Mary Helen Barcellos-Hoff

List of Publications by Year
in descending order

115 papers	8,876 citations	57758 44 h-index	42399 92 g-index
119 all docs	119 docs citations	119 times ranked	11958 citing authors

#	Article	IF	Citations
1	The morphologies of breast cancer cell lines in three-dimensional assays correlate with their profiles of gene expression. Molecular Oncology, 2007, 1, 84-96.	4.6	872
2	Radiation fosters dose-dependent and chemotherapy-induced immunogenic cell death. OncoImmunology, 2014, 3, e28518.	4.6	439
3	Radiation and the microenvironment â€“ tumorigenesis and therapy. Nature Reviews Cancer, 2005, 5, 867-875.	28.4	437
4	TGFÎ² Is a Master Regulator of Radiation Therapy-Induced Antitumor Immunity. Cancer Research, 2015, 75, 2232-2242.	0.9	429
5	Phenotypic Reversion or Death of Cancer Cells by Altering Signaling Pathways in Three-Dimensional Contexts. Journal of the National Cancer Institute, 2002, 94, 1494-1503.	6.3	392
6	The influence of the microenvironment on the malignant phenotype. Trends in Molecular Medicine, 2000, 6, 324-329.	2.6	360
7	Isoform-Specific Activation of Latent Transforming Growth Factor Î² (LTGF-Î²) by Reactive Oxygen Species. Radiation Research, 2006, 166, 839-848.	1.5	246
8	Extracellular Signaling through the Microenvironment: A Hypothesis Relating Carcinogenesis, Bystander Effects, and Genomic Instability. Radiation Research, 2001, 156, 618-627.	1.5	240
9	The evolution of the cancer niche during multistage carcinogenesis. Nature Reviews Cancer, 2013, 13, 511-518.	28.4	235
10	TGFÎ²1 Inhibition Increases the Radiosensitivity of Breast Cancer Cells<i>In Vitro</i>and Promotes Tumor Control by Radiation<i>In Vivo</i>. Clinical Cancer Research, 2011, 17, 6754-6765.	7.0	217
11	Latent transforming growth factor Î²1 activation in situ: quantitative and functional evidence after lowâ€dose Î³â€irradiation ¹. FASEB Journal, 1997, 11, 991-1002.	0.5	215
12	Resistance of Glioblastoma-Initiating Cells to Radiation Mediated by the Tumor Microenvironment Can Be Abolished by Inhibiting Transforming Growth Factor-Î². Cancer Research, 2012, 72, 4119-4129.	0.9	214
13	Photoactivation of Endogenous Latent Transforming Growth Factorâ€“Î²1 Directs Dental Stem Cell Differentiation for Regeneration. Science Translational Medicine, 2014, 6, 238ra69.	12.4	206
14	TGF-Â Biology in Mammary Development and Breast Cancer. Cold Spring Harbor Perspectives in Biology, 2011, 3, a003277-a003277.	5.5	197
15	Transforming growth factor-Î² in breast cancer: too much, too late. Breast Cancer Research, 2009, 11, 202.	5.0	173
16	Conditional Overexpression of Active Transforming Growth Factor Î²1 In vivo Accelerates Metastases of Transgenic Mammary Tumors. Cancer Research, 2004, 64, 9002-9011.	0.9	164
17	How Do Tissues Respond to Damage at the Cellular Level? The Role of Cytokines in Irradiated Tissues. Radiation Research, 1998, 150, S109.	1.5	161
18	Ionizing Radiation Predisposes Nonmalignant Human Mammary Epithelial Cells to Undergo Transforming Growth Factor Î²â€“Induced Epithelial to Mesenchymal Transition. Cancer Research, 2007, 67, 8662-8670.	0.9	155

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19	Inhibition of Transforming Growth Factor-Î²1 Signaling Attenuates Ataxia Telangiectasia Mutated Activity in Response to Genotoxic Stress. Cancer Research, 2006, 66, 10861-10869.	0.9	152
20	Imaging Features that Discriminate between Foci Induced by High- and Low-LET Radiation in Human Fibroblasts. Radiation Research, 2006, 165, 505-515.	1.5	142
21	Iterative Voting for Inference of Structural Saliency and Characterization of Subcellular Events. IEEE Transactions on Image Processing, 2007, 16, 615-623.	9.8	139
22	Latent Transforming Growth Factor-Î² Activation in Mammary Gland. American Journal of Pathology, 2002, 160, 2081-2093.	3.8	138
23	Radiation Acts on the Microenvironment to Affect Breast Carcinogenesis by Distinct Mechanisms that Decrease Cancer Latency and Affect Tumor Type. Cancer Cell, 2011, 19, 640-651.	16.8	137
24	Transforming growth factor-beta1 mediates cellular response to DNA damage in situ. Cancer Research, 2002, 62, 5627-31.	0.9	122
25	Latency and activation in the control of TGF-Î². Journal of Mammary Gland Biology and Neoplasia, 1996, 1, 353-363.	2.7	110
26	It takes a tissue to make a tumor: epigenetics, cancer and the microenvironment. Journal of Mammary Gland Biology and Neoplasia, 2001, 6, 213-221.	2.7	99
27	Image-Based Modeling Reveals Dynamic Redistribution of DNA Damage into Nuclear Sub-Domains. PLoS Computational Biology, 2007, 3, e155.	3.2	97
28	The effect of environmental chemicals on the tumor microenvironment. Carcinogenesis, 2015, 36, S160-S183.	2.8	97
29	The Microenvironment of Lung Cancer and Therapeutic Implications. Advances in Experimental Medicine and Biology, 2016, 890, 75-110.	1.6	96
30	Ionizing Radiation Accelerates Aortic Lesion Formation in Fat-Fed Mice via SOD-Inhibitable Processes. Arteriosclerosis, Thrombosis, and Vascular Biology, 1999, 19, 1387-1392.	2.4	91
31	Interplay between BRCA1 and RHAMM Regulates Epithelial Apicobasal Polarization and May Influence Risk of Breast Cancer. PLoS Biology, 2011, 9, e1001199.	5.6	91
32	Targeted and Nontargeted Effects of Ionizing Radiation That Impact Genomic Instability. Cancer Research, 2008, 68, 8304-8311.	0.9	84
33	Integrative radiation carcinogenesis: interactions between cell and tissue responses to DNA damage. Seminars in Cancer Biology, 2005, 15, 138-148.	9.6	80
34	New highlights on stromaâ€“epithelial interactions in breast cancer. Breast Cancer Research, 2004, 7, 33-6.	5.0	77
35	Concepts and challenges in cancer risk prediction for the space radiation environment. Life Sciences in Space Research, 2015, 6, 92-103.	2.3	75
36	Subjugation of TGFÎ² Signaling by Human Papilloma Virus in Head and Neck Squamous Cell Carcinoma Shifts DNA Repair from Homologous Recombination to Alternative End Joining. Clinical Cancer Research, 2018, 24, 6001-6014.	7.0	71

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37	Ionizing radiation induces heritable disruption of epithelial cell interactions. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10728-10733.	7.1	68
38	New tricks for an old fox: Impact of TGFÎ² on the DNA damage response and genomic stability. Science Signaling, 2014, 7, re5.	3.6	64
39	New rationales for using TGFbetainhibitors in radiotherapy. International Journal of Radiation Biology, 2007, 83, 803-811.	1.8	61
40	Therapeutic Targets in Malignant Glioblastoma Microenvironment. Seminars in Radiation Oncology, 2009, 19, 163-170.	2.2	60
41	Autocrine TGFÎ² Is a Survival Factor for Monocytes and Drives Immunosuppressive Lineage Commitment. Cancer Immunology Research, 2019, 7, 306-320.	3.4	58
42	Notch signaling regulates metabolic heterogeneity in glioblastoma stem cells. Oncotarget, 2017, 8, 64932-64953.	1.8	58
43	Dual inhibition of TGFâ€Î² and PDâ€L1: a novel approach to cancer treatment. Molecular Oncology, 2022, 16, 2117-2134.	4.6	53
44	The not-so innocent bystander: the microenvironment as a therapeutic target in cancer. Expert Opinion on Therapeutic Targets, 2003, 7, 71-88.	3.4	49
45	Age- and Pregnancy-Associated DNA Methylation Changes in Mammary Epithelial Cells. Stem Cell Reports, 2015, 4, 297-311.	4.8	45
46	A systems biology approach to multicellular and multi-generational radiation responses. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2006, 597, 32-38.	1.0	44
47	Irradiation of Juvenile, but not Adult, Mammary Gland Increases Stem Cell Self-Renewal and Estrogen Receptor Negative Tumors. Stem Cells, 2014, 32, 649-661.	3.2	44
48	RADIATION CARCINOGENESIS IN CONTEXT: HOW DO IRRADIATED TISSUES BECOME TUMORS?. Health Physics, 2009, 97, 446-457.	0.5	42
49	TGFÎ²1 Protects Cells from Î³-IR by Enhancing the Activity of the NHEJ Repair Pathway. Molecular Cancer Research, 2015, 13, 319-329.	3.4	41
50	Attenuation of the DNA Damage Response by Transforming Growth Factor-Beta Inhibitors Enhances Radiation Sensitivity of Nonâ€"Small-Cell Lung Cancer Cells InÂVitro and InÂVivo. International Journal of Radiation Oncology Biology Physics, 2015, 91, 91-99.	0.8	40
51	Cancer as an emergent phenomenon in systems radiation biology. Radiation and Environmental Biophysics, 2008, 47, 33-38.	1.4	38
52	Tumors as Organs: Biologically Augmenting Radiation Therapy by Inhibiting Transforming Growth Factor Î² Activity in Carcinomas. Seminars in Radiation Oncology, 2013, 23, 242-251.	2.2	36
53	Patient-Specific Screening Using High-Grade Glioma Explants to Determine Potential Radiosensitization by a TGF-Î² Small Molecule Inhibitor. Neoplasia, 2016, 18, 795-805.	5.3	35
54	The Pivotal Role of Insulin-Like Growth Factor I in Normal Mammary Development. Endocrinology and Metabolism Clinics of North America, 2011, 40, 461-471.	3.2	33

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55	Loss of TGFÎ² signaling increases alternative end-joining DNA repair that sensitizes to genotoxic therapies across cancer types. Science Translational Medicine, 2021, 13, .	12.4	33
56	Persistence of Î³-H2AX and 53BP1 foci in proliferating and non-proliferating human mammary epithelial cells after exposure to Î³-rays or iron ions. International Journal of Radiation Biology, 2011, 87, 696-710.	1.8	31
57	Lack of Radiation Dose or Quality Dependence of Epithelial-to-Mesenchymal Transition (EMT) Mediated by Transforming Growth Factor Î². International Journal of Radiation Oncology Biology Physics, 2011, 79, 1523-1531.	0.8	29
58	HZE Radiation Non-Targeted Effects on the Microenvironment That Mediate Mammary Carcinogenesis. Frontiers in Oncology, 2016, 6, 57.	2.8	29
59	Karyotypic Instability and Centrosome Aberrations in the Progeny of Finite Life-Span Human Mammary Epithelial Cells Exposed to Sparsely or Densely Ionizing Radiation. Radiation Research, 2008, 170, 23-32.	1.5	28
60	Misrepair in Context: TGFÎ² Regulation of DNA Repair. Frontiers in Oncology, 2019, 9, 799.	2.8	28
61	How tissues respond to damage at the cellular level: orchestration by transforming growth factor-Î² (TGF-Î²). British Journal of Radiology, 2005, Supplement_27, 123-127.	2.2	26
62	Does Microenvironment Contribute to the Etiology of Estrogen Receptorâ€"Negative Breast Cancer?. Clinical Cancer Research, 2013, 19, 541-548.	7.0	26
63	Promotion of variant human mammary epithelial cell outgrowth by ionizing radiation: an agent-based model supported by in vitro studies. Breast Cancer Research, 2010, 12, R11.	5.0	24
64	Densely Ionizing Radiation Acts via the Microenvironment to Promote Aggressive <i>Trp53</i>-Null Mammary Carcinomas. Cancer Research, 2014, 74, 7137-7148.	0.9	24
65	Murine Microenvironment Metaprofiles Associate with Human Cancer Etiology and Intrinsic Subtypes. Clinical Cancer Research, 2013, 19, 1353-1362.	7.0	23
66	A TGFÎ²â€"miR-182â€"BRCA1 axis controls the mammary differentiation hierarchy. Science Signaling, 2016, 9, ra118.	3.6	23
67	Immunodetection of 3-nitrotyrosine in the liver of zymosan-treated rats with a new monoclonal antibody: comparison to analysis by HPLC. Free Radical Biology and Medicine, 2001, 31, 1375-1387.	2.9	21
68	Mapping mammary gland architecture using multi-scale in situ analysis. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.3	21
69	Stromal Mediation of Radiation Carcinogenesis. Journal of Mammary Gland Biology and Neoplasia, 2010, 15, 381-387.	2.7	20
70	Limiting-Dilution Transplantation Assays in Mammary Stem Cell Studies. Methods in Molecular Biology, 2010, 621, 29-47.	0.9	18
71	Noninvasive diagnosis and management of spontaneous intracranial hypotension in patients with marfan syndrome: Case Report and Review of the Literature. , 2014, 5, 8.		17
72	Multidimensional Profiling of Cell Surface Proteins and Nuclear Markers. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2010, 7, 80-90.	3.0	16

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73	Identification of genetic loci that control mammary tumor susceptibility through the host microenvironment. Scientific Reports, 2015, 5, 8919.	3.3	16
74	The radiobiology of TGFÎ². Seminars in Cancer Biology, 2022, 86, 857-867.	9.6	15
75	A tool for the quantitative spatial analysis of complex cellular systems. IEEE Transactions on Image Processing, 2005, 14, 1300-1313.	9.8	14
76	New Biological Insights on the Link Between Radiation Exposure and Breast Cancer Risk. Journal of Mammary Gland Biology and Neoplasia, 2013, 18, 3-13.	2.7	14
77	Positron Emission Tomography Imaging of Functional Transforming Growth Factor Î² (TGFÎ²) Activity and Benefit of TGFÎ² Inhibition in Irradiated Intracranial Tumors. International Journal of Radiation Oncology Biology Physics, 2021, 109, 527-539.	0.8	13
78	Inflammation Mediates the Development of Aggressive Breast Cancer Following Radiotherapy. Clinical Cancer Research, 2021, 27, 1778-1791.	7.0	13
79	Quantitative Image Analysis in Mammary Gland Biology. Journal of Mammary Gland Biology and Neoplasia, 2004, 9, 343-359.	2.7	12
80	Consequences of Epithelial or Stromal TGFÎ²1 Depletion in the Mammary Gland. Journal of Mammary Gland Biology and Neoplasia, 2011, 16, 147-155.	2.7	11
81	Systems biology perspectives on the carcinogenic potential of radiation. Journal of Radiation Research, 2014, 55, i145-i154.	1.6	11
82	Development of a novel multiplexed assay for quantification of transforming growth factor-Î²(TGF-Î²). Growth Factors, 2015, 33, 79-91.	1.7	11
83	Aggressive Mammary Cancers Lacking Lymphocytic Infiltration Arise in Irradiated Mice and Can Be Prevented by Dietary Intervention. Cancer Immunology Research, 2020, 8, 217-229.	3.4	11
84	Exploiting Canonical TGFÎ² Signaling in Cancer Treatment. Molecular Cancer Therapeutics, 2022, 21, 16-24.	4.1	10
85	Epigenetics and breast cancer. , 2001, 6, 151-152.		9
86	SRSF1 governs progenitor-specific alternative splicing to maintain adult epithelial tissue homeostasis and renewal. Developmental Cell, 2022, 57, 624-637.e4.	7.0	9
87	In Situ Analysis of Cell Populations: Long-Term Label-Retaining Cells. Methods in Molecular Biology, 2010, 621, 1-28.	0.9	8
88	Use of Stem Cell Markers in Dissociated Mammary Populations. Methods in Molecular Biology, 2010, 621, 49-55.	0.9	8
89	Hydrogen Peroxide Enhances TGFÎ²-mediated Epithelial-to-Mesenchymal Transition in Human Mammary Epithelial MCF-10A Cells. Anticancer Research, 2017, 37, 987-996.	1.1	8
90	Altered regulation of <i>BRCA1</i> exon 11 splicing is associated with breast cancer risk in carriers of <i>BRCA1</i> pathogenic variants. Human Mutation, 2021, 42, 1488-1502.	2.5	7

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91	Intensity-based signal separation algorithm for accurate quantification of clustered centrosomes in tissue sections. Microscopy Research and Technique, 2006, 69, 964-972.	2.2	6
92	EDITORIAL: Resistance to radio- and chemotherapy and the tumour microenvironment. International Journal of Radiation Biology, 2009, 85, 920-922.	1.8	6
93	Low-Dose Radiation Knowledge Worth the Cost. Science, 2011, 332, 305-306.	12.6	6
94	Validation of Anticorrelated TGFÎ² Signaling and Alternative End-Joining DNA Repair Signatures that Predict Response to Genotoxic Cancer Therapy. Clinical Cancer Research, 2022, 28, 1372-1382.	7.0	6
95	Evaluation of Radioresponse and Radiosensitizers in Glioblastoma Organotypic Cultures. Methods in Molecular Biology, 2018, 1741, 171-182.	0.9	5
96	From Mouse to Human: Cellular Morphometric Subtype Learned From Mouse Mammary Tumors Provides Prognostic Value in Human Breast Cancer. Frontiers in Oncology, 2021, 11, 819565.	2.8	5
97	Three down and counting: the transformation of human mammary cells from normal to malignant in three steps. Trends in Molecular Medicine, 2001, 7, 142-143.	6.7	4
98	3D Segmentation of Mammospheres for Localization Studies. Lecture Notes in Computer Science, 2006, , 518-527.	1.3	4
99	TGFÎ² Biology in Breast: 15ÂYears On. Journal of Mammary Gland Biology and Neoplasia, 2011, 16, 65-66.	2.7	3
100	Distinct Luminal-Type Mammary Carcinomas Arise from Orthotopic <i>Trp53</i>-Null Mammary Transplantation of Juvenile versus Adult Mice. Cancer Research, 2014, 74, 7149-7158.	0.9	3
101	BUB1-bling over with Possibilities. Neoplasia, 2015, 17, 153-154.	5.3	3
102	WHAT IS THE USE OF SYSTEMS BIOLOGY APPROACHES IN RADIATION BIOLOGY?. Health Physics, 2011, 100, 272-273.	0.5	2
103	Subverting misconceptions about radiation therapy. Nature Immunology, 2016, 17, 345-345.	14.5	2
104	Remodeling the Irradiated Tumor Microenvironment: The Fifth R of Radiobiology?. Cancer Drug Discovery and Development, 2017, , 135-149.	0.4	2
105	RDNA-09. RADIATION PRIMES SB28 GLIOBLASTOMA FOR RESPONSE TO TGFÎ² AND PD-L1 NEUTRALIZING ANTIBODIES. Neuro-Oncology, 2019, 21, vi208-vi208.	1.2	2
106	Mammary Tumorâ€"Derived Transplants as Breast Cancer Models to Evaluate Tumorâ€"Immune Interactions and Therapeutic Responses. Cancer Research, 2022, 82, 365-376.	0.9	1
107	In honor of Mina J. Bissell. Integrative Biology (United Kingdom), 2011, 3, 253.	1.3	0
108	Soil Amendments That Slow Cancer Growth. Cancer Discovery, 2014, 4, 637-639.	9.4	0

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109	SC-04 * NON-UNIFORM NOTCH SIGNALING UNDERLIES HETEROGENEITY WITHIN THE GLIOBLASTOMA STEM CELL POPULATION. Neuro-Oncology, 2014, 16, v197-v197.	1.2	0
110	STEM-04DEFINING GLIOBLASTOMA STEM CELL HETEROGENEITY. Neuro-Oncology, 2015, 17, v208.4-v209.	1.2	0
111	Editorial: Cell Signaling Mediating Critical Radiation Responses. Frontiers in Oncology, 2021, 11, 695355.	2.8	0
112	Abstract LB-175: Concomitant radiotherapy (RT) and TGFÎ² neutralizing antibodies alters tumor microenvironment and promotes tumor regression. , 2014, , .		0
113	Abstract 633: Inhibition of TGFÎ² as a strategy to convert the irradiated tumor into in situ individualized vaccine. , 2014, , .		0
114	Abstract IA19: Multiplexing TGFÎ² in the tumor microenvironment. , 2015, , .		0
115	Abstract 4232: CAPE (caffeic acid phenethyl ester) induces a mammary stem cell lineage restriction to a luminal phenotype via chromatin remodeling. , 2015, , .		0