

Katherine A Vallis

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Tricyclic cell-penetrating peptides for efficient delivery of functional antibodies into cancer cells.. <i>Nature Chemistry</i> , 2022 ,	17.6	11
119	Impact of cyclic changes in pharmacokinetics and absorbed dose in pediatric neuroblastoma patients receiving [Lu]Lu-DOTATATE.. <i>EJNMMI Physics</i> , 2022 , 9, 24	4.4	
118	9 International Symposium on Physical, Molecular, Cellular, and Medical Aspects of Auger Processes: Preface.. <i>International Journal of Radiation Biology</i> , 2022 , 1-2	2.9	
117	3-Bromopyruvate-mediated MCT1-dependent metabolic perturbation sensitizes triple negative breast cancer cells to ionizing radiation. <i>Cancer & Metabolism</i> , 2021 , 9, 37	5.4	2
116	Interactive contouring through contextual deep learning. <i>Medical Physics</i> , 2021 , 48, 2951-2959	4.4	0
115	Stereotactic Inverse Dose Planning After Yttrium-90 Selective Internal Radiation Therapy in Hepatocellular Cancer. <i>Advances in Radiation Oncology</i> , 2021 , 6, 100617	3.3	3
114	Radioimmunotherapy for Brain Metastases: The Potential for Inflammation as a Target of Choice. <i>Frontiers in Oncology</i> , 2021 , 11, 714514	5.3	2
113	Oligonucleotide-Functionalized Gold Nanoparticles for Synchronous Telomerase Inhibition, Radiosensitization, and Delivery of Theranostic Radionuclides. <i>Molecular Pharmaceutics</i> , 2021 , 18, 3820-3831	5.6	4
112	Combining sonodynamic therapy with chemoradiation for the treatment of pancreatic cancer. <i>Journal of Controlled Release</i> , 2021 , 337, 371-377	11.7	5
111	The Impact of Radiobiologically Informed Dose Prescription on the Clinical Benefit of Y SIRT in Colorectal Cancer Patients. <i>Journal of Nuclear Medicine</i> , 2020 , 61, 1658-1664	8.9	7
110	Megavoltage Radiosensitization of Gold Nanoparticles on a Glioblastoma Cancer Cell Line Using a Clinical Platform. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	9
109	Assessment of robustness against setup uncertainties using probabilistic scenarios in lung cancer: a comparison of proton with photon therapy. <i>British Journal of Radiology</i> , 2020 , 93, 20190584	3.4	2
108	Is an analytical dose engine sufficient for intensity modulated proton therapy in lung cancer?. <i>British Journal of Radiology</i> , 2020 , 93, 20190583	3.4	3
107	Indium-111 labelling of liposomal HEGF for radionuclide delivery via ultrasound-induced cavitation. <i>Journal of Controlled Release</i> , 2020 , 319, 222-233	11.7	3
106	Metallointercalator [Ru(dppz)(PIP)] Renders BRCA Wild-Type Triple-Negative Breast Cancer Cells Hypersensitive to PARP Inhibition. <i>ACS Chemical Biology</i> , 2020 , 15, 378-387	4.9	5
105	Radionuclide spatial distribution and dose deposition for in vitro assessments of Pb-212-CAM-1 targeted alpha therapy. <i>Medical Physics</i> , 2020 , 47, 1317-1326	4.4	3
104	Imaging DNA Damage Repair In Vivo After Lu-DOTATATE Therapy. <i>Journal of Nuclear Medicine</i> , 2020 , 61, 743-750	8.9	15

103	An In-labelled bis-ruthenium(ii) dipyrrophenazine theranostic complex: mismatch DNA binding and selective radiotoxicity towards MMR-deficient cancer cells. <i>Chemical Science</i> , 2020 , 11, 8936-8944	9.4	6
102	VCAM-1 targeted alpha-particle therapy for early brain metastases. <i>Neuro-Oncology</i> , 2020 , 22, 357-368	1	9
101	Manganese-free chow, a refined non-invasive solution to reduce gastrointestinal signal for T-weighted magnetic resonance imaging of the mouse abdomen. <i>Laboratory Animals</i> , 2020 , 54, 353-364	2.6	1
100	Proton vs photon: A model-based approach to patient selection for reduction of cardiac toxicity in locally advanced lung cancer. <i>Radiotherapy and Oncology</i> , 2020 , 152, 151-162	5.3	14
99	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. <i>Chemical Science</i> , 2020 , 12, 2667-2673	9.4	9
98	Probing the limits of Q-tag bioconjugation of antibodies. <i>Chemical Communications</i> , 2019 , 55, 11342-11348	4.8	9
97	Applications and limitations of machine learning in radiation oncology. <i>British Journal of Radiology</i> , 2019 , 92, 20190001	3.4	53
96	Radiosensitivity of colorectal cancer to Y and the radiobiological implications for radioembolisation therapy. <i>Physics in Medicine and Biology</i> , 2019 , 64, 135018	3.8	7
95	International Variation in Criteria for Internal Mammary Chain Radiotherapy. <i>Clinical Oncology</i> , 2019 , 31, 453-461	2.8	16
94	Buparlisib with thoracic radiotherapy and its effect on tumour hypoxia: A phase I study in patients with advanced non-small cell lung carcinoma. <i>European Journal of Cancer</i> , 2019 , 113, 87-95	7.5	25
93	Targeted Radionuclide Therapy: New Advances for Improvement of Patient Management and Response. <i>Cancers</i> , 2019 , 11,	6.6	20
92	Radiolabeled Oligonucleotides Targeting the RNA Subunit of Telomerase Inhibit Telomerase and Induce DNA Damage in Telomerase-Positive Cancer Cells. <i>Cancer Research</i> , 2019 , 79, 4627-4637	10.1	8
91	Ultrasound-mediated cavitation enhances the delivery of an EGFR-targeting liposomal formulation designed for chemo-radionuclide therapy. <i>Theranostics</i> , 2019 , 9, 5595-5609	12.1	20
90	Transition metal compounds as cancer radiosensitizers. <i>Chemical Society Reviews</i> , 2019 , 48, 540-557	58.5	50
89	Dosimetric evaluation of radionuclides for VCAM-1-targeted radionuclide therapy of early brain metastases. <i>Theranostics</i> , 2018 , 8, 292-303	12.1	13
88	Subcellular Targeting of Theranostic Radionuclides. <i>Frontiers in Pharmacology</i> , 2018 , 9, 996	5.6	46
87	Targeting Micrometastases: The Effect of Heterogeneous Radionuclide Distribution on Tumor Control Probability. <i>Journal of Nuclear Medicine</i> , 2018 ,	8.9	12
86	A three-in-one-bullet for oesophageal cancer: replication fork collapse, spindle attachment failure and enhanced radiosensitivity generated by a ruthenium(ii) metallo-intercalator. <i>Chemical Science</i> , 2018 , 9, 841-849	9.4	29

85	In-labelled polymeric nanoparticles incorporating a ruthenium-based radiosensitizer for EGFR-targeted combination therapy in oesophageal cancer cells. <i>Nanoscale</i> , 2018 , 10, 10596-10608	7.7	35
84	Targeted alpha therapy with Pb or Ac: Change in RBE from daughter migration. <i>Physica Medica</i> , 2018 , 51, 91-98	2.7	6
83	Absorbed dose evaluation of Auger electron-emitting radionuclides: impact of input decay spectra on dose point kernels and S-values. <i>Physics in Medicine and Biology</i> , 2017 , 62, 2239-2253	3.8	21
82	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. <i>Lancet, The</i> , 2017 , 389, S94	4.0	2
81	Abstract ID: 36 Geant4 modeling of targeted radionuclide therapy for brain metastasis. <i>Physica Medica</i> , 2017 , 42, 6-7	2.7	
80	An efficient and robust MRI-guided radiotherapy planning approach for targeting abdominal organs and tumours in the mouse. <i>PLoS ONE</i> , 2017 , 12, e0176693	3.7	11
79	Improved outcome of I-mIBG treatment through combination with external beam radiotherapy in the SK-N-SH mouse model of neuroblastoma. <i>Radiotherapy and Oncology</i> , 2017 , 124, 488-495	5.3	10
78	Monitoring response to anti-angiogenic mTOR inhibitor therapy in vivo using In-bevacizumab. <i>EJNMMI Research</i> , 2017 , 7, 49	3.6	3
77	Targeted radionuclide therapy in combined-modality regimens. <i>Lancet Oncology, The</i> , 2017 , 18, e414-e423	3.7	71
76	MRI-guided radiotherapy of the SK-N-SH neuroblastoma xenograft model using a small animal radiation research platform. <i>British Journal of Radiology</i> , 2017 , 90, 20160427	3.4	12
75	Targeting telomerase with radiolabeled inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2017 , 125, 117-129	6.8	12
74	Electrically tunable fluidic lens imaging system for laparoscopic fluorescence-guided surgery. <i>Biomedical Optics Express</i> , 2017 , 8, 3232-3247	3.5	8
73	Accumulation of In-Labelled EGF-Au-PEG Nanoparticles in EGFR-Positive Tumours is Enhanced by Coadministration of Targeting Ligand. <i>Nanotheranostics</i> , 2017 , 1, 232-243	5.6	13
72	Nanomaterial-Antibody Hybrids 2017 , 83-109		
71	A ruthenium polypyridyl intercalator stalls DNA replication forks, radiosensitizes human cancer cells and is enhanced by Chk1 inhibition. <i>Scientific Reports</i> , 2016 , 6, 31973	4.9	34
70	DNA double-strand break repair: a theoretical framework and its application. <i>Journal of the Royal Society Interface</i> , 2016 , 13, 20150679	4.1	11
69	EGF-coated gold nanoparticles provide an efficient nano-scale delivery system for the molecular radiotherapy of EGFR-positive cancer. <i>International Journal of Radiation Biology</i> , 2016 , 92, 716-723	2.9	45
68	Synthesis and evaluation of an F-labeled derivative of F3 for targeting surface-expressed nucleolin in cancer and tumor endothelial cells. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2016 , 59, 492-499	1.9	11

67	Internalization of Auger electron-emitting isotopes into cancer cells: a method for spatial distribution determination of equivalent source terms. <i>International Journal of Radiation Biology</i> , 2016 , 92, 633-640	2.9	3
66	HER2AX expression in cytological specimens as a biomarker of response to radiotherapy in solid malignancies. <i>Diagnostic Cytopathology</i> , 2016 , 44, 141-6	1.4	6
65	Monte Carlo Evaluation of Auger Electron-Emitting Theranostic Radionuclides. <i>Journal of Nuclear Medicine</i> , 2015 , 56, 1441-6	8.9	53
64	Regional Nodal Irradiation in Early-Stage Breast Cancer. <i>New England Journal of Medicine</i> , 2015 , 373, 307-16	59.2	710
63	Spatial distribution of Auger electrons emitted from internalised radionuclides in cancer cells: the photoresist autoradiography (PAR) method. <i>Radiation Protection Dosimetry</i> , 2015 , 166, 228-32	0.9	4
62	XRCC1 Polymorphism Associated With Late Toxicity After Radiation Therapy in Breast Cancer Patients. <i>International Journal of Radiation Oncology Biology Physics</i> , 2015 , 92, 1084-1092	4	53
61	Relationship between Caffeine and Levels of DNA Repair and Oxidative Stress in Women with and without a BRCA1 Mutation. <i>Journal of Nutrigenetics and Nutrigenomics</i> , 2015 , 8, 174-84		13
60	PET and SPECT Imaging for the Acceleration of Anti-Cancer Drug Development. <i>Current Drug Targets</i> , 2015 , 16, 582-91	3	3
59	SU-F-BRD-04: Robustness Analysis of Proton Breast Treatments Using An Alpha-Stable Distribution Parameterization. <i>Medical Physics</i> , 2015 , 42, 3526-3526	4.4	0
58	Imaging DNA damage allows detection of preneoplasia in the BALB-neuT model of breast cancer. <i>Journal of Nuclear Medicine</i> , 2014 , 55, 2026-31	8.9	11
57	Uptake, internalization and nuclear translocation of radioimmunotherapeutic agents. <i>Therapeutic Delivery</i> , 2014 , 5, 319-35	3.8	6
56	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. <i>American Journal of Nuclear Medicine and Molecular Imaging</i> , 2014 , 4, 181-92	2.2	25
55	Advances in anticancer radiopharmaceuticals. <i>Clinical Oncology</i> , 2013 , 25, 604-9	2.8	37
54	Nanographene oxide-based radioimmunoconstructs for in vivo targeting and SPECT imaging of HER2-positive tumors. <i>Biomaterials</i> , 2013 , 34, 1146-54	15.6	71
53	Molecular radiotherapy using cleavable radioimmunoconjugates that target EGFR and HER2AX. <i>Molecular Cancer Therapeutics</i> , 2013 , 12, 2472-82	6.1	21
52	Selective permeabilization of the blood-brain barrier at sites of metastasis. <i>Journal of the National Cancer Institute</i> , 2013 , 105, 1634-43	9.7	62
51	Characterization of single tracks by photoresist detection and AFM analysis-focus on biomedical science and technology. <i>Physics in Medicine and Biology</i> , 2013 , 58, 7673-82	3.8	2
50	¹¹¹ In-BnDTPA-F3: an Auger electron-emitting radiotherapeutic agent that targets nucleolin. <i>EJNMMI Research</i> , 2012 , 2, 9	3.6	18

49	Relationship between chromatin structure and sensitivity to molecularly targeted auger electron radiation therapy. <i>International Journal of Radiation Oncology Biology Physics</i> , 2012 , 83, 1298-305	4	15
48	Photoresists as a high spatial resolution autoradiography substrate for quantitative mapping of intra- and sub-cellular distribution of Auger electron emitting radionuclides. <i>International Journal of Radiation Biology</i> , 2012 , 88, 933-40	2.9	7
47	Clinical imaging of tumor angiogenesis. <i>Future Oncology</i> , 2012 , 8, 1443-59	3.6	13
46	Amplification of DNA damage by a H2AX-targeted radiopharmaceutical. <i>Nuclear Medicine and Biology</i> , 2012 , 39, 1142-51	2.1	24
45	Auger Emitting Radiopharmaceuticals for Cancer Therapy 2012 , 461-478		2
44	Targeting ATR in vivo using the novel inhibitor VE-822 results in selective sensitization of pancreatic tumors to radiation. <i>Cell Death and Disease</i> , 2012 , 3, e441	9.8	242
43	Proteomic analyses reveal high expression of decorin and endoplasmin (HSP90B1) are associated with breast cancer metastasis and decreased survival. <i>PLoS ONE</i> , 2012 , 7, e30992	3.7	68
42	Chemically amplified photoresist for high resolution autoradiography in targeted radiotherapy. <i>Biomaterials</i> , 2011 , 32, 6138-44	15.6	7
41	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. <i>Journal of Nuclear Medicine</i> , 2011 , 52, 776-83	8.9	15
40	Imaging DNA damage in vivo using gammaH2AX-targeted immunoconjugates. <i>Cancer Research</i> , 2011 , 71, 4539-49	10.1	49
39	Methotrexate, paclitaxel, and doxorubicin radiosensitize HER2-amplified human breast cancer cells to the Auger electron-emitting radiotherapeutic agent (111)In-NLS-trastuzumab. <i>Journal of Nuclear Medicine</i> , 2010 , 51, 477-83	8.9	39
38	Antitumor effects and normal-tissue toxicity of 111In-nuclear localization sequence-trastuzumab in athymic mice bearing HER-positive human breast cancer xenografts. <i>Journal of Nuclear Medicine</i> , 2010 , 51, 1084-91	8.9	52
37	Toenail selenium status and DNA repair capacity among female BRCA1 mutation carriers. <i>Cancer Causes and Control</i> , 2010 , 21, 679-87	2.8	21
36	Targeting the nucleus: an overview of Auger-electron radionuclide therapy. <i>Current Drug Discovery Technologies</i> , 2010 , 7, 263-79	1.5	77
35	Outcomes of surveillance mammography after treatment of primary breast cancer: a population-based case series. <i>Breast Cancer Research and Treatment</i> , 2009 , 114, 169-78	4.4	34
34	In vivo monitoring of intranuclear p27(kip1) protein expression in breast cancer cells during trastuzumab (Herceptin) therapy. <i>Nuclear Medicine and Biology</i> , 2009 , 36, 811-9	2.1	9
33	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. <i>International Journal of Radiation Biology</i> , 2009 , 85, 262-71	2.9	62
32	Trastuzumab-resistant breast cancer cells remain sensitive to the auger electron-emitting radiotherapeutic agent 111In-NLS-trastuzumab and are radiosensitized by methotrexate. <i>Journal of Nuclear Medicine</i> , 2008 , 49, 1498-505	8.9	60

31	Relationship between induction of phosphorylated H2AX and survival in breast cancer cells exposed to ¹¹¹ In-DTPA-hEGF. <i>Journal of Nuclear Medicine</i> , 2008 , 49, 1353-61	8.9	53
30	Cone beam computed tomography guidance for setup of patients receiving accelerated partial breast irradiation. <i>International Journal of Radiation Oncology Biology Physics</i> , 2007 , 68, 547-54	4	89
29	DNA repair capacity as a possible biomarker of breast cancer risk in female BRCA1 mutation carriers. <i>British Journal of Cancer</i> , 2007 , 96, 118-25	8.7	38
28	¹²³ I-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). <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2007 , 34, 368-77	8.8	39
27	Epidermal growth factor receptor inhibition modulates the nuclear localization and cytotoxicity of the Auger electron emitting radiopharmaceutical ¹¹¹ In-DTPA human epidermal growth factor. <i>Journal of Nuclear Medicine</i> , 2007 , 48, 1562-70	8.9	26
26	(¹¹¹ In)-labeled trastuzumab (Herceptin) modified with nuclear localization sequences (NLS): an Auger electron-emitting radiotherapeutic agent for HER2/neu-amplified breast cancer. <i>Journal of Nuclear Medicine</i> , 2007 , 48, 1357-68	8.9	139
25	Effect of the EGFR density of breast cancer cells on nuclear importation, in vitro cytotoxicity, and tumor and normal-tissue uptake of [¹¹¹ In]DTPA-hEGF. <i>Nuclear Medicine and Biology</i> , 2007 , 34, 887-96	2.1	38
24	A population-based case-cohort study of the risk of myocardial infarction following radiation therapy for breast cancer. <i>Radiotherapy and Oncology</i> , 2007 , 82, 294-300	5.3	68
23	What is the risk of cardiac morbidity with adjuvant radiotherapy for breast cancer?. <i>Nature Clinical Practice Oncology</i> , 2006 , 3, 180-1		1
22	Preclinical pharmacokinetic, biodistribution, toxicology, and dosimetry studies of ¹¹¹ In-DTPA-human epidermal growth factor: an auger electron-emitting radiotherapeutic agent for epidermal growth factor receptor-positive breast cancer. <i>Journal of Nuclear Medicine</i> , 2006 , 47, 1023-31	8.9	51
21	A kit formulated under good manufacturing practices for labeling human epidermal growth factor with ¹¹¹ In for radiotherapeutic applications. <i>Journal of Nuclear Medicine</i> , 2004 , 45, 701-8	8.9	24
20	Antisense imaging of epidermal growth factor-induced p21(WAF-1/CIP-1) gene expression in MDA-MB-468 human breast cancer xenografts. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2003 , 30, 1273-80	8.8	14
19	Prospective comparison of breast pain in patients participating in a randomized trial of breast-conserving surgery and tamoxifen with or without radiotherapy. <i>International Journal of Radiation Oncology Biology Physics</i> , 2003 , 55, 154-61	4	42
18	Antitumor effects and normal tissue toxicity of ¹¹¹ In-labeled epidermal growth factor administered to athymic mice bearing epidermal growth factor receptor-positive human breast cancer xenografts. <i>Journal of Nuclear Medicine</i> , 2003 , 44, 1469-78	8.9	53
17	Assessment of coronary heart disease morbidity and mortality after radiation therapy for early breast cancer. <i>Journal of Clinical Oncology</i> , 2002 , 20, 1036-42	2.2	115
16	Concurrent cyclophosphamide, methotrexate, and 5-fluorouracil chemotherapy and radiotherapy for breast carcinoma: a well tolerated adjuvant regimen. <i>Cancer</i> , 2002 , 95, 696-703	6.4	34
15	Identification of radiation-responsive genes in vitro using a gene trap strategy predicts for modulation of expression by radiation in vivo. <i>Radiation Research</i> , 2002 , 157, 8-18	3.1	11
14	A phase I study of ^{99m} Tc-hR3 (DiaCIM), a humanized immunoconjugate directed towards the epidermal growth factor receptor. <i>Nuclear Medicine Communications</i> , 2002 , 23, 1155-64	1.6	25

13	A high-throughput induction gene trap approach defines C4ST as a target of BMP signaling. <i>Mechanisms of Development</i> , 2002 , 118, 77-89	1.7	29
12	Comparative antiproliferative effects of (111)In-DTPA-hEGF, chemotherapeutic agents and gamma-radiation on EGFR-positive breast cancer cells. <i>Nuclear Medicine and Biology</i> , 2002 , 29, 693-9	2.1	27
11	Amplified delivery of indium-111 to EGFR-positive human breast cancer cells. <i>Nuclear Medicine and Biology</i> , 2001 , 28, 895-902	2.1	16
10	Breast cancer in women <i>Annals of Oncology</i> , 2000 , 11, 1255-62	10.3	21
9	Evaluation of toremifene for reversal of multidrug resistance in renal cell cancer patients treated with vinblastine. <i>Cancer Chemotherapy and Pharmacology</i> , 2000 , 46, 27-34	3.5	37
8	Expression Trapping: Identification of Novel Genes Expressed in Hematopoietic and Endothelial Lineages by Gene Trapping in ES Cells. <i>Blood</i> , 1998 , 92, 4622-4631	2.2	60
7	Menadione-resistant Chinese hamster ovary cells have an increased capacity for glutathione synthesis. <i>British Journal of Cancer</i> , 1997 , 76, 870-7	8.7	5
6	Relationship between the adaptive response to oxidants and stable menadione-resistance in Chinese hamster ovary cell lines. <i>Carcinogenesis</i> , 1996 , 17, 649-54	4.6	16
5	Radiotherapy for stages I and II testicular seminoma: results and morbidity in 238 patients. <i>British Journal of Radiology</i> , 1995 , 68, 400-5	3.4	52
4	Relationship between the debrisoquine hydroxylase polymorphism and cancer susceptibility. <i>Carcinogenesis</i> , 1992 , 13, 1035-8	4.6	96
3	Distress associated with radiotherapy for malignant disease: a quantitative analysis based on patients perceptions. <i>British Journal of Cancer</i> , 1989 , 60, 370-4	8.7	29
2	Early experience with combined interstitial hyperthermia and brachytherapy. <i>British Journal of Radiology</i> , 1986 , 59, 525-7	3.4	10
1	Orally administered oxygen nanobubbles enhance tumor response to sonodynamic therapy. <i>Nano Select</i> ,	3.1	5