Marie-Catherine Vozenin

List of Publications by Year
in descending order

116	8,495	53660 45	48187 88
papers	citations	h-index	g-index

128	128	128	6280
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrahigh dose-rate FLASH irradiation increases the differential response between normal and tumor tissue in mice. Science Translational Medicine, 2014, 6, 245ra93.	5.8	768
2	Pathogenetic mechanisms in radiation fibrosis. Radiotherapy and Oncology, 2010, 97, 149-161.	0.3	498
3	The Advantage of FLASH Radiotherapy Confirmed in Mini-pig and Cat-cancer Patients. Clinical Cancer Research, 2019, 25, 35-42.	3.2	430
4	Irradiation in a flash: Unique sparing of memory in mice after whole brain irradiation with dose rates above 100 Gy/s. Radiotherapy and Oncology, 2017, 124, 365-369.	0.3	410
5	Treatment of a first patient with FLASH-radiotherapy. Radiotherapy and Oncology, 2019, 139, 18-22.	0.3	406
6	Long-term neurocognitive benefits of FLASH radiotherapy driven by reduced reactive oxygen species. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10943-10951.	3.3	326
7	Biological Benefits of Ultra-high Dose Rate FLASH Radiotherapy: Sleeping Beauty Awoken. Clinical Oncology, 2019, 31, 407-415.	0.6	324
8	Clinical translation of FLASH radiotherapy: Why and how?. Radiotherapy and Oncology, 2019, 139, 11-17.	0.3	294
9	X-rays can trigger the FLASH effect: Ultra-high dose-rate synchrotron light source prevents normal brain injury after whole brain irradiation in mice. Radiotherapy and Oncology, 2018, 129, 582-588.	0.3	250
10	Hypofractionated FLASH-RT as an Effective Treatment against Glioblastoma that Reduces Neurocognitive Side Effects in Mice. Clinical Cancer Research, 2021, 27, 775-784.	3.2	144
11	High doseâ€perâ€pulse electron beam dosimetry: Commissioning of the Oriatron eRT6 prototype linear accelerator for preclinical use. Medical Physics, 2018, 45, 863-874.	1.6	143
12	High doseâ€perâ€pulse electron beam dosimetry â€" A model to correct for the ion recombination in the Advanced Markus ionization chamber. Medical Physics, 2017, 44, 1157-1167.	1.6	141
13	Durable and controlled depletion of neutrophils in mice. Nature Communications, 2020, 11, 2762.	5.8	138
14	Striking regression of subcutaneous fibrosis induced by high doses of gamma rays using a combination of pentoxifylline and Î±-tocopherol: an experimental study. International Journal of Radiation Oncology Biology Physics, 1999, 43, 839-847.	0.4	137
15	NF-ÂB constitutes a potential therapeutic target in high-risk myelodysplastic syndrome. Blood, 2005, 107, 1156-1165.	0.6	127
16	Pravastatin Inhibits the Rho/CCN2/Extracellular Matrix Cascade in Human Fibrosis Explants and Improves Radiation-Induced Intestinal Fibrosis in Rats. Clinical Cancer Research, 2007, 13, 5331-5340.	3.2	126
17	Coactivation of AP-1 activity and TGF-Î²1 gene expression in the stress response of normal skin cells to ionizing radiation. Oncogene, 1997, 15, 981-989.	2.6	115
18	High doseâ€perâ€pulse electron beam dosimetry: Usability and doseâ€rate independence of EBT3 Gafchromic films. Medical Physics, 2017, 44, 725-735.	1.6	115

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19	CSF1R inhibition prevents radiation pulmonary fibrosis by depletion of interstitial macrophages. European Respiratory Journal, 2018, 51, 1702120.	3.1	114
20	Pravastatin Limits Endothelial Activation after Irradiation and Decreases the Resulting Inflammatory and Thrombotic Responses. Radiation Research, 2005, 163, 479-487.	0.7	108
21	Inhibition of Rho kinase modulates radiation induced fibrogenic phenotype in intestinal smooth muscle cells through alteration of the cytoskeleton and connective tissue growth factor expression. Gut, 2005, 54, 336-343.	6.1	98
22	Antifibrotic action of Cu/Zn SOD is mediated by TGF-Î²1 repression and phenotypic reversion of myofibroblasts. Free Radical Biology and Medicine, 2001, 30, 30-42.	1.3	94
23	Down-regulation of BRCA1 in BCR-ABLâ€“expressing hematopoietic cells. Blood, 2003, 101, 4583-4588.	0.6	94
24	Dosimetric and preparation procedures for irradiating biological models with pulsed electron beam at ultra-high dose-rate. Radiotherapy and Oncology, 2019, 139, 34-39.	0.3	92
25	Fibrogenic signals in patients with radiation enteritis are associated with increased connective tissue growth factor expression. International Journal of Radiation Oncology Biology Physics, 2003, 56, 561-572.	0.4	90
26	Comparative gene expression profiling in three primary human cell lines after treatment with a novel inhibitor of Rho kinase or atorvastatin. Blood Coagulation and Fibrinolysis, 2008, 19, 709-718.	0.5	87
27	Abdominal irradiation increases inflammatory cytokine expression and activates NF-ÎºB in rat ileal muscularis layer. American Journal of Physiology - Renal Physiology, 2003, 285, G556-G565.	1.6	83
28	Synergy of Radiotherapy and a Cancer Vaccine for the Treatment of HPV-Associated Head and Neck Cancer. Molecular Cancer Therapeutics, 2015, 14, 1336-1345.	1.9	77
29	Neuroprotection of Radiosensitive Juvenile Mice by Ultra-High Dose Rate FLASH Irradiation. Cancers, 2020, 12, 1671.	1.7	74
30	The European Joint Research Project UHDpulse â€“ Metrology for advanced radiotherapy using particle beams with ultra-high pulse dose rates. Physica Medica, 2020, 80, 134-150.	0.4	71
31	Induction of CTGF by TGF-Î²1 in normal and radiation enteritis human smooth muscle cells: Smad/Rho balance and therapeutic perspectives. Radiotherapy and Oncology, 2005, 76, 219-225.	0.3	70
32	Antifibrotic, Antioxidant, and Immunomodulatory Effects of Mesenchymal Stem Cells in HOClâ€‐Induced Systemic Sclerosis. Arthritis and Rheumatology, 2016, 68, 1013-1025.	2.9	70
33	Understanding High-Dose, Ultra-High Dose Rate, and Spatially Fractionated Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2020, 107, 766-778.	0.4	70
34	Successful Mitigation of Delayed Intestinal Radiation Injury Using Pravastatin is not Associated with Acute Injury Improvement or Tumor Protection. International Journal of Radiation Oncology Biology Physics, 2007, 68, 1471-1482.	0.4	67
35	Ultra-high-dose-rate FLASH and Conventional-Dose-Rate Irradiation Differentially Affect Human Acute Lymphoblastic Leukemia and Normal Hematopoiesis. International Journal of Radiation Oncology Biology Physics, 2021, 109, 819-829.	0.4	66
36	Ultraâ€‐high dose rate electron beams and the FLASH effect: From preclinical evidence to a new radiotherapy paradigm. Medical Physics, 2022, 49, 2082-2095.	1.6	66

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37	Gene Expression Profile in Human Late Radiation Enteritis Obtained by High-Density cDNA Array Hybridization. Radiation Research, 2004, 161, 299-311.	0.7	65
38	GLUT1 Expression in Tumor-Associated Neutrophils Promotes Lung Cancer Growth and Resistance to Radiotherapy. Cancer Research, 2021, 81, 2345-2357.	0.4	65
39	Global gene expression profiles reveal an increase in mRNA levels of collagens, MMPs, and TIMPs in late radiation enteritis. American Journal of Physiology - Renal Physiology, 2004, 287, G875-G885.	1.6	64
40	Modulation of the Rho/ROCK Pathway in Heart and Lung after Thorax Irradiation Reveals Targets to Improve Normal Tissue Toxicity. Current Drug Targets, 2010, 11, 1395-1404.	1.0	61
41	Comparison between Stromal Vascular Fraction and Adipose Mesenchymal Stem Cells in Remodeling Hypertrophic Scars. PLoS ONE, 2016, 11, e0156161.	1.1	55
42	Commissioning of an ultraâ€high dose rate pulsed electron beam medical LINAC for FLASH RT preclinical animal experiments and future clinical human protocols. Medical Physics, 2021, 48, 3134-3142.	1.6	51
43	Altered proliferation and differentiation of human epidermis in cases of skin fibrosis after radiotherapy. International Journal of Radiation Oncology Biology Physics, 2002, 53, 385-393.	0.4	48
44	The radiosensitizing activity of the SMAC-mimetic, Debio 1143, is TNFÎ±-mediated in head and neck squamous cell carcinoma. Radiotherapy and Oncology, 2015, 116, 495-503.	0.3	48
45	All Irradiations that are Ultra-High Dose Rate may not be FLASH: The Critical Importance of Beam Parameter Characterization and In Vivo Validation of the FLASH Effect. Radiation Research, 2020, 194, 571-572.	0.7	48
46	Rho/ROCK pathway as a molecular target for modulation of intestinal radiation-induced toxicity. British Journal of Radiology, 2007, 80, S32-S40.	1.0	46
47	Molecular Aspects of Intestinal Radiation-Induced Fibrosis. Current Molecular Medicine, 2009, 9, 273-280.	0.6	46
48	Enhanced Sensitivity to Low Dose Irradiation of ApoEâ¯/â¯ Mice Mediated by Early Pro-Inflammatory Profile and Delayed Activation of the TGFÎ²1 Cascade Involved in Fibrogenesis. PLoS ONE, 2013, 8, e57052.	1.1	45
49	Expression and activation of MMP -2, -3, -9, -14 are induced in rat colon after abdominal X-irradiation. Scandinavian Journal of Gastroenterology, 2006, 41, 60-70.	0.6	43
50	Specific signals involved in the long-term maintenance of radiation-induced fibrogenic differentiation: a role for CCN2 and low concentration of TGF-Î²1. American Journal of Physiology - Cell Physiology, 2008, 294, C1332-C1341.	2.1	43
51	Ultra-High-Dose-Rate FLASH Irradiation Limits Reactive Gliosis in the Brain. Radiation Research, 2020, 194, 636-645.	0.7	43
52	Novel Anti-Metastatic Action of Cidofovir Mediated by Inhibition of E6/E7, CXCR4 and Rho/ROCK Signaling in HPV+ Tumor Cells. PLoS ONE, 2009, 4, e5018.	1.1	42
53	Dose- and Volume-Limiting Late Toxicity of FLASH Radiotherapy in Cats with Squamous Cell Carcinoma of the Nasal Planum and in Mini Pigs. Clinical Cancer Research, 2022, 28, 3814-3823.	3.2	42
54	Pharmacological strategies to spare normal tissues from radiation damage: useless or overlooked therapeutics?. Cancer and Metastasis Reviews, 2012, 31, 699-712.	2.7	41

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55	Expanding the therapeutic index of radiation therapy by normal tissue protection. British Journal of Radiology, 2019, 92, 20180008.	1.0	41
56	Recommended ESTRO Core Curriculum for Radiation Oncology/Radiotherapy 4th edition. Radiotherapy and Oncology, 2019, 141, 1-4.	0.3	41
57	Bioluminescent Orthotopic Mouse Models of Human Localized Non-Small Cell Lung Cancer: Feasibility and Identification of Circulating Tumour Cells. PLoS ONE, 2011, 6, e26073.	1.1	41
58	Radiation-induced enteropathy: Molecular basis of pentoxifyllineâ€“vitamin E anti-fibrotic effect involved TGF-Î²1 cascade inhibition. Radiotherapy and Oncology, 2012, 105, 305-312.	0.3	40
59	Understanding the FLASH effect to unravel the potential of ultra-high dose rate irradiation. International Journal of Radiation Biology, 2022, 98, 506-516.	1.0	40
60	Glucagon-Like Peptide-2 Improves Both Acute and Late Experimental Radiation Enteritis in the Rat. International Journal of Radiation Oncology Biology Physics, 2007, 69, 1563-1571.	0.4	38
61	Normal tissues toxicities triggered by combined anti-angiogenic and radiation therapies: hurdles might be ahead. British Journal of Cancer, 2012, 107, 308-314.	2.9	38
62	How could breast cancer molecular features contribute to locoregional treatment decision making?. Critical Reviews in Oncology/Hematology, 2017, 110, 43-48.	2.0	37
63	FLASH radiotherapy International Workshop. Radiotherapy and Oncology, 2019, 139, 1-3.	0.3	34
64	Maintenance of Tight Junction Integrity in the Absence of Vascular Dilation in the Brain of Mice Exposed to Ultra-High-Dose-Rate FLASH Irradiation. Radiation Research, 2020, 194, 625-635.	0.7	34
65	Maintenance of radiation-induced intestinal fibrosis: Cellular and molecular features. World Journal of Gastroenterology, 2007, 13, 2675.	1.4	31
66	Lung Cancer Stem Cell: New Insights on Experimental Models and Preclinical Data. Journal of Oncology, 2011, 2011, 1-10.	0.6	30
67	Cellular Composition and Contribution of Tertiary Lymphoid Structures to Tumor Immune Infiltration and Modulation by Radiation Therapy. Frontiers in Oncology, 2018, 8, 256.	1.3	30
68	Implementation and validation of a beamâ€current transformer on a medical pulsed electron beam LINAC for FLASHâ€RT beam monitoring. Journal of Applied Clinical Medical Physics, 2021, 22, 165-171.	0.8	28
69	Fibrosis Development in HOCl-Induced Systemic Sclerosis: A Multistage Process Hampered by Mesenchymal Stem Cells. Frontiers in Immunology, 2018, 9, 2571.	2.2	27
70	Epac contributes to cardiac hypertrophy and amyloidosis induced by radiotherapy but not fibrosis. Radiotherapy and Oncology, 2014, 111, 63-71.	0.3	26
71	Pravastatin Reverses Established Radiation-Induced Cutaneous and Subcutaneous Fibrosis in Patients With Head and Neck Cancer: Results of the Biology-Driven Phase 2 Clinical Trial Pravacur. International Journal of Radiation Oncology Biology Physics, 2019, 104, 365-373.	0.4	26
72	Stereotactic Radiotherapy for the Management of Refractory Ventricular Tachycardia: Promise and Future Directions. Frontiers in Cardiovascular Medicine, 2020, 7, 108.	1.1	23

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73	Histopathological and Cellular Studies of a Case of Cutaneous Radiation Syndrome after Accidental Chronic Exposure to a Cesium Source. Radiation Research, 1999, 152, 332.	0.7	22
74	Unravelling the biology of human papillomavirus (HPV) related tumours to enhance their radiosensitivity. Cancer Treatment Reviews, 2010, 36, 629-636.	3.4	21
75	Fc-Receptor-Mediated Intracellular Delivery of Cu/Zn-superoxide Dismutase (SOD1) Protects Against Redox-Induced Apoptosis Through a Nitric Oxide Dependent Mechanism. Molecular Medicine, 2000, 6, 1042-1053.	1.9	20
76	Differential Effect Triggered by a Heparan Mimetic of the RGTA Family Preventing Oral Mucositis Without Tumor Protection. International Journal of Radiation Oncology Biology Physics, 2009, 74, 1242-1250.	0.4	20
77	MiR-210: A potential therapeutic target against radiation-induced enteropathy. Radiotherapy and Oncology, 2014, 111, 219-221.	0.3	20
78	Promoter Sequences Involved in Transforming Growth Factor Î²1 Gene Induction in HaCaT Keratinocytes after Gamma Irradiation. Radiation Research, 2002, 157, 249-255.	0.7	19
79	Collapse of Skin Antioxidant Status during the Subacute Period of Cutaneous Radiation Syndrome: A Case Report. Radiation Research, 2007, 167, 43-50.	0.7	19
80	Technical note: Validation of an ultrahigh dose rate pulsed electron beam monitoring system using a current transformer for FLASH preclinical studies. Medical Physics, 2022, 49, 1831-1838.	1.6	19
81	Emerging Opportunities of Radiotherapy Combined With Immunotherapy in the Era of Breast Cancer Heterogeneity. Frontiers in Oncology, 2018, 8, 609.	1.3	17
82	Expression of matrix metalloproteinases and tissue inhibitor metalloproteinases increases in X-irradiated rat ileum despite the disappearance of CD8a T cells. World Journal of Gastroenterology, 2005, 11, 6312.	1.4	17
83	The myofibroblast markers Î±-SM actin and Î²-actin are differentially expressed in 2 and 3-D culture models of fibrotic and normal skin. Cytotechnology, 1998, 26, 29-38.	0.7	16
84	Therapeutic management of intestinal fibrosis induced by radiation therapy: from molecular profiling to new intervention strategies et vice et versa. Fibrogenesis and Tissue Repair, 2012, 5, S13.	3.4	16
85	Cytotoxic effect of lapatinib is restricted to human papillomavirus-positive head and neck squamous cell carcinoma cell lines. OncoTargets and Therapy, 2015, 8, 335.	1.0	16
86	Optimization of Alanine Measurements for Fast and Accurate Dosimetry in FLASH Radiation Therapy. Radiation Research, 2020, 194, 573-579.	0.7	16
87	Tissue toxicity induced by ionizing radiation to the normal intestine: Understanding the pathophysiological mechanisms to improve the medical management. World Journal of Gastroenterology, 2007, 13, 3031.	1.4	16
88	Simultaneous Irradiation of Fibroblasts and Carcinoma Cells Repress the Secretion of Soluble Factors Able to Stimulate Carcinoma Cell Migration. PLoS ONE, 2015, 10, e0115447.	1.1	15
89	Anti-Ly6G binding and trafficking mediate positive neutrophil selection to unleash the anti-tumor efficacy of radiation therapy. OncoImmunology, 2021, 10, 1876597.	2.1	14
90	Characteristics of very highâ€energy electron beams for the irradiation of deepâ€seated targets. Medical Physics, 2021, 48, 3958-3967.	1.6	14

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91	â€˜Inâ€fieldâ€™ and â€˜outâ€ofâ€fieldâ€™ functional impairment during subacute and chronic phases of experimental radiation enteropathy in the rat. International Journal of Radiation Biology, 2003, 79, 437-450.	1.0	13
92	Cardiac Radionuclide Imaging in Rodents: A Review of Methods, Results, and Factors at Play. Frontiers in Medicine, 2017, 4, 35.	1.2	13
93	Experimental Drainage Device to Reduce Lymphoedema in a Rat Model. European Journal of Vascular and Endovascular Surgery, 2019, 57, 859-867.	0.8	13
94	The combination of the antiviral agent cidofovir and anti-EGFR antibody cetuximab exerts an antiproliferative effect on HPV-positive cervical cancer cell linesâ€™ in-vitro and in-vivo xenografts. Anti-Cancer Drugs, 2013, 24, 599-608.	0.7	12
95	TAT-RasGAP317â€“326 Enhances Radiosensitivity of Human Carcinoma Cell Lines In Vitro and In Vivo through Promotion of Delayed Mitotic Cell Death. Radiation Research, 2017, 187, 562.	0.7	11
96	TRIM33 deficiency in monocytes and macrophages impairs resolution of colonic inflammation. EBioMedicine, 2019, 44, 60-70.	2.7	10
97	Cidofovir Administered with Radiation Displays an Antiangiogenic Effect Mediated by E6 Inhibition and Subsequent TP53-Dependent VEGF Repression in HPV18+ Cell Lines. Radiation Research, 2006, 166, 600-610.	0.7	9
98	Differential expression of the Hs Kin17 protein during differentiation of in vitro reconstructed human skin. Archives of Dermatological Research, 1997, 289, 448-456.	1.1	8
99	PrPc deficiency and dasatinib protect mouse intestines against radiation injury by inhibiting of c-Src. Radiotherapy and Oncology, 2016, 120, 175-183.	0.3	7
100	Extracellular Vesicles for the Treatment of Radiation-Induced Normal Tissue Toxicity in the Lung. Frontiers in Oncology, 2020, 10, 602763.	1.3	7
101	Maintenance of Tight Junction Integrity in the Absence of Vascular Dilation in the Brain of Mice Exposed to Ultra-High-Dose-Rate FLASH Irradiation. Radiation Research, 2020, 194, 625-635.	0.7	7
102	A new mouse model of radiation-induced liver disease reveals mitochondrial dysfunction as an underlying fibrotic stimulus. JHEP Reports, 2022, 4, 100508.	2.6	7
103	In Regard to van Marlen etÂal. International Journal of Radiation Oncology Biology Physics, 2020, 107, 1012-1013.	0.4	6
104	Sex-Specific Differences in Toxicity Following Systemic Paclitaxel Treatment and Localized Cardiac Radiotherapy. Cancers, 2021, 13, 3973.	1.7	6
105	A need for biology-driven personalized radiotherapy in breast cancer. Breast Cancer Research and Treatment, 2018, 167, 603-604.	1.1	4
106	Isodose 20â€Gy found as a threshold dose for radiation recall dermatitis. Clinical and Translational Radiation Oncology, 2019, 17, 14-16.	0.9	3
107	What Have We Learned From Human Papillomavirusâ€“Positive Tumors? Trying to Connect Data About Biomarkers Among Human Papillomavirusâ€“Related Squamous Cell Carcinomas. Journal of Clinical Oncology, 2010, 28, e340-e341.	0.8	2
108	Circulating Tumor Cells and Radiotherapy Benefit in Early Breast Cancer. JAMA Oncology, 2019, 5, 111.	3.4	2

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109	Breakâ€even dose level for hypofractionated treatment schedules. Medical Physics, 2021, 48, 7534-7540.	1.6	2
110	Novel Strategies to Prevent, Mitigate or Reverse Radiation Injury and Fibrosis. , 2016, , 75-108.		1
111	The Era of Modern Radiation Therapy: Innovations to Spare Normal Tissues. , 2019, , 1-15.		1
112	Enhanced Local Control by Radiation Boost in Breast Cancer: Back Side of the Coin?. Journal of Clinical Oncology, 2007, 25, 5841-5843.	0.8	0
113	Radiosensitivity of Human Papillomavirusâ€"Related Tumors: In Regard to Gupta etÂal. (Int J Radiat Oncol) Tj ETQq1 1 0.784314 rgBT /C	0.4	0
114	MÃ©canismes de la toxicitÃ© cardiaque induite par les rayonnements ionisants. Archives Des Maladies Du Coeur Et Des Vaisseaux - Pratique, 2016, 2016, 22-28.	0.0	0
115	Potential of FLASH irradiation to minimize the incidence of radio-induced damage and fibrosis to normal lung in a mouse model. Journal of Thoracic Oncology, 2016, 11, S5.	0.5	0
116	Letter in Response toÂDoyen et al., â€œEarly Toxicities After High Dose Rate Proton Therapy in Cancer Treatmentsâ€• Frontiers in Oncology, 2021, 11, 687593.	1.3	0