Katherine A Vallis

List of Publications by Citations

120 papers	3,903 citations	35 h-index	58 g-index
131 ext. papers	4,579 ext. citations	6.4 avg, IF	5.3 L-index

#	Paper	IF	Citations
120	Regional Nodal Irradiation in Early-Stage Breast Cancer. *New England Journal of Medicine*, **2015**, 373, 307-16	59.2	710
119	Targeting ATR in vivo using the novel inhibitor VE-822 results in selective sensitization of pancreatic tumors to radiation. *Cell Death and Disease*, **2012**, 3, e441	9.8	242
118	(111)In-labeled trastuzumab (Herceptin) modified with nuclear localization sequences (NLS): an Auger electron-emitting radiotherapeutic agent for HER2/neu-amplified breast cancer. *Journal of Nuclear Medicine*, **2007**, 48, 1357-68	8.9	139
117	Assessment of coronary heart disease morbidity and mortality after radiation therapy for early breast cancer. *Journal of Clinical Oncology*, **2002**, 20, 1036-42	2.2	115
116	Relationship between the debrisoquine hydroxylase polymorphism and cancer susceptibility. *Carcinogenesis*, **1992**, 13, 1035-8	4.6	96
115	Cone beam computed tomography guidance for setup of patients receiving accelerated partial breast irradiation. *International Journal of Radiation Oncology Biology Physics*, **2007**, 68, 547-54	4	89
114	Targeting the nucleus: an overview of Auger-electron radionuclide therapy. *Current Drug Discovery Technologies*, **2010**, 7, 263-79	1.5	77
113	Targeted radionuclide therapy in combined-modality regimens. *Lancet Oncology, The*, **2017**, 18, e414-e423	31.7	71
112	Nanographene oxide-based radioimmunoconstructs for in vivo targeting and SPECT imaging of HER2-positive tumors. *Biomaterials*, **2013**, 34, 1146-54	15.6	71
111	A population-based case-cohort study of the risk of myocardial infarction following radiation therapy for breast cancer. *Radiotherapy and Oncology*, **2007**, 82, 294-300	5.3	68
110	Proteomic analyses reveal high expression of decorin and endoplasmin (HSP90B1) are associated with breast cancer metastasis and decreased survival. *PLoS ONE*, **2012**, 7, e30992	3.7	68
109	Selective permeabilization of the blood-brain barrier at sites of metastasis. *Journal of the National Cancer Institute*, **2013**, 105, 1634-43	9.7	62
108	Computational analysis of the number, area and density of gamma-H2AX foci in breast cancer cells exposed to (111)In-DTPA-hEGF or gamma-rays using Image-J software. *International Journal of Radiation Biology*, **2009**, 85, 262-71	2.9	62
107	Trastuzumab-resistant breast cancer cells remain sensitive to the auger electron-emitting radiotherapeutic agent 111In-NLS-trastuzumab and are radiosensitized by methotrexate. *Journal of Nuclear Medicine*, **2008**, 49, 1498-505	8.9	60
106	Expression Trapping: Identification of Novel Genes Expressed in Hematopoietic and Endothelial Lineages by Gene Trapping in ES Cells. *Blood*, **1998**, 92, 4622-4631	2.2	60
105	Applications and limitations of machine learning in radiation oncology. *British Journal of Radiology*, **2019**, 92, 20190001	3.4	53
104	Monte Carlo Evaluation of Auger Electron-Emitting Theranostic Radionuclides. *Journal of Nuclear Medicine*, **2015**, 56, 1441-6	8.9	53

103	XRCC1 Polymorphism Associated With Late Toxicity After Radiation Therapy in Breast Cancer Patients. *International Journal of Radiation Oncology Biology Physics*, **2015**, 92, 1084-1092	4	53
102	Relationship between induction of phosphorylated H2AX and survival in breast cancer cells exposed to 111In-DTPA-hEGF. *Journal of Nuclear Medicine*, **2008**, 49, 1353-61	8.9	53
101	Antitumor effects and normal tissue toxicity of 111In-labeled epidermal growth factor administered to athymic mice bearing epidermal growth factor receptor-positive human breast cancer xenografts. *Journal of Nuclear Medicine*, **2003**, 44, 1469-78	8.9	53
100	Antitumor effects and normal-tissue toxicity of 111In-nuclear localization sequence-trastuzumab in athymic mice bearing HER-positive human breast cancer xenografts. *Journal of Nuclear Medicine*, **2010**, 51, 1084-91	8.9	52
99	Radiotherapy for stages I and II testicular seminoma: results and morbidity in 238 patients. *British Journal of Radiology*, **1995**, 68, 400-5	3.4	52
98	Preclinical pharmacokinetic, biodistribution, toxicology, and dosimetry studies of 111In-DTPA-human epidermal growth factor: an auger electron-emitting radiotherapeutic agent for epidermal growth factor receptor-positive breast cancer. *Journal of Nuclear Medicine*, **2006**, 47, 1023-31	8.9	51
97	Transition metal compounds as cancer radiosensitizers. *Chemical Society Reviews*, **2019**, 48, 540-557	58.5	50
96	Imaging DNA damage in vivo using gammaH2AX-targeted immunoconjugates. *Cancer Research*, **2011**, 71, 4539-49	10.1	49
95	Subcellular Targeting of Theranostic Radionuclides. *Frontiers in Pharmacology*, **2018**, 9, 996	5.6	46
94	EGF-coated gold nanoparticles provide an efficient nano-scale delivery system for the molecular radiotherapy of EGFR-positive cancer. *International Journal of Radiation Biology*, **2016**, 92, 716-723	2.9	45
93	Prospective comparison of breast pain in patients participating in a randomized trial of breast-conserving surgery and tamoxifen with or without radiotherapy. *International Journal of Radiation Oncology Biology Physics*, **2003**, 55, 154-61	4	42
92	Methotrexate, paclitaxel, and doxorubicin radiosensitize HER2-amplified human breast cancer cells to the Auger electron-emitting radiotherapeutic agent (111)In-NLS-trastuzumab. *Journal of Nuclear Medicine*, **2010**, 51, 477-83	8.9	39
91	123I-labeled HIV-1 tat peptide radioimmunoconjugates are imported into the nucleus of human breast cancer cells and functionally interact in vitro and in vivo with the cyclin-dependent kinase inhibitor, p21(WAF-1/Cip-1). *European Journal of Nuclear Medicine and Molecular Imaging*, **2007**, 34, 368-77	8.8	39
90	DNA repair capacity as a possible biomarker of breast cancer risk in female BRCA1 mutation carriers. *British Journal of Cancer*, **2007**, 96, 118-25	8.7	38
89	Effect of the EGFR density of breast cancer cells on nuclear importation, in vitro cytotoxicity, and tumor and normal-tissue uptake of [111In]DTPA-hEGF. *Nuclear Medicine and Biology*, **2007**, 34, 887-96	2.1	38
88	Advances in anticancer radiopharmaceuticals. *Clinical Oncology*, **2013**, 25, 604-9	2.8	37
87	Evaluation of toremifene for reversal of multidrug resistance in renal cell cancer patients treated with vinblastine. *Cancer Chemotherapy and Pharmacology*, **2000**, 46, 27-34	3.5	37
86	In-labelled polymeric nanoparticles incorporating a ruthenium-based radiosensitizer for EGFR-targeted combination therapy in oesophageal cancer cells. *Nanoscale*, **2018**, 10, 10596-10608	7.7	35

85	A ruthenium polypyridyl intercalator stalls DNA replication forks, radiosensitizes human cancer cells and is enhanced by Chk1 inhibition. *Scientific Reports*, **2016**, 6, 31973	4.9	34
84	Outcomes of surveillance mammography after treatment of primary breast cancer: a population-based case series. *Breast Cancer Research and Treatment*, **2009**, 114, 169-78	4.4	34
83	Concurrent cyclophosphamide, methotrexate, and 5-fluorouracil chemotherapy and radiotherapy for breast carcinoma: a well tolerated adjuvant regimen. *Cancer*, **2002**, 95, 696-703	6.4	34
82	A high-throughput induction gene trap approach defines C4ST as a target of BMP signaling. *Mechanisms of Development*, **2002**, 118, 77-89	1.7	29
81	Distress associated with radiotherapy for malignant disease: a quantitative analysis based on patients perceptions. *British Journal of Cancer*, **1989**, 60, 370-4	8.7	29
80	A three-in-one-bullet for oesophageal cancer: replication fork collapse, spindle attachment failure and enhanced radiosensitivity generated by a ruthenium(ii) metallo-intercalator. *Chemical Science*, **2018**, 9, 841-849	9.4	29
79	Comparative antiproliferative effects of (111)In-DTPA-hEGF, chemotherapeutic agents and gamma-radiation on EGFR-positive breast cancer cells. *Nuclear Medicine and Biology*, **2002**, 29, 693-9	2.1	27
78	Epidermal growth factor receptor inhibition modulates the nuclear localization and cytotoxicity of the Auger electron emitting radiopharmaceutical 111In-DTPA human epidermal growth factor. *Journal of Nuclear Medicine*, **2007**, 48, 1562-70	8.9	26
77	Buparlisib with thoracic radiotherapy and its effect on tumour hypoxia: A phase I study in patients with advanced non-small cell lung carcinoma. *European Journal of Cancer*, **2019**, 113, 87-95	7.5	25
76	A phase I study of 99mTc-hR3 (DiaCIM), a humanized immunoconjugate directed towards the epidermal growth factor receptor. *Nuclear Medicine Communications*, **2002**, 23, 1155-64	1.6	25
75	Phase I trial to evaluate the tumor and normal tissue uptake, radiation dosimetry and safety of (111)In-DTPA-human epidermal growth factor in patients with metastatic EGFR-positive breast cancer. *American Journal of Nuclear Medicine and Molecular Imaging*, **2014**, 4, 181-92	2.2	25
74	Amplification of DNA damage by a H2AX-targeted radiopharmaceutical. *Nuclear Medicine and Biology*, **2012**, 39, 1142-51	2.1	24
73	A kit formulated under good manufacturing practices for labeling human epidermal growth factor with 111In for radiotherapeutic applications. *Journal of Nuclear Medicine*, **2004**, 45, 701-8	8.9	24
72	Absorbed dose evaluation of Auger electron-emitting radionuclides: impact of input decay spectra on dose point kernels and S-values. *Physics in Medicine and Biology*, **2017**, 62, 2239-2253	3.8	21
71	Molecular radiotherapy using cleavable radioimmunoconjugates that target EGFR and H2AX. *Molecular Cancer Therapeutics*, **2013**, 12, 2472-82	6.1	21
70	Toenail selenium status and DNA repair capacity among female BRCA1 mutation carriers. *Cancer Causes and Control*, **2010**, 21, 679-87	2.8	21
69	Breast cancer in women Annals of Oncology, **2000**, 11, 1255-62	10.3	21
68	Targeted Radionuclide Therapy: New Advances for Improvement of Patient Management and Response. *Cancers*, **2019**, 11,	6.6	20

67	Ultrasound-mediated cavitation enhances the delivery of an EGFR-targeting liposomal formulation designed for chemo-radionuclide therapy. *Theranostics*, **2019**, 9, 5595-5609	12.1	20
66	111In-BnDTPA-F3: an Auger electron-emitting radiotherapeutic agent that targets nucleolin. *EJNMMI Research*, **2012**, 2, 9	3.6	18
65	International Variation in Criteria for Internal Mammary Chain Radiotherapy. *Clinical Oncology*, **2019**, 31, 453-461	2.8	16
64	Relationship between the adaptive response to oxidants and stable menadione-resistance in Chinese hamster ovary cell lines. *Carcinogenesis*, **1996**, 17, 649-54	4.6	16
63	Amplified delivery of indium-111 to EGFR-positive human breast cancer cells. *Nuclear Medicine and Biology*, **2001**, 28, 895-902	2.1	16
62	Relationship between chromatin structure and sensitivity to molecularly targeted auger electron radiation therapy. *International Journal of Radiation Oncology Biology Physics*, **2012**, 83, 1298-305	4	15
61	ErbB-2 blockade and prenyltransferase inhibition alter epidermal growth factor and epidermal growth factor receptor trafficking and enhance (111)In-DTPA-hEGF Auger electron radiation therapy. *Journal of Nuclear Medicine*, **2011**, 52, 776-83	8.9	15
60	Imaging DNA Damage Repair In Vivo After Lu-DOTATATE Therapy. *Journal of Nuclear Medicine*, **2020**, 61, 743-750	8.9	15
59	Antisense imaging of epidermal growth factor-induced p21(WAF-1/CIP-1) gene expression in MDA-MB-468 human breast cancer xenografts. *European Journal of Nuclear Medicine and Molecular Imaging*, **2003**, 30, 1273-80	8.8	14
58	Proton vs photon: A model-based approach to patient selection for reduction of cardiac toxicity in locally advanced lung cancer. *Radiotherapy and Oncology*, **2020**, 152, 151-162	5.3	14
57	Dosimetric evaluation of radionuclides for VCAM-1-targeted radionuclide therapy of early brain metastases. *Theranostics*, **2018**, 8, 292-303	12.1	13
56	Accumulation of In-Labelled EGF-Au-PEG Nanoparticles in EGFR-Positive Tumours is Enhanced by Coadministration of Targeting Ligand. *Nanotheranostics*, **2017**, 1, 232-243	5.6	13
55	Relationship between Caffeine and Levels of DNA Repair and Oxidative Stress in Women with and without a BRCA1 Mutation. *Journal of Nutrigenetics and Nutrigenomics*, **2015**, 8, 174-84		13
54	Clinical imaging of tumor angiogenesis. *Future Oncology*, **2012**, 8, 1443-59	3.6	13
53	Targeting Micrometastases: The Effect of Heterogeneous Radionuclide Distribution on Tumor Control Probability. *Journal of Nuclear Medicine*, **2018**,	8.9	12
52	MRI-guided radiotherapy of the SK-N-SH neuroblastoma xenograft model using a small animal radiation research platform. *British Journal of Radiology*, **2017**, 90, 20160427	3.4	12
51	Targeting telomerase with radiolabeled inhibitors. *European Journal of Medicinal Chemistry*, **2017**, 125, 117-129	6.8	12
50	An efficient and robust MRI-guided radiotherapy planning approach for targeting abdominal organs and tumours in the mouse. *PLoS ONE*, **2017**, 12, e0176693	3.7	11

49	DNA double-strand break repair: a theoretical framework and its application. *Journal of the Royal Society Interface*, **2016**, 13, 20150679	4.1	11
48	Imaging DNA damage allows detection of preneoplasia in the BALB-neuT model of breast cancer. *Journal of Nuclear Medicine*, **2014**, 55, 2026-31	8.9	11
47	Identification of radiation-responsive genes in vitro using a gene trap strategy predicts for modulation of expression by radiation in vivo. *Radiation Research*, **2002**, 157, 8-18	3.1	11
46	Tricyclic cell-penetrating peptides for efficient delivery of functional antibodies into cancer cells.. *Nature Chemistry*, **2022**,	17.6	11
45	Synthesis and evaluation of an F-labeled derivative of F3 for targeting surface-expressed nucleolin in cancer and tumor endothelial cells. *Journal of Labelled Compounds and Radiopharmaceuticals*, **2016**, 59, 492-499	1.9	11
44	Improved outcome of I-mIBG treatment through combination with external beam radiotherapy in the SK-N-SH mouse model of neuroblastoma. *Radiotherapy and Oncology*, **2017**, 124, 488-495	5.3	10
43	Early experience with combined interstitial hyperthermia and brachytherapy. *British Journal of Radiology*, **1986**, 59, 525-7	3.4	10
42	Probing the limits of Q-tag bioconjugation of antibodies. *Chemical Communications*, **2019**, 55, 11342-11348	5.8	9
41	Megavoltage Radiosensitization of Gold Nanoparticles on a Glioblastoma Cancer Cell Line Using a Clinical Platform. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	9
40	In vivo monitoring of intranuclear p27(kip1) protein expression in breast cancer cells during trastuzumab (Herceptin) therapy. *Nuclear Medicine and Biology*, **2009**, 36, 811-9	2.1	9
39	VCAM-1 targeted alpha-particle therapy for early brain metastases. *Neuro-Oncology*, **2020**, 22, 357-368	1	9
38	Photoactivatable prodrug for simultaneous release of mertansine and CO along with a BODIPY derivative as a luminescent marker in mitochondria: a proof of concept for NIR image-guided cancer therapy. *Chemical Science*, **2020**, 12, 2667-2673	9.4	9
37	Radiolabeled Oligonucleotides Targeting the RNA Subunit of Telomerase Inhibit Telomerase and Induce DNA Damage in Telomerase-Positive Cancer Cells. *Cancer Research*, **2019**, 79, 4627-4637	10.1	8
36	Electrically tunable fluidic lens imaging system for laparoscopic fluorescence-guided surgery. *Biomedical Optics Express*, **2017**, 8, 3232-3247	3.5	8
35	Radiosensitivity of colorectal cancer to Y and the radiobiological implications for radioembolisation therapy. *Physics in Medicine and Biology*, **2019**, 64, 135018	3.8	7
34	The Impact of Radiobiologically Informed Dose Prescription on the Clinical Benefit of Y SIRT in Colorectal Cancer Patients. *Journal of Nuclear Medicine*, **2020**, 61, 1658-1664	8.9	7
33	Photoresists as a high spatial resolution autoradiography substrate for quantitative mapping of intra- and sub-cellular distribution of Auger electron emitting radionuclides. *International Journal of Radiation Biology*, **2012**, 88, 933-40	2.9	7
32	Chemically amplified photoresist for high resolution autoradiography in targeted radiotherapy. *Biomaterials*, **2011**, 32, 6138-44	15.6	7

31	Uptake, internalization and nuclear translocation of radioimmunotherapeutic agents. *Therapeutic Delivery*, **2014**, 5, 319-35	3.8	6
30	An In-labelled bis-ruthenium(ii) dipyridophenazine theranostic complex: mismatch DNA binding and selective radiotoxicity towards MMR-deficient cancer cells. *Chemical Science*, **2020**, 11, 8936-8944	9.4	6
29	H2AX expression in cytological specimens as a biomarker of response to radiotherapy in solid malignancies. *Diagnostic Cytopathology*, **2016**, 44, 141-6	1.4	6
28	Targeted alpha therapy with Pb or Ac: Change in RBE from daughter migration. *Physica Medica*, **2018**, 51, 91-98	2.7	6
27	Menadione-resistant Chinese hamster ovary cells have an increased capacity for glutathione synthesis. *British Journal of Cancer*, **1997**, 76, 870-7	8.7	5
26	Metallointercalator [Ru(dppz)(PIP)] Renders BRCA Wild-Type Triple-Negative Breast Cancer Cells Hypersensitive to PARP Inhibition. *ACS Chemical Biology*, **2020**, 15, 378-387	4.9	5
25	Orally administered oxygen nanobubbles enhance tumor response to sonodynamic therapy. *Nano Select*,	3.1	5
24	Combining sonodynamic therapy with chemoradiation for the treatment of pancreatic cancer. *Journal of Controlled Release*, **2021**, 337, 371-377	11.7	5
23	Spatial distribution of Auger electrons emitted from internalised radionuclides in cancer cells: the photoresist autoradiography (PAR) method. *Radiation Protection Dosimetry*, **2015**, 166, 228-32	0.9	4
22	Oligonucleotide-Functionalized Gold Nanoparticles for Synchronous Telomerase Inhibition, Radiosensitization, and Delivery of Theranostic Radionuclides. *Molecular Pharmaceutics*, **2021**, 18, 3820-3831	5.6	4
21	Monitoring response to anti-angiogenic mTOR inhibitor therapy in vivo using In-bevacizumab. *EJNMMI Research*, **2017**, 7, 49	3.6	3
20	PET and SPECT Imaging for the Acceleration of Anti-Cancer Drug Development. *Current Drug Targets*, **2015**, 16, 582-91	3	3
19	Is an analytical dose engine sufficient for intensity modulated proton therapy in lung cancer?. *British Journal of Radiology*, **2020**, 93, 20190583	3.4	3
18	Indium-111 labelling of liposomal HEGF for radionuclide delivery via ultrasound-induced cavitation. *Journal of Controlled Release*, **2020**, 319, 222-233	11.7	3
17	Radionuclide spatial distribution and dose deposition for in vitro assessments of Pb-VCAM-1 targeted alpha therapy. *Medical Physics*, **2020**, 47, 1317-1326	4.4	3
16	Internalization of Auger electron-emitting isotopes into cancer cells: a method for spatial distribution determination of equivalent source terms. *International Journal of Radiation Biology*, **2016**, 92, 633-640	2.9	3
15	Stereotactic Inverse Dose Planning After Yttrium-90 Selective Internal Radiation Therapy in Hepatocellular Cancer. *Advances in Radiation Oncology*, **2021**, 6, 100617	3.3	3
14	Robustness assessment using probabilistic scenarios of intensity modulated proton therapy and volumetric arc therapy in non-small-cell lung cancer: an in-silico radiotherapy planning study. *Lancet, The*, **2017**, 389, S94	40	2

13	Assessment of robustness against setup uncertainties using probabilistic scenarios in lung cancer: a comparison of proton with photon therapy. *British Journal of Radiology*, **2020**, 93, 20190584	3.4	2
12	Auger Emitting Radiopharmaceuticals for Cancer Therapy **2012**, 461-478		2
11	Characterization of single ⊞tracks by photoresist detection and AFM analysis-focus on biomedical science and technology. *Physics in Medicine and Biology*, **2013**, 58, 7673-82	3.8	2
10	3-Bromopyruvate-mediated MCT1-dependent metabolic perturbation sensitizes triple negative breast cancer cells to ionizing radiation. *Cancer & Metabolism*, **2021**, 9, 37	5.4	2
9	Radioimmunotherapy for Brain Metastases: The Potential for Inflammation as a Target of Choice. *Frontiers in Oncology*, **2021**, 11, 714514	5.3	2
8	What is the risk of cardiac morbidity with adjuvant radiotherapy for breast cancer?. *Nature Clinical Practice Oncology*, **2006**, 3, 180-1		1
7	Manganese-free chow, a refined non-invasive solution to reduce gastrointestinal signal for T-weighted magnetic resonance imaging of the mouse abdomen. *Laboratory Animals*, **2020**, 54, 353-364	2.6	1
6	SU-F-BRD-04: Robustness Analysis of Proton Breast Treatments Using An Alpha-Stable Distribution Parameterization. *Medical Physics*, **2015**, 42, 3526-3526	4.4	0
5	Interactive contouring through contextual deep learning. *Medical Physics*, **2021**, 48, 2951-2959	4.4	0
4	Abstract ID: 36 Geant4 modeling of targeted radionuclide therapy for brain metastasis. *Physica Medica*, **2017**, 42, 6-7	2.7	
3	Nanomaterial-Antibody Hybrids **2017**, 83-109		
2	Impact of cyclic changes in pharmacokinetics and absorbed dose in pediatric neuroblastoma patients receiving [Lu]Lu-DOTATATE.. *EJNMMI Physics*, **2022**, 9, 24	4.4	
1	9 International Symposium on Physical, Molecular, Cellular, and Medical Aspects of Auger Processes: Preface.. *International Journal of Radiation Biology*, **2022**, 1-2	2.9	