Robert F Hobbs

List of Publications by Year
in descending order

107 papers	5,519 citations	117625 34 h-index	82547 72 g-index
109 all docs	109 docs citations	109 times ranked	4130 citing authors

#	Article	IF	Citations
1	MIRD Pamphlet No. 21: A Generalized Schema for Radiopharmaceutical Dosimetryâ€"Standardization of Nomenclature. Journal of Nuclear Medicine, 2009, 50, 477-484.	5.0	633
2	Targeted Î± particle immunotherapy for myeloid leukemia. Blood, 2002, 100, 1233-1239.	1.4	430
3	Initial Evaluation of [18F]DCFPyL for Prostate-Specific Membrane Antigen (PSMA)-Targeted PET Imaging of Prostate Cancer. Molecular Imaging and Biology, 2015, 17, 565-574.	2.6	378
4	Radiopharmaceutical therapy in cancer: clinical advances and challenges. Nature Reviews Drug Discovery, 2020, 19, 589-608.	46.4	370
5	2-(3-{1-Carboxy-5-[(6-[18F]Fluoro-Pyridine-3-Carbonyl)-Amino]-Pentyl}-Ureido)-Pentanedioic Acid, [18F]DCFPyL, a PSMA-Based PET Imaging Agent for Prostate Cancer. Clinical Cancer Research, 2011, 17, 7645-7653.	7.0	331
6	MIRD Pamphlet No. 23: Quantitative SPECT for Patient-Specific 3-Dimensional Dosimetry in Internal Radionuclide Therapy. Journal of Nuclear Medicine, 2012, 53, 1310-1325.	5.0	293
7	Biodistribution, Tumor Detection, and Radiation Dosimetry of ¹⁸F-DCFBC, a Low-Molecular-Weight Inhibitor of Prostate-Specific Membrane Antigen, in Patients with Metastatic Prostate Cancer. Journal of Nuclear Medicine, 2012, 53, 1883-1891.	5.0	264
8	Sequential Cytarabine and Î±-Particle Immunotherapy with Bismuth-213â€"Lintuzumab (HuM195) for Acute Myeloid Leukemia. Clinical Cancer Research, 2010, 16, 5303-5311.	7.0	234
9	Targeted alpha particle immunotherapy for myeloid leukemia. Blood, 2002, 100, 1233-9.	1.4	143
10	Imaging, Biodistribution, and Dosimetry of Radionuclide-Labeled PD-L1 Antibody in an Immunocompetent Mouse Model of Breast Cancer. Cancer Research, 2016, 76, 472-479.	0.9	140
11	MIRD Pamphlet No. 24: Guidelines for Quantitative ¹³¹I SPECT in Dosimetry Applications. Journal of Nuclear Medicine, 2013, 54, 2182-2188.	5.0	125
12	Alpha-particles for targeted therapy. Advanced Drug Delivery Reviews, 2008, 60, 1402-1406.	13.7	107
13	A bone marrow toxicity model for²²³Ra alpha-emitter radiopharmaceutical therapy. Physics in Medicine and Biology, 2012, 57, 3207-3222.	3.0	105
14	(2S)-2-(3-(1-Carboxy-5-(4-²¹¹At-Astatobenzamido)Pentyl)Ureido)-Pentanedioic Acid for PSMA-Targeted Î±-Particle Radiopharmaceutical Therapy. Journal of Nuclear Medicine, 2016, 57, 1569-1575.	5.0	101
15	Three-Dimensional Imaging-Based Radiobiological Dosimetry. Seminars in Nuclear Medicine, 2008, 38, 321-334.	4.6	82
16	¹²⁴I PET-Based 3D-RD Dosimetry for a Pediatric Thyroid Cancer Patient: Real-Time Treatment Planning and Methodologic Comparison. Journal of Nuclear Medicine, 2009, 50, 1844-1847.	5.0	80
17	Imaging of Programmed Cell Death Ligand 1: Impact of Protein Concentration on Distribution of Anti-PD-L1 SPECT Agents in an Immunocompetent Murine Model of Melanoma. Journal of Nuclear Medicine, 2017, 58, 1560-1566.	5.0	73
18	Radium-223 mechanism of action: implications for use in treatment combinations. Nature Reviews Urology, 2019, 16, 745-756.	3.8	71

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19	Preclinical Evaluation of ^{203/212}Pb-Labeled Low-Molecular-Weight Compounds for Targeted Radiopharmaceutical Therapy of Prostate Cancer. Journal of Nuclear Medicine, 2020, 61, 80-88.	5.0	59
20	MIRD Continuing Education: Bystander and Low Dose-Rate Effects: Are These Relevant to Radionuclide Therapy?. Journal of Nuclear Medicine, 2007, 48, 1683-1691.	5.0	53
21	Three-dimensional radiobiological dosimetry (3D-RD) with 124I PET for 131I therapy of thyroid cancer. European Journal of Nuclear Medicine and Molecular Imaging, 2011, 38, 41-47.	6.4	52
22	A Treatment Planning Method for Sequentially Combining Radiopharmaceutical Therapy and External Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2011, 80, 1256-1262.	0.8	49
23	Comparison of Residence Time Estimation Methods for Radioimmunotherapy Dosimetry and Treatment Planningâ€"Monte Carlo Simulation Studies. IEEE Transactions on Medical Imaging, 2008, 27, 521-530.	8.9	48
24	A nephron-based model of the kidneys for macro-to-micro Î±-particle dosimetry. Physics in Medicine and Biology, 2012, 57, 4403-4424.	3.0	48
25	Evaluation of quantitative imaging methods for organ activity and residence time estimation using a population of phantoms having realistic variations in anatomy and uptake. Medical Physics, 2009, 36, 612-619.	3.0	46
26	Targeted and Nontargeted Î±-Particle Therapies. Annual Review of Biomedical Engineering, 2018, 20, 73-93.	12.3	46
27	Current Status of Radiopharmaceutical Therapy. International Journal of Radiation Oncology Biology Physics, 2021, 109, 891-901.	0.8	44
28	Recombinant Human Thyroid-Stimulating Hormone Versus Thyroid Hormone Withdrawal in ¹²⁴I PET/CTâ€"Based Dosimetry for ¹³¹I Therapy of Metastatic Differentiated Thyroid Cancer. Journal of Nuclear Medicine, 2017, 58, 1146-1154.	5.0	42
29	Redefining Relative Biological Effectiveness in the Context of the EQDX Formalism: Implications for Alpha-Particle Emitter Therapy. Radiation Research, 2014, 181, 90-98.	1.5	40
30	177Lu-labeled low-molecular-weight agents for PSMA-targeted radiopharmaceutical therapy. European Journal of Nuclear Medicine and Molecular Imaging, 2019, 46, 2545-2557.	6.4	40
31	Dosimetry of internal emitters. Journal of Nuclear Medicine, 2005, 46 Suppl 1, 18S-27S.	5.0	40
32	Preclinical Evaluation of 86Y-Labeled Inhibitors of Prostate-Specific Membrane Antigen for Dosimetry Estimates. Journal of Nuclear Medicine, 2015, 56, 628-634.	5.0	35
33	Pharmacokinetics, microscale distribution, and dosimetry of alpha-emitter-labeled anti-PD-L1 antibodies in an immune competent transgenic breast cancer model. EJNMMI Research, 2017, 7, 57.	2.5	35
34	Lung toxicity in radioiodine therapy of thyroid carcinoma: development of a dose-rate method and dosimetric implications of the 80-mCi rule. Journal of Nuclear Medicine, 2006, 47, 1977-84.	5.0	34
35	An Approach for Balancing Diagnostic Image Quality with Cancer Risk: Application to Pediatric Diagnostic Imaging of ^{99m}Tc-Dimercaptosuccinic Acid. Journal of Nuclear Medicine, 2011, 52, 1923-1929.	5.0	33
36	Comparison of quantitative Yâ€90 SPECT and nonâ€timeâ€ofâ€flight PET imaging in postâ€therapy radioembolization of liver cancer. Medical Physics, 2016, 43, 5779-5790.	3.0	32

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37	Normal-Tissue Tolerance to Radiopharmaceutical Therapies, the Knowns and the Unknowns. Journal of Nuclear Medicine, 2021, 62, 23S-35S.	5.0	32
38	MIRD Commentary: Proposed Name for a Dosimetry Unit Applicable to Deterministic Biological Effectsâ€"The Barendsen (Bd). Journal of Nuclear Medicine, 2009, 50, 485-487.	5.0	31
39	Calculation of the biological effective dose for piecewise defined doseâ€rate fits. Medical Physics, 2009, 36, 904-907.	3.0	30
40	Dosimetry, Radiobiology and Synthetic Lethality: Radiopharmaceutical Therapy (RPT) With Alpha-Particle-Emitters. Seminars in Nuclear Medicine, 2020, 50, 124-132.	4.6	29
41	Auger radiopharmaceutical therapy targeting prostate-specific membrane antigen in a micrometastatic model of prostate cancer. Theranostics, 2020, 10, 2888-2896.	10.0	28
42	An Improved ²¹¹At-Labeled Agent for PSMA-Targeted Î±-Therapy. Journal of Nuclear Medicine, 2022, 63, 259-267.	5.0	28
43	Dose Estimation in Pediatric Nuclear Medicine. Seminars in Nuclear Medicine, 2017, 47, 118-125.	4.6	27
44	Effective treatment of ductal carcinoma in situ with a HER-2-targeted alpha-particle emitting radionuclide in a preclinical model of human breast cancer. Oncotarget, 2016, 7, 33306-33315.	1.8	25
45	Cancer Stem Cell Targeting Using the Alpha-Particle Emitter,²¹³Bi: Mathematical Modeling and Feasibility Analysis. Cancer Biotherapy and Radiopharmaceuticals, 2008, 23, 74-81.	1.0	22
46	Biodistribution and Radiation Dosimetry of ¹²⁴I-DPA-713, a PET Radiotracer for Macrophage-Associated Inflammation. Journal of Nuclear Medicine, 2018, 59, 1751-1756.	5.0	22
47	Internal photon and electron dosimetry of the newborn patientâ€"a hybrid computational phantom study. Physics in Medicine and Biology, 2012, 57, 1433-1457.	3.0	20
48	Radiobiologic Optimization of Combination Radiopharmaceutical Therapy Applied to Myeloablative Treatment of Non-Hodgkin Lymphoma. Journal of Nuclear Medicine, 2013, 54, 1535-1542.	5.0	20
49	Dosimetry and Radiobiology of Alpha-Particle Emitting Radionuclides. Current Radiopharmaceuticals, 2018, 11, 209-214.	0.8	20
50	Radiopharmaceutical Therapy. Health Physics, 2019, 116, 175-178.	0.5	19
51	Evaluation of ¹¹¹In-DOTA-5D3, a Surrogate SPECT Imaging Agent for Radioimmunotherapy of Prostate-Specific Membrane Antigen. Journal of Nuclear Medicine, 2019, 60, 400-406.	5.0	19
52	A risk index for pediatric patients undergoing diagnostic imaging with^{99m}Tc-dimercaptosuccinic acid that accounts for body habitus. Physics in Medicine and Biology, 2016, 61, 2319-2332.	3.0	17
53	Preclinical evaluation of ²¹³Bi-/²²⁵Ac-labeled low-molecular-weight compounds for radiopharmaceutical therapy of prostate cancer. Journal of Nuclear Medicine, 2021, 62, jnumed.120.256388.	5.0	17
54	Alpha Particle Emitter Radiolabeled Antibody for Metastatic Cancer: What Can We Learn from Heavy Ion Beam Radiobiology?. Antibodies, 2012, 1, 124-148.	2.5	16

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55	Radiopharmaceutical therapy in the era of precision medicine. European Journal of Cancer, 2014, 50, 2360-2363.	2.8	16
56	A phase II randomized trial of RAdium-223 dichloride and SABR Versus SABR for oligomEtastatic prostate caNcerS (RAVENS). BMC Cancer, 2020, 20, 492.	2.6	16
57	[¹⁸F]Fluoroethyl Triazole Substituted PSMA Inhibitor Exhibiting Rapid Normal Organ Clearance. Bioconjugate Chemistry, 2016, 27, 1655-1662.	3.6	15
58	Imaging and dosimetry for alpha-particle emitter radiopharmaceutical therapy: improving radiopharmaceutical therapy by looking into the black box. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 49, 18-29.	6.4	15
59	Tumor Response to Radiopharmaceutical Therapies: The Knowns and the Unknowns. Journal of Nuclear Medicine, 2021, 62, 12S-22S.	5.0	14
60	Î±-Particleâ€“Emitter Radiopharmaceutical Therapy: Resistance Is Futile. Cancer Research, 2019, 79, 5479-5481.	0.9	13
61	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.	0.8	13
62	Combined model-based and patient-specific dosimetry for 18F-DCFPyL, a PSMA-targeted PET agent. European Journal of Nuclear Medicine and Molecular Imaging, 2018, 45, 989-998.	6.4	12
63	Comparative Dosimetry for ⁶⁸Ga-DOTATATE: Impact of Using Updated ICRP Phantoms, S Values, and Tissue-Weighting Factors. Journal of Nuclear Medicine, 2018, 59, 1281-1288.	5.0	12
64	Practical considerations for quantitative clinical SPECT/CT imaging of alpha particle emitting radioisotopes. Theranostics, 2021, 11, 9721-9737.	10.0	12
65	Toward Patient-Friendly Cell-Level Dosimetry. Journal of Nuclear Medicine, 2007, 48, 496-497.	5.0	11
66	Human Radiation Dosimetry for Orally and Intravenously Administered ¹⁸F-FDG. Journal of Nuclear Medicine, 2020, 61, 613-619.	5.0	11
67	Transport-driven engineering of liposomes for delivery of Î±-particle radiotherapy to solid tumors: effect on inhibition of tumor progression and onset delay of spontaneous metastases. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 4246-4258.	6.4	11
68	Dosimetric impact of Ac-227 in accelerator-produced Ac-225 for alpha-emitter radiopharmaceutical therapy of patients with hematological malignancies: a pharmacokinetic modeling analysis. EJNMMI Physics, 2021, 8, 60.	2.7	11
69	Tumor and red bone marrow dosimetry: comparison of methods for prospective treatment planning in pretargeted radioimmunotherapy. EJNMMI Physics, 2015, 2, 5.	2.7	10
70	Mathematical Modeling of Preclinical Alpha-Emitter Radiopharmaceutical Therapy. Cancer Research, 2020, 80, 868-876.	0.9	10
71	Strengths and Weaknesses of a Planar Whole-Body Method of 153Sm Dosimetry for Patients with Metastatic Osteosarcoma and Comparison with Three-Dimensional Dosimetry. Cancer Biotherapy and Radiopharmaceuticals, 2015, 30, 369-379.	1.0	9
72	Long-lived Alpha Emitters in Radioimmunotherapy: The Mischievous Progeny. Cancer Biotherapy and Radiopharmaceuticals, 2000, 15, 219-221.	1.0	8

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73	Quantitative impact of changes in marrow cellularity, skeletal size, and bone mineral density on active marrow dosimetry based upon a reference model. Medical Physics, 2017, 44, 272-283.	3.0	8
74	68Ga-DOTATATE PET. Nuclear Medicine Communications, 2019, 40, 920-926.	1.1	8
75	Prospective SPECT-CT Organ Dosimetry-Driven Radiation-Absorbed Dose Escalation Using the In-111 (111In)/Yttrium 90 (90Y) Ibritumomab Tiuxetan (ZevalinÂ®) Theranostic Pair in Patients with Lymphoma at Myeloablative Dose Levels. Cancers, 2021, 13, 2828.	3.7	8
76	Update:Molecular Radiotherapy: Survey and Current Status. Cancer Biotherapy and Radiopharmaceuticals, 2008, 23, 531-540.	1.0	7
77	Use of standardized uptake value thresholding for target volume delineation in pediatric Hodgkin lymphoma. Practical Radiation Oncology, 2015, 5, 219-227.	2.1	7
78	Pharmacokinetic modeling of [18F]fluorodeoxyglucose (FDG) for premature infants, and newborns through 5-year-olds. EJNMMI Research, 2016, 6, 28.	2.5	7
79	Current pediatric administered activity guidelines for ^{99m}Tcâ€DMSA SPECT based on patient weight do not provide the same taskâ€based image quality. Medical Physics, 2019, 46, 4847-4856.	3.0	7
80	The Role of Preclinical Models in Radiopharmaceutical Therapy. American Society of Clinical Oncology Educational Book / ASCO American Society of Clinical Oncology Meeting, 2014, , e121-e125.	3.8	6
81	Absorbed-dose calculation for treatment of liver neoplasms with 90Y-microspheres. Clinical and Translational Imaging, 2016, 4, 273-282.	2.1	6
82	Human HER2 overexpressing mouse breast cancer cell lines derived from MMTV.f.HuHER2 mice: characterization and use in a model of metastatic breast cancer. Oncotarget, 2017, 8, 68071-68082.	1.8	6
83	Development of a defect model for renal pediatric SPECT imaging research. , 2015, , .		5
84	Response of breast cancer carcinoma spheroids to combination therapy with radiation and DNA-PK inhibitor: growth arrest without a change in Î±/Î² ratio. International Journal of Radiation Biology, 2020, 96, 1534-1540.	1.8	5
85	Body morphometry appropriate computational phantoms for dose and risk optimization in pediatric renal imaging with Tc-99m DMSA and Tc-99m MAG3. Physics in Medicine and Biology, 2020, 65, 235026.	3.0	5
86	Combination of Carriers with Complementary Intratumoral Microdistributions of Delivered Î±-Particles May Realize the Promise for ²²⁵Ac in Large, Solid Tumors. Journal of Nuclear Medicine, 2022, 63, 1223-1230.	5.0	5
87	Depthâ€dependent concentrations of hematopoietic stem cells in the adult skeleton: Implications for active marrow dosimetry. Medical Physics, 2017, 44, 747-761.	3.0	4
88	²¹²Pb-conjugated anti-rat HER2/neu antibody against a neu-N derived murine mammary carcinoma cell line: cell kill and RBE inÂvitro. International Journal of Radiation Biology, 2022, 98, 1452-1461.	1.8	4
89	I-124 PET/CT image-based dosimetry in patients with differentiated thyroid cancer treated with I-131: correlation of patient-specific lesional dosimetry to treatment response. Annals of Nuclear Medicine, 2022, 36, 213-223.	2.2	4
90	Anti-GD2 antibody for radiopharmaceutical imaging of osteosarcoma. European Journal of Nuclear Medicine and Molecular Imaging, 2022, 49, 4382-4393.	6.4	4

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91	Introduction to Kidney Doseâ€“Response for Radionuclide Therapy. Cancer Biotherapy and Radiopharmaceuticals, 2004, 19, 357-358.	1.0	3
92	Phase II study of intraoperative dosimetry for prostate brachytherapy using registered ultrasound and fluoroscopy. Brachytherapy, 2018, 17, 858-865.	0.5	3
93	Development and Validation of Methods for Quantitative In Vivo SPECT of Pb-212. Journal of Medical Imaging and Radiation Sciences, 2019, 50, S33.	0.3	3
94	The Case for Dosimetry in Alpha-Emitter Therapy. Journal of Medical Imaging and Radiation Sciences, 2019, 50, S45-S46.	0.3	3
95	Renal 99mTc-DMSA pharmacokinetics in pediatric patients. EJNMMI Physics, 2021, 8, 53.	2.7	3
96	DeepAMO: a multi-slice, multi-view anthropomorphic model observer for visual detection tasks performed on volume images. Journal of Medical Imaging, 2021, 8, 041204.	1.5	3
97	Dosimetric considerations of 99mTc-MDP uptake within the epiphyseal plates of the long bones of pediatric patients. Physics in Medicine and Biology, 2020, 65, 235025.	3.0	3
98	Development and evaluation of convergent and accelerated penalized SPECT image reconstruction methods for improved doseâ€“volume histogram estimation in radiopharmaceutical therapy. Medical Physics, 2014, 41, 112507.	3.0	2
99	Process validation, current good manufacturing practice production, dosimetry, and toxicity studies of the carbonic anhydrase IX imaging agent [111 In]Inâ€XYIMSRâ€01 for phase I regulatory approval. Journal of Labelled Compounds and Radiopharmaceuticals, 2021, 64, 243-250.	1.0	2
100	Real-time quantitation of thyroidal radioiodine uptake in thyroid disease with monitoring by a collar detection device. Scientific Reports, 2021, 11, 18479.	3.3	2
101	Accuracy in dosimetry of diagnostic agents: impact of the number of source tissues used in whole organ S value-based calculations. EJNMMI Research, 2020, 10, 26.	2.5	2
102	Superior Postimplant Dosimetry Achieved Using Dynamic Intraoperative Dosimetry for Permanent Prostate Brachytherapy. Practical Radiation Oncology, 2021, 11, 264-271.	2.1	1
103	Evaluation of image quality using Channelized Hotelling observer for pediatric diagnostic imaging of 99mTc-dimercaptosuccinic acid. , 2013, , .		0
104	Abstract 1395: Humanized GD2 antibody for targeted radiopharmaceutical therapy of human and canine osteosarcoma. , 2021, , .		0
105	Redefining Relative Biological Effectiveness in the Context of the EQDX Formalism: Implications for Alpha-Particle Emitter Therapy. Radiation Research, 2013, , 131230084310008.	1.5	0
106	SAT-417 Personalized Treatment Planning for Radioiodine Therapy of Gravesâ€™ Disease;The Collar Therapy Indicator(CoTI). Journal of the Endocrine Society, 2020, 4, .	0.2	0
107	Reply LTE, Single time point tumour dosimetry assuming normal distribution of tumour kinetics. Journal of Nuclear Medicine, 2022, , jnumed.121.263717.	5.0	0