: An independent dose and LET_d prediction tool for proton therapy at ProBeamÂ® facilities. Medical Physics, 2020, 47, 5274-5286.	3.1	19
49	A scalable CRISPR/Cas9-based fluorescent reporter assay to study DNA double-strand break repair choice. Nature Communications, 2020, 11, .	13.7	40
50	Increased Radiation-Associated T-Cell Infiltration in Recurrent IDH-Mutant Glioma. International Journal of Molecular Sciences, 2020, 21, 7801.	4.4	19
51	Mapping the Relative Biological Effectiveness of Proton, Helium and Carbon Ions with High-Throughput Techniques. Cancers, 2020, 12, 3658.	3.8	32
52	Assessment of RBE-Weighted Dose Models for Carbon Ion Therapy Toward Modernization of Clinical Practice at HIT: InÂVitro, inÂVivo, and in Patients. International Journal of Radiation Oncology Biology Physics, 2020, 108, 779-791.	1.5	66
53	Study of the intracellular nanoparticle-based radiosensitization mechanisms in F98 glioma cells treated with charged particle therapy through synchrotron-based infrared microspectroscopy. Analyst, The, 2020, 145, 2345-2356.	3.1	15
54	Personalized Assessment of Normal Tissue Radiosensitivity via Transcriptome Response to Photon, Proton and Carbon Irradiation in Patient-Derived Human Intestinal Organoids. Cancers, 2020, 12, 469.	3.8	13

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55	Surfactant Expression Defines an Inflamed Subtype of Lung Adenocarcinoma Brain Metastases that Correlates with Prolonged Survival. Clinical Cancer Research, 2020, 26, 2231-2243.	6.8	32
56	Deep abscopal response to radiotherapy and anti-PD-1 in an oligometastatic melanoma patient with unfavorable pretreatment immune signature. Cancer Immunology, Immunotherapy, 2020, 69, 1823-1832.	4.6	25
57	Comparison of GeneChip, nCounter, and Real-Time PCRâ€“Based Gene Expressions Predicting Locoregional Tumor Control after Primary and Postoperative Radiochemotherapy in Head and Neck Squamous Cell Carcinoma. Journal of Molecular Diagnostics, 2020, 22, 801-810.	2.5	13
58	ERCC2 gene single-nucleotide polymorphism as a prognostic factor for locally advanced head and neck carcinomas after definitive cisplatin-based radiochemotherapy. Pharmacogenomics Journal, 2020, 21, 37-46.	2.7	9
59	Biophysical modeling and experimental validation of relative biological effectiveness (RBE) for 4He ion beam therapy. Radiation Oncology, 2019, 14, .	2.7	47
60	Dosimetric validation of Monte Carlo and analytical dose engines with raster-scanning 1H, 4He, 12C, and 16O ion-beams using an anthropomorphic phantom. Physica Medica, 2019, 64, 123-131.	1.6	23
61	The CD98 Heavy Chain Is a Marker and Regulator of Head and Neck Squamous Cell Carcinoma Radiosensitivity. Clinical Cancer Research, 2019, 25, 3152-3163.	6.8	75
62	Location-Dependent Patient Outcome and Recurrence Patterns in IDH1-Wildtype Glioblastoma. Cancers, 2019, 11, 122.	3.8	35
63	Somatic mutations and promotor methylation of the ryanodine receptor 2 is a common event in the pathogenesis of head and neck cancer. International Journal of Cancer, 2019, 145, 3299-3310.	4.3	37
64	Impact of post-surgical freezing delay on brain tumor metabolomics. Metabolomics, 2019, 15, .	2.8	10
65	Identification of KIF11 as a Novel Target in Meningioma. Cancers, 2019, 11, 545.	3.8	44
66	Modeling the Effect of Hypoxia and DNA Repair Inhibition on Cell Survival after Photon Irradiation. International Journal of Molecular Sciences, 2019, 20, 6054.	4.4	16
67	Large scale in vivo microâ€RNA loss of function screen identified miRâ€29a, miRâ€100 and miRâ€155 as modulators of radioresistance and tumorâ€stroma communication. International Journal of Cancer, 2019, 144, 2774-2781.	4.3	9
68	Determining RBE for development of lung fibrosis induced by fractionated irradiation with carbon ions utilizing fibrosis index and high-LET BED model. Clinical and Translational Radiation Oncology, 2019, 14, 25-32.	0.9	7
69	Synthetic phosphopeptides: From spike-in standards to affinity tools for protein-protein interaction studies. Analytical Biochemistry, 2019, 568, 73-77.	2.4	0
70	Modeling and multiscale characterization of the quantitative imaging based fibrosis index reveals pathophysiological, transcriptome and proteomic correlates of lung fibrosis induced by fractionated irradiation. International Journal of Cancer, 2019, 144, 3160-3173.	4.3	16
71	Carbon irradiation overcomes glioma radioresistance by eradicating stem cells and forming an antiangiogenic and immunopermissive niche. JCI Insight, 2019, 4, .	5.4	75
72	A solidâ€phase transfection platform for arrayed <scp>CRISPR</scp> screens. Molecular Systems Biology, 2019, 15, .	6.7	11

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73	Comparison of detection methods for HPV status as a prognostic marker for loco-regional control after radiochemotherapy in patients with HNSCC. Radiotherapy and Oncology, 2018, 127, 27-35.	2.0	21
74	SDF-1/CXCR4 expression is an independent negative prognostic biomarker in patients with head and neck cancer after primary radiochemotherapy. Radiotherapy and Oncology, 2018, 126, 125-131.	2.0	26
75	Feasibility and robustness of dynamic 18F-FET PET based tracer kinetic models applied to patients with recurrent high-grade glioma prior to carbon ion irradiation. Scientific Reports, 2018, 8, .	3.4	21
76	Cellular Barcoding Identifies Clonal Substitution as a Hallmark of Local Recurrence in a Surgical Model of Head and Neck Squamous Cell Carcinoma. Cell Reports, 2018, 25, 2208-2222.e7.	6.3	37
77	Fast robust dose calculation on GPU for high-precision 1H, 4He, 12C and 16O ion therapy: the FRoG platform. Scientific Reports, 2018, 8, .	3.4	51
78	Oncogene addiction and radiation oncology: effect of radiotherapy with photons and carbon ions in ALK-EML4 translocated NSCLC. Radiation Oncology, 2018, 13, .	2.7	80
79	Impact of 18F-FET PET on Target Volume Definition and Tumor Progression of Recurrent High Grade Glioma Treated with Carbon-Ion Radiotherapy. Scientific Reports, 2018, 8, .	3.4	35
80	Comparative analysis of the effects of a sphingosine kinase inhibitor to temozolomide and radiation treatment on glioblastoma cell lines. Cancer Biology and Therapy, 2017, 18, 400-406.	4.1	15
81	Deciphering the Acute Cellular Phosphoproteome Response to Irradiation with X-rays, Protons and Carbon Ions. Molecular and Cellular Proteomics, 2017, 16, 855-872.	3.0	33
82	Optimization of Monte Carlo particle transport parameters and validation of a novel high throughput experimental setup to measure the biological effects of particle beams. Medical Physics, 2017, 44, 6061-6073.	3.1	28
83	SDF-1/CXCR4 expression in head and neck cancer and outcome after postoperative radiochemotherapy. Clinical and Translational Radiation Oncology, 2017, 5, 28-36.	0.9	17
84	Overcoming hypoxia-induced tumor radioresistance in non-small cell lung cancer by targeting DNA-dependent protein kinase in combination with carbon ion irradiation. Radiation Oncology, 2017, 12, .	2.7	96
85	Quantitative assessment of radiation dose and fractionation effects on normal tissue by utilizing a novel lung fibrosis index model. Radiation Oncology, 2017, 12, .	2.7	18
86	LOC283731 promoter hypermethylation prognosticates survival after radiochemotherapy in IDH1 wildâ€type glioblastoma patients. International Journal of Cancer, 2016, 139, 424-432.	4.3	21
87	Spatial transcriptome analysis reveals Notch pathway-associated prognostic markers in IDH1 wild-type glioblastoma involving the subventricular zone. BMC Medicine, 2016, 14, .	7.1	36
88	HPV status, cancer stem cell marker expression, hypoxia gene signatures and tumour volume identify good prognosis subgroups in patients with HNSCC after primary radiochemotherapy: A multicentre retrospective study of the German Cancer Consortium Radiation Oncology Group (DKTK-ROG). Radiotherapy and Oncology, 2016, 121, 364-373.	2.0	147
89	K-Ras and cyclooxygenase-2 coactivation augments intraductal papillary mucinous neoplasm and Notch1 mimicking human pancreas lesions. Scientific Reports, 2016, 6, .	3.4	8
90	Low Cancer Stem Cell Marker Expression and Low Hypoxia Identify Good Prognosis Subgroups in HPV(â^') HNSCC after Postoperative Radiochemotherapy: A Multicenter Study of the DKTK-ROG. Clinical Cancer Research, 2016, 22, 2639-2649.	6.8	135

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91	Comparative analysis of transcriptomics based hypoxia signatures in head- and neck squamous cell carcinoma. Radiotherapy and Oncology, 2016, 118, 350-358.	2.0	66
92	Inhibition of Tumor Growth and Metastasis in Pancreatic Cancer Models by Interference With CD44v6 Signaling. Gastroenterology, 2016, 150, 513-525.e10.	0.9	108
93	Radiosensitivity of Patient-Derived Glioma Stem Cell 3-Dimensional Cultures to Photon, Proton, and Carbon Irradiation. International Journal of Radiation Oncology Biology Physics, 2016, 95, 112-119.	1.5	52
94	Correlation of Particle Traversals with Clonogenic Survival Using Cell-Fluorescent Ion Track Hybrid Detector. Frontiers in Oncology, 2015, 5, .	2.6	10
95	Molecular profiling of long-term survivors identifies a subgroup of glioblastoma characterized by chromosome 19/20 co-gain. Acta Neuropathologica, 2015, 130, 419-434.	9.2	85
96	Stem Cell-Specific Mechanisms Ensure Genomic Fidelity within HSCs and upon Aging of HSCs. Cell Reports, 2015, 13, 2412-2424.	6.3	54
97	Synergistic effects of crizotinib and radiotherapy in experimental EML4â€“ALK fusion positive lung cancer. Radiotherapy and Oncology, 2015, 114, 173-181.	2.0	49
98	For the Next Trick: New Discoveries in Radiobiology Applied to Glioblastoma. American Society of Clinical Oncology Educational Book / ASCO American Society of Clinical Oncology Meeting, 2014, , e95-e99.	4.5	23
99	HPV16 DNA status is a strong prognosticator of loco-regional control after postoperative radiochemotherapy of locally advanced oropharyngeal carcinoma: Results from a multicentre explorative study of the German Cancer Consortium Radiation Oncology Group (DKTK-ROG). Radiotherapy and Oncology, 2014, 113, 317-323.	2.0	149
100	Engineering cell-fluorescent ion track hybrid detectors. Radiation Oncology, 2013, 8, .	2.7	31
101	Subcellular Spatial Correlation of Particle Traversal and Biological Response in Clinical Ion Beams. International Journal of Radiation Oncology Biology Physics, 2013, 87, 1141-1147.	1.5	30
102	Identification of stable endogenous control genes for transcriptional profiling of photon, proton and carbon-ion irradiated cells. Radiation Oncology, 2012, 7, .	2.7	22
103	Consensus Micro RNAs Governing the Switch of Dormant Tumors to the Fast-Growing Angiogenic Phenotype. PLoS ONE, 2012, 7, e44001.	2.3	56
104	Gene Expression Signatures in the Peripheral Blood After Radiosurgery of Human Cerebral Arteriovenous Malformations. Strahlentherapie Und Onkologie, 2010, 186, 91-98.	2.1	8
105	Tumor growth and angiogenesis are dependent on the presence of immature dendritic cells. FASEB Journal, 2010, 24, 1411-1418.	0.6	109
106	Evading tumor evasion: Current concepts and perspectives of anti-angiogenic cancer therapy. Drug Resistance Updates, 2010, 13, 16-28.	19.3	220
107	MicroRNA expression after ionizing radiation in human endothelial cells. Radiation Oncology, 2010, 5, .	2.7	137
108	Whole Blood Transcriptomics in Cardiac Surgery Identifies a Gene Regulatory Network Connecting Ischemia Reperfusion with Systemic Inflammation. PLoS ONE, 2010, 5, e13658.	2.3	39

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109	Transcriptional Switch of Dormant Tumors to Fast-Growing Angiogenic Phenotype. Cancer Research, 2009, 69, 836-844.	3.8	231
110	Consensus transcriptome signature of perineural invasion in pancreatic carcinoma. Molecular Cancer Therapeutics, 2009, 8, 1494-1504.	1.9	96
111	Late treatment with imatinib mesylate ameliorates radiation-induced lung fibrosis in a mouse model. Radiation Oncology, 2009, 4, .	2.7	57
112	Angiostatin regulates the expression of antiangiogenic and proapoptotic pathways via targeted inhibition of mitochondrial proteins. Blood, 2009, 114, 1987-1998.	4.2	42
113	SU11657 Enhances Radiosensitivity of Human Meningioma Cells. International Journal of Radiation Oncology Biology Physics, 2008, 70, 1213-1218.	1.5	9
114	Transcriptional network governing the angiogenic switch in human pancreatic cancer. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 12890-12895.	7.5	204
115	Small molecule receptor tyrosine kinase inhibitor of platelet-derived growth factor signaling (SU9518) modifies radiation response in fibroblasts and endothelial cells. BMC Cancer, 2006, 6, .	2.9	48
116	Inhibition of platelet-derived growth factor signaling attenuates pulmonary fibrosis. Journal of Experimental Medicine, 2005, 201, 925-935.	9.2	364
117	Endostatin: The logic of antiangiogenic therapy. Drug Resistance Updates, 2005, 8, 59-74.	19.3	102
118	Apoptosis signals in lymphoblasts induced by focused ultrasound. FASEB Journal, 2004, 18, 1413-1414.	0.6	64
119	Triple combination of irradiation, chemotherapy (pemetrexed), and VEGFR inhibition (SU5416) in human endothelial and tumor cells. International Journal of Radiation Oncology Biology Physics, 2004, 60, 1220-1232.	1.5	60
120	Endostatin's Antiangiogenic Signaling Network. Molecular Cell, 2004, 13, 649-663.	13.3	381
121	Computed Tomography Monitoring of Radiation-Induced Lung Fibrosis in Mice. Investigative Radiology, 2004, 39, 600-609.	6.8	68