

Ruth Hemmersbach

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

2,029
citations

279798

23
h-index

243625

44
g-index

77
all docs

77
docs citations

77
times ranked

1301
citing authors

#	ARTICLE	IF	CITATIONS
1	The Fight against Cancer by Microgravity: The Multicellular Spheroid as a Metastasis Model. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3073.	4.1	32
2	Live-Cell Imaging of the Contractile Velocity and Transient Intracellular Ca ²⁺ Fluctuations in Human Stem Cell-Derived Cardiomyocytes. <i>Cells</i> , 2022, 11, 1280.	4.1	7
3	Microgravity-induced stress mechanisms in human stem cell-derived cardiomyocytes. <i>IScience</i> , 2022, 25, 104577.	4.1	12
4	In Prostate Cancer Cells Cytokines Are Early Responders to Gravitational Changes Occurring in Parabolic Flights. <i>International Journal of Molecular Sciences</i> , 2022, 23, 7876.	4.1	3
5	Streamlining Culture Conditions for the Neuroblastoma Cell Line SH-SY5Y: A Prerequisite for Functional Studies. <i>Methods and Protocols</i> , 2022, 5, 58.	2.0	8
6	Enhancing Synaptic Plasticity <i>in vitro</i> using Novel Ketamine Derivatives. <i>FASEB Journal</i> , 2021, 35, .	0.5	0
7	Radiation Response of Murine Embryonic Stem Cells. <i>Cells</i> , 2020, 9, 1650.	4.1	8
8	Tissue Engineering of Cartilage Using a Random Positioning Machine. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9596.	4.1	19
9	The MAPHEUS module CellFix for studying the influence of altered gravity on the physiology of single cells. <i>Review of Scientific Instruments</i> , 2020, 91, 014101.	1.3	1
10	Guanylyl Cyclase-cGMP Signaling Pathway in Melanocytes: Differential Effects of Altered Gravity in Non-Metastatic and Metastatic Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 1139.	4.1	6
11	ARABIDOMICS – A new experimental platform for molecular analyses of plants in drop towers, on parabolic flights, and sounding rockets. <i>Review of Scientific Instruments</i> , 2020, 91, 034504.	1.3	5
12	Fighting Thyroid Cancer with Microgravity Research. <i>International Journal of Molecular Sciences</i> , 2019, 20, 2553.	4.1	36
13	Parabolic, Flight-Induced, Acute Hypergravity and Microgravity Effects on the Beating Rate of Human Cardiomyocytes. <i>Cells</i> , 2019, 8, 352.	4.1	11
14	Validation of Random Positioning Versus Clinorotation Using a Macrophage Model System. <i>Microgravity Science and Technology</i> , 2019, 31, 223-230.	1.4	23
15	Short-Term Microgravity Influences Cell Adhesion in Human Breast Cancer Cells. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5730.	4.1	28
16	Molecular response of <i>Deinococcus radiodurans</i> to simulated microgravity explored by proteometabolomic approach. <i>Scientific Reports</i> , 2019, 9, 18462.	3.3	20
17	Beneficial Effects of Low Frequency Vibration on Human Chondrocytes <i>In Vitro</i> . <i>Cellular Physiology and Biochemistry</i> , 2019, 53, 623-637.	1.6	4
18	Modulation of Differentiation Processes in Murine Embryonic Stem Cells Exposed to Parabolic Flight-Induced Acute Hypergravity and Microgravity. <i>Stem Cells and Development</i> , 2018, 27, 838-847.	2.1	14

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19	Differential Regulation of cGMP Signaling in Human Melanoma Cells at Altered Gravity: Simulated Microgravity Down-Regulates Cancer-Related Gene Expression and Motility. <i>Microgravity Science and Technology</i> , 2018, 30, 457-467.	1.4	8
20	Pathway Analysis Hints Towards Beneficial Effects of Long-Term Vibration on Human Chondrocytes. <i>Cellular Physiology and Biochemistry</i> , 2018, 47, 1729-1741.	1.6	5
21	Analysis of Statoliths Displacement in Chara Rhizoids for Validating the Microgravity-Simulation Quality of Clinorotation Modes. <i>Microgravity Science and Technology</i> , 2018, 30, 229-236.	1.4	11
22	Hypergravity selectively augments neuronal in vitro differentiation. <i>FASEB Journal</i> , 2018, 32, 897.1.	0.5	1
23	Gravitaxis in Euglena. <i>Advances in Experimental Medicine and Biology</i> , 2017, 979, 237-266.	1.6	17
24	Gravireceptors in eukaryotes—a comparison of case studies on the cellular level. <i>Npj Microgravity</i> , 2017, 3, 13.	3.7	56
25	Pyrocystis noctiluca represents an excellent bioassay for shear forces induced in ground-based microgravity simulators (clinostat and random positioning machine). <i>Npj Microgravity</i> , 2017, 3, 12.	3.7	63
26	2-D clinorotation alters the uptake of some nutrients in Arabidopsis thaliana. <i>Journal of Plant Physiology</i> , 2017, 212, 54-57.	3.5	6
27	Cytokine Release and Focal Adhesion Proteins in Normal Thyroid Cells Cultured on the Random Positioning Machine. <i>Cellular Physiology and Biochemistry</i> , 2017, 43, 257-270.	1.6	19
28	Impact of Gravity on Thyroid Cells. <i>International Journal of Molecular Sciences</i> , 2017, 18, 972.	4.1	24
29	Alterations of the cytoskeleton in human cells in space proved by life-cell imaging. <i>Scientific Reports</i> , 2016, 6, 20043.	3.3	93
30	Simulating Parabolic Flight like g-Profiles on Ground - A Combination of Centrifuge and Clinostat. <i>Microgravity Science and Technology</i> , 2016, 28, 231-235.	1.4	6
31	Hypergravity Facilities in the ESA Ground-Based Facility Program – Current Research Activities and Future Tasks. <i>Microgravity Science and Technology</i> , 2016, 28, 205-214.	1.4	33
32	Cytosolic Calcium Concentration Changes in Neuronal Cells Under Clinorotation and in Parabolic Flight Missions. <i>Microgravity Science and Technology</i> , 2016, 28, 633-638.	1.4	8
33	The Impact of Hypergravity and Vibration on Gene and Protein Expression of Thyroid Cells. <i>Microgravity Science and Technology</i> , 2016, 28, 261-274.	1.4	4
34	Topical Issue on Ground-Based Facilities (GBF): Results and Experiences from ESA's Ground-Based Facilities Programme in Space Life Sciences. <i>Microgravity Science and Technology</i> , 2016, 28, 189-189.	1.4	1
35	Pipette-based Method to Study Embryoid Body Formation Derived from Mouse and Human Pluripotent Stem Cells Partially Recapitulating Early Embryonic Development Under Simulated Microgravity Conditions. <i>Microgravity Science and Technology</i> , 2016, 28, 287-295.	1.4	4
36	Facilities for Simulation of Microgravity in the ESA Ground-Based Facility Programme. <i>Microgravity Science and Technology</i> , 2016, 28, 191-203.	1.4	71

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37	ARADISH - Development of a Standardized Plant Growth Chamber for Experiments in Gravitational Biology Using Ground Based Facilities. <i>Microgravity Science and Technology</i> , 2016, 28, 297-305.	1.4	5
38	Thyroid Cells Exposed to Simulated Microgravity Conditions – Comparison of the Fast Rotating Clinostat and the Random Positioning Machine. <i>Microgravity Science and Technology</i> , 2016, 28, 247-260.	1.4	21
39	Tissue Engineering of Cartilage on Ground-Based Facilities. <i>Microgravity Science and Technology</i> , 2016, 28, 237-245.	1.4	10
40	2-D Clinostat for Simulated Microgravity Experiments with Arabidopsis Seedlings. <i>Microgravity Science and Technology</i> , 2016, 28, 59-66.	1.4	15
41	The influence of simulated microgravity on the proteome of <i>Daphnia magna</i> . <i>Npj Microgravity</i> , 2015, 1, 15016.	3.7	14
42	Mechanisms of three-dimensional growth of thyroid cells during long-term simulated microgravity. <i>Scientific Reports</i> , 2015, 5, 16691.	3.3	65
43	A Bird’s-Eye View of Molecular Changes in Plant Gravitropism Using Omics Techniques. <i>Frontiers in Plant Science</i> , 2015, 6, 1176.	3.6	19
44	Moderate alterations of the cytoskeleton in human chondrocytes after short-term microgravity produced by parabolic flight maneuvers could be prevented by up-regulation of BMP2 and SOX9. <i>FASEB Journal</i> , 2015, 29, 2303-2314.	0.5	65
45	Proper selection of $1g$ controls in simulated microgravity research as illustrated with clinorotated plant cell suspension cultures. <i>Life Sciences in Space Research</i> , 2015, 5, 47-52.	2.3	12
46	Syk phosphorylation – a gravisensitive step in macrophage signalling. <i>Cell Communication and Signaling</i> , 2015, 13, 9.	6.5	36
47	Differential gene expression of human chondrocytes cultured under short-term altered gravity conditions during parabolic flight maneuvers. <i>Cell Communication and Signaling</i> , 2015, 13, 18.	6.5	32
48	Common Effects on Cancer Cells Exerted by a Random Positioning Machine and a 2D Clinostat. <i>PLoS ONE</i> , 2015, 10, e0135157.	2.5	61
49	Impact of a High Magnetic Field on the Orientation of Gravitactic Unicellular Organisms – A Critical Consideration about the Application of Magnetic Fields to Mimic Functional Weightlessness. <i>Astrobiology</i> , 2014, 14, 205-215.	3.0	15
50	The Influence of Simulated Microgravity on Purinergic Signaling Is Different between Individual Culture and Endothelial and Smooth Muscle Cell Coculture. <i>BioMed Research International</i> , 2014, 1-11.	1.9	12
51	Spheroid formation of human thyroid cancer cells under simulated microgravity: a possible role of CTGF and CAV1. <i>Cell Communication and Signaling</i> , 2014, 12, 32.	6.5	66
52	Differential gene expression profile and altered cytokine secretion of thyroid cancer cells in space. <i>FASEB Journal</i> , 2014, 28, 813-835.	0.5	110
53	Adaptation of a 2-D Clinostat for Simulated Microgravity Experiments with Adherent Cells. <i>Microgravity Science and Technology</i> , 2013, 25, 153-159.	1.4	52
54	Ground-Based Facilities for Simulation of Microgravity: Organism-Specific Recommendations for Their Use, and Recommended Terminology. <i>Astrobiology</i> , 2013, 13, 1-17.	3.0	372

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55	The Impact of Altered Gravity and Vibration on Endothelial Cells During a Parabolic Flight. <i>Cellular Physiology and Biochemistry</i> , 2013, 31, 432-451.	1.6	53
56	Gravity-sensitive signaling drives 3-dimensional formation of multicellular thyroid cancer spheroids. <i>FASEB Journal</i> , 2012, 26, 5124-5140.	0.5	83
57	Rapid alterations of cell cycle control proteins in human T lymphocytes in microgravity. <i>Cell Communication and Signaling</i> , 2012, 10, 1.	6.5	72
58	PMT (Photomultiplier) Clinostat. <i>Microgravity Science and Technology</i> , 2011, 23, 67-71.	1.4	19
59	Natriuretic peptide-sensitive guanylyl cyclase expression is down-regulated in human melanoma cells at simulated weightlessness. <i>Acta Astronautica</i> , 2011, 68, 652-655.	3.2	13
60	Differential Gene Regulation under Altered Gravity Conditions in Follicular Thyroid Cancer Cells: Relationship between the Extracellular Matrix and the Cytoskeleton. <i>Cellular Physiology and Biochemistry</i> , 2011, 28, 185-198.	1.6	88
61	Ground-based experimental platforms in gravitational biology and human physiology. <i>Signal Transduction</i> , 2006, 6, 381-387.	0.4	30
62	Evolutionary Aspects of Gravisensing: From Bacteria to Men. , 2005, , 184-196.		0
63	Methods in Gravitational Biology. , 2005, , 12-27.		0
64	Image Analysis. , 2005, , 28-50.		1
65	Ciliates. , 2005, , 51-74.		0
66	Flagellates. , 2005, , 75-105.		1
67	Other Organisms. , 2005, , 106-112.		0
68	Responses to Other Stimuli. , 2005, , 113-140.		0
69	Energetics. , 2005, , 141-164.		0
70	Models for Graviperception. , 2005, , 165-183.		0
71	Variable acceleration influences cyclic AMP levels in <i>Paramecium biaurelia</i> . <i>Journal of Gravitational Physiology: A Journal of the International Society for Gravitational Physiology</i> , 2002, 9, P267-8.	0.0	0
72	Influence of extremely low frequency electromagnetic fields on the swimming behavior of ciliates. <i>Bioelectromagnetics</i> , 1997, 18, 491-498.	1.6	19