

# John L Humm

## List of Publications by Year in descending order

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85  
papers

4,791  
citations

159358

30  
h-index

95083

68  
g-index

90  
all docs

90  
docs citations

90  
times ranked

6429  
citing authors

#	ARTICLE	IF	CITATIONS
1	Towards multidimensional radiotherapy (MD-CRT): biological imaging and biological conformality. <i>International Journal of Radiation Oncology Biology Physics</i> , 2000, 47, 551-560.	0.4	885
2	Clinical translation of an ultrasmall inorganic optical-PET imaging nanoparticle probe. <i>Science Translational Medicine</i> , 2014, 6, 260ra149.	5.8	589
3	Segmentation of lung lesion volume by adaptive positron emission tomography image thresholding. <i>Cancer</i> , 1997, 80, 2505-2509.	2.0	377
4	From PET detectors to PET scanners. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2003, 30, 1574-1597.	3.3	186
5	Assessment of regional tumor hypoxia using <sup>18</sup> F-fluoromisonidazole and <sup>64</sup> Cu(II)-diacetyl-bis(N4-methylthiosemicarbazone) positron emission tomography: Comparative study featuring microPET imaging, Po <sub>2</sub> probe measurement, autoradiography, and fluorescent microscopy in the R3327-AT and FaDu rat tumor models. <i>International Journal of Radiation Oncology Biology Physics</i> , 2005, 61, 1493-1502.	0.4	183
6	Segmentation of lung lesion volume by adaptive positron emission tomography image thresholding. <i>Cancer</i> , 1997, 80, 2505-9.	2.0	174
7	Dependence of FDG uptake on tumor microenvironment. <i>International Journal of Radiation Oncology Biology Physics</i> , 2005, 62, 545-553.	0.4	170
8	Dosimetry of Auger-electron-emitting radionuclides: Report No. 3 of AAPM Nuclear Medicine Task Group No. 6. <i>Medical Physics</i> , 1994, 21, 1901-1915.	1.6	128
9	<sup>18</sup> F-FDG PET/CT for Monitoring of Ipilimumab Therapy in Patients with Metastatic Melanoma. <i>Journal of Nuclear Medicine</i> , 2019, 60, 335-341.	2.8	123
10	Strategy of Using Intratreatment Hypoxia Imaging to Selectively and Safely Guide Radiation Dose De-escalation Concurrent With Chemotherapy for Locoregionally Advanced Human Papillomavirus-Related Oropharyngeal Carcinoma. <i>International Journal of Radiation Oncology Biology Physics</i> , 2016, 96, 9-17.	0.4	121
11	Use of PET to monitor the response of lung cancer to radiation treatment. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2000, 27, 861-866.	3.3	108
12	Precision Radiotherapy: Reduction in Radiation for Oropharyngeal Cancer in the 30 ROC Trial. <i>Journal of the National Cancer Institute</i> , 2021, 113, 742-751.	3.0	98
13	Positron Emission Tomography/Computed Tomography-Based Assessments of Androgen Receptor Expression and Glycolytic Activity as a Prognostic Biomarker for Metastatic Castration-Resistant Prostate Cancer. <i>JAMA Oncology</i> , 2018, 4, 217.	3.4	93
14	Tumour-specific PI3K inhibition via nanoparticle-targeted delivery in head and neck squamous cell carcinoma. <i>Nature Communications</i> , 2017, 8, 14292.	5.8	90
15	Iodine-124-labeled iodo-azomycin-galactoside imaging of tumor hypoxia in mice with serial microPET scanning. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2004, 31, 117-128.	3.3	88
16	Prognostic value of baseline metabolic tumor volume measured on <sup>18</sup> F-fluorodeoxyglucose positron emission tomography/computed tomography in melanoma patients treated with ipilimumab therapy. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2019, 46, 930-939.	3.3	75
17	Targeted Brain Tumor Radiotherapy Using an Auger Emitter. <i>Clinical Cancer Research</i> , 2020, 26, 2871-2881.	3.2	69
18	An Antitumor Immune Response Is Evoked by Partial-Volume Single-Dose Radiation in 2 Murine Models. <i>International Journal of Radiation Oncology Biology Physics</i> , 2019, 103, 697-708.	0.4	62

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19	Prediction of absorbed dose to normal organs in thyroid cancer patients treated with <sup>131</sup> I by use of <sup>124</sup> I PET and 3-dimensional internal dosimetry software. <i>Journal of Nuclear Medicine</i> , 2007, 48, 143-9.	2.8	59
20	Predicting hypoxia status using a combination of contrast-enhanced computed tomography and [ <sup>18</sup> F]-Fluorodeoxyglucose positron emission tomography radiomics features. <i>Radiotherapy and Oncology</i> , 2018, 127, 36-42.	0.3	55
21	PARP-1 Targeted Radiotherapy in Mouse Models of Glioblastoma. <i>Journal of Nuclear Medicine</i> , 2018, 59, 1225-1233.	2.8	51
22	<sup>18</sup> F-FDG PET/CT Is an Immediate Imaging Biomarker of Treatment Success After Liver Metastasis Ablation. <i>Journal of Nuclear Medicine</i> , 2016, 57, 1052-1057.	2.8	50
23	Radium-223 in the Treatment of Osteoblastic Metastases: A Critical Clinical Review. <i>International Journal of Radiation Oncology Biology Physics</i> , 2015, 91, 898-906.	0.4	49
24	A phase II study of radioimmunotherapy with intraventricular <sup>131</sup> I-3F8 for medulloblastoma. <i>Pediatric Blood and Cancer</i> , 2018, 65, e26754.	0.8	46
25	The potential of theragnostic <sup>124</sup> I-8H9 convection-enhanced delivery in diffuse intrinsic pontine glioma. <i>Neuro-Oncology</i> , 2014, 16, 800-806.	0.6	38
26	Imaging Patients with Metastatic Castration-Resistant Prostate Cancer Using <sup>89</sup> Zr-DFO-MSTP2109A Anti-STEAP1 Antibody. <i>Journal of Nuclear Medicine</i> , 2019, 60, 1517-1523.	2.8	38
27	Image-Guided <sup>2</sup> Probe Measurements Correlated with Parametric Images Derived from <sup>18</sup> F-Fluoromisonidazole Small-Animal PET Data in Rats. <i>Journal of Nuclear Medicine</i> , 2012, 53, 1608-1615.	2.8	34
28	PET quantification with a histogram derived total activity metric: Superior quantitative consistency compared to total lesion glycolysis with absolute or relative SUV thresholds in phantoms and lung cancer patients. <i>Nuclear Medicine and Biology</i> , 2014, 41, 410-418.	0.3	33
29	A Combination of Radiation and the Hypoxia-Activated Prodrug Evofosfamide (TH-302) is Efficacious against a Human Orthotopic Pancreatic Tumor Model. <i>Translational Oncology</i> , 2017, 10, 760-765.	1.7	33
30	Monitoring early response to chemoradiotherapy with <sup>18</sup> F-FMISO dynamic PET in head and neck cancer. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2017, 44, 1682-1691.	3.3	33
31	Copper-64-diacetyl-bis(N(4)-methylthiosemicarbazone) Pharmacokinetics in FaDu Xenograft Tumors and Correlation With Microscopic Markers of Hypoxia. <i>International Journal of Radiation Oncology Biology Physics</i> , 2012, 84, e393-e399.	0.4	32
32	Multiparametric Imaging of Tumor Hypoxia and Perfusion with <sup>18</sup> F-Fluoromisonidazole Dynamic PET in Head and Neck Cancer. <i>Journal of Nuclear Medicine</i> , 2017, 58, 1072-1080.	2.8	31
33	Tumor hypoxia imaging in orthotopic liver tumors and peritoneal metastasis: a comparative study featuring dynamic <sup>18</sup> F-MISO and <sup>124</sup> I-IAZG PET in the same study cohort. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2008, 35, 39-46.	3.3	29
34	Biodistribution and Dosimetry of Intraventricularly Administered <sup>124</sup> I-Omburtamab in Patients with Metastatic Leptomeningeal Tumors. <i>Journal of Nuclear Medicine</i> , 2019, 60, 1794-1801.	2.8	29
35	PETSTEP: Generation of synthetic PET lesions for fast evaluation of segmentation methods. <i>Physica Medica</i> , 2015, 31, 969-980.	0.4	28
36	Feasibility of In Situ, High-Resolution Correlation of Tracer Uptake with Histopathology by Quantitative Autoradiography of Biopsy Specimens Obtained Under <sup>18</sup> F-FDG PET/CT Guidance. <i>Journal of Nuclear Medicine</i> , 2015, 56, 538-544.	2.8	28

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37	Reproducibility of <sup>18</sup> F-fluoromisonidazole intratumour distribution in non-small cell lung cancer. EJNMMI Research, 2016, 6, 79.	1.1	25
38	Pharmacokinetic Assessment of <sup>18</sup> F-(2 <i>S</i> ,4 <i>R</i> )-4-Fluoroglutamine in Patients with Cancer. Journal of Nuclear Medicine, 2020, 61, 357-366.	2.8	23
39	Electron dose profile shaping by modulation of a scanning elementary beam. Medical Physics, 1996, 23, 33-44.	1.6	22
40	Pharmacokinetic Analysis of Dynamic <sup>18</sup> F-Fluoromisonidazole PET Data in Non-“Small Cell Lung Cancer. Journal of Nuclear Medicine, 2017, 58, 911-919.	2.8	22
41	Copper-64 trastuzumab PET imaging: a reproducibility study. Quarterly Journal of Nuclear Medicine and Molecular Imaging, 2019, 63, 191-198.	0.4	21
42	Reproducibility and Repeatability of Semiquantitative <sup>18</sup> F-Fluorodihydrotestosterone Uptake Metrics in Castration-Resistant Prostate Cancer Metastases: A Prospective Multicenter Study. Journal of Nuclear Medicine, 2018, 59, 1516-1523.	2.8	20
43	Non-invasive imaging prediction of tumor hypoxia: A novel developed and externally validated CT and FDG-PET-based radiomic signatures. Radiotherapy and Oncology, 2020, 153, 97-105.	0.3	19
44	<sup>11</sup> C-Choline PET/CT in Recurrent Prostate Cancer: Retrospective Analysis in a Large U.S. Patient Series. Journal of Nuclear Medicine, 2020, 61, 827-833.	2.8	18
45	Assessing and accounting for the impact of respiratory motion on FDG uptake and viable volume for liver lesions in free-breathing PET using respiration-suspended PET images as reference. Medical Physics, 2014, 41, 091905.	1.6	17
46	Targeted radioimmunotherapy for embryonal tumor with multilayered rosettes. Journal of Neuro-Oncology, 2019, 143, 101-106.	1.4	17
47	Feasibility of <sup>18</sup> F-Fluoromisonidazole Kinetic Modeling in Head and Neck Cancer Using Shortened Acquisition Times. Journal of Nuclear Medicine, 2016, 57, 334-341.	2.8	16
48	In vivo characterization of a reporter gene system for imaging hypoxia-induced gene expression. Nuclear Medicine and Biology, 2009, 36, 821-831.	0.3	15
49	In Vitro and In Vivo Comparison of Gemcitabine and the Gemcitabine Analog 1-(2-deoxy-2-fluoroarabinofuranosyl) Cytosine (FAC) in Human Orthotopic and Genetically Modified Mouse Pancreatic Cancer Models. Molecular Imaging and Biology, 2017, 19, 885-892.	1.3	14
50	Measured dose rate constant from oncology patients administered <sup>18</sup> F for positron emission tomography. Medical Physics, 2012, 39, 6071-6079.	1.6	13
51	PET-based compartmental modeling of <sup>124</sup> I-A33 antibody: quantitative characterization of patient-specific tumor targeting in colorectal cancer. European Journal of Nuclear Medicine and Molecular Imaging, 2015, 42, 1700-1706.	3.3	13
52	<sup>18</sup> F-Fluorocholine PET uptake correlates with pathologic evidence of recurrent tumor after stereotactic radiosurgery for brain metastases. European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 1446-1457.	3.3	13
53	Overcoming Barriers to Radiopharmaceutical Therapy (RPT): An Overview From the NRG-NCI Working Group on Dosimetry of Radiopharmaceutical Therapy. International Journal of Radiation Oncology Biology Physics, 2021, 109, 905-912.	0.4	13
54	Reverse-Contrast Imaging and Targeted Radiation Therapy of Advanced Pancreatic Cancer Models. International Journal of Radiation Oncology Biology Physics, 2015, 93, 444-453.	0.4	12

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55	<sup>11</sup> C-Choline Pharmacokinetics in Recurrent Prostate Cancer. <i>Journal of Nuclear Medicine</i> , 2018, 59, 1672-1678.	2.8	11
56	Relaxed ordered subset preconditioned alternating projection algorithm for PET reconstruction with automated penalty weight selection. <i>Medical Physics</i> , 2017, 44, 4083-4097.	1.6	10
57	Assessment of Simplified Methods for Quantification of 18F-FDHT Uptake in Patients with Metastatic Castration-Resistant Prostate Cancer. <i>Journal of Nuclear Medicine</i> , 2019, 60, 1221-1227.	2.8	10
58	Optimizing 90Y Particle Density Improves Outcomes After Radioembolization. <i>CardioVascular and Interventional Radiology</i> , 2022, 45, 958-969.	0.9	10
59	An automated iterative algorithm for water and fat decomposition in three-point Dixon magnetic resonance imaging. <i>Medical Physics</i> , 1999, 26, 2341-2347.	1.6	9
60	IntraOmmaya compartmental radioimmunotherapy using 131I-omburtamabâ” pharmacokinetic modeling to optimize therapeutic index. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2021, 48, 1166-1177.	3.3	9
61	Dosimetric properties of a scanned beam microtron at low monitor unit settings: Importance for conformal therapy. <i>Medical Physics</i> , 1996, 23, 329-335.	1.6	8
62	Changes in FDG Tumor Uptake during and after Fractionated Radiation Therapy in a Rodent Tumor Xenograft. <i>Molecular Imaging and Biology</i> , 1999, 2, 289-296.	0.3	8
63	Technical Note: Scintillation well counters and particle counting digital autoradiography devices can be used to detect activities associated with genomic profiling adequacy of biopsy specimens obtained after a low activity <sup>18</sup> Fâ€scp>FDG</scp> injection. <i>Medical Physics</i> , 2018, 45, 2179-2185.	1.6	8
64	Initial performance studies of a wearable brain positron emission tomography camera based on autonomous thin-film digital Geiger avalanche photodiode arrays. <i>Journal of Medical Imaging</i> , 2016, 4, 011003.	0.8	7
65	Comparing the intra-tumoral distribution of Gemcitabine, 5-Fluorouracil, and Capecitabine in a murine model of pancreatic ductal adenocarcinoma. <i>PLoS ONE</i> , 2020, 15, e0231745.	1.1	7
66	A phase I trial of sorafenib with whole brain radiotherapy (WBRT) in breast cancer patients with brain metastases and a correlative study of FLT-PET brain imaging. <i>Breast Cancer Research and Treatment</i> , 2021, 188, 415-425.	1.1	7
67	F-18 meta-fluorobenzylguanidine PET imaging of myocardial sympathetic innervation. <i>Journal of Nuclear Cardiology</i> , 2022, 29, 3179-3188.	1.4	7
68	The value of gamma camera and computed tomography data set coregistration to assess Lewis Y antigen targeting in small cell lung cancer by 111Indium-labeled humanized monoclonal antibody 3S193. <i>European Journal of Radiology</i> , 2008, 67, 292-299.	1.2	6
69	Distribution of Gemcitabine Is Nearly Homogenous in Two Orthotopic Murine Models of Pancreatic Cancer. <i>Cancer Biotherapy and Radiopharmaceuticals</i> , 2015, 30, 299-304.	0.7	6
70	Adaptation, Commissioning, and Evaluation of a 3D Treatment Planning System for High-Resolution Small-Animal Irradiation. <i>Technology in Cancer Research and Treatment</i> , 2016, 15, 460-471.	0.8	6
71	Predicting Gemcitabine Delivery by <sup>18</sup> F-FAC PET in Murine Models of Pancreatic Cancer. <i>Journal of Nuclear Medicine</i> , 2021, 62, 195-200.	2.8	6
72	Evaluation of the tumor registration error in biopsy procedures performed under realâ€time PET/CT guidance. <i>Medical Physics</i> , 2017, 44, 5089-5095.	1.6	5

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73	18F-fluoromisonidazole predicts evofosfamide uptake in pancreatic tumor model. EJNMMI Research, 2018, 8, 53.	1.1	5
74	TMSOTf assisted synthesis of 2â€™-deoxy-2â€™-[18F]fluoro-âˆ²-D-arabinofuranosylcytosine ([18F]FAC). PLoS ONE, 2018, 13, e0196784.	1.1	3
75	Application of Community Detection Algorithm to Investigate the Correlation between Imaging Biomarkers of Tumor Metabolism, Hypoxia, Cellularity, and Perfusion for Precision Radiotherapy in Head and Neck Squamous Cell Carcinomas. Cancers, 2021, 13, 3908.	1.7	3
76	Introduction to the Special Issue on Molecular Imaging in Radiation Biology. Radiation Research, 2012, 177, 329-330.	0.7	2
77	David E. Charlton (1936â€“2013). Radiation Research, 2013, 180, 553-555.	0.7	2
78	Inter-operator variability in compartmental kinetic analysis of 18 F-fluoromisonidazole dynamic PET. Clinical Imaging, 2018, 49, 121-127.	0.8	2
79	General solution of the radioactive parent-daughter relationship. Medical Physics, 1994, 21, 1739-1740.	1.6	1
80	Guest Editorial. Seminars in Nuclear Medicine, 2015, 45, 98-100.	2.5	1
81	Assessment of SPECT Systems Using Multiple Detector Technologies. , 2019, , .		1
82	Optimizing reconstruction parameters for quantitative 124I-PET in the presence of therapeutic doses of 131I. EJNMMI Physics, 2021, 8, 50.	1.3	1
83	Imaging in Radiation Oncology * *This chapter is an update and expansion of material presented in the first edition by C.C. Ling, R. Mohan, L.E. Reinstein, and L.N. Rothenberg, and in the second edition by the current authors.. , 2010, , 120-154.		1
84	Analysis of capecitabine metabolites in conjunction with digital autoradiography in a murine model of pancreatic cancer suggests extensive drug penetration through the tumor. Pharmacology Research and Perspectives, 2022, 10, e00898.	1.1	0
85	SUVfdg: A standard-uptake-value (SUV) body habitus normalizer specific to fluorodeoxyglucose (FDG) in humans. PLoS ONE, 2022, 17, e0266704.	1.1	0