

# Leoni A Kunz-Schughart

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

10,000  
citations

126708

33  
h-index

98622

67  
g-index

69  
all docs

69  
docs citations

69  
times ranked

15578  
citing authors

| #  | ARTICLE                                                                                                                                                                                                           | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Multicellular tumor spheroids: An underestimated tool is catching up again. <i>Journal of Biotechnology</i> , 2010, 148, 3-15.                                                                                    | 1.9 | 1,376     |
| 2  | Inhibitory effect of tumor cell-derived lactic acid on human T cells. <i>Blood</i> , 2007, 109, 3812-3819.                                                                                                        | 0.6 | 1,361     |
| 3  | Spheroid-based drug screen: considerations and practical approach. <i>Nature Protocols</i> , 2009, 4, 309-324.                                                                                                    | 5.5 | 1,353     |
| 4  | The Use of 3-D Cultures for High-Throughput Screening: The Multicellular Spheroid Model. <i>Journal of Biomolecular Screening</i> , 2004, 9, 273-285.                                                             | 2.6 | 689       |
| 5  | Oxidative Phosphorylation as an Emerging Target in Cancer Therapy. <i>Clinical Cancer Research</i> , 2018, 24, 2482-2490.                                                                                         | 3.2 | 687       |
| 6  | Tumor-derived lactic acid modulates dendritic cell activation and antigen expression. <i>Blood</i> , 2006, 107, 2013-2021.                                                                                        | 0.6 | 541       |
| 7  | Experimental anti-tumor therapy in 3-D: Spheroids – old hat or new challenge?. <i>International Journal of Radiation Biology</i> , 2007, 83, 849-871.                                                             | 1.0 | 384       |
| 8  | Multicellular spheroids: a three-dimensional in vitro culture system to study tumour biology. <i>International Journal of Experimental Pathology</i> , 1998, 79, 1-23.                                            | 0.6 | 300       |
| 9  | Temozolomide Preferentially Depletes Cancer Stem Cells in Glioblastoma. <i>Cancer Research</i> , 2008, 68, 5706-5715.                                                                                             | 0.4 | 269       |
| 10 | CD133 as a biomarker for putative cancer stem cells in solid tumours: limitations, problems and challenges. <i>Journal of Pathology</i> , 2013, 229, 355-378.                                                     | 2.1 | 252       |
| 11 | Aldehyde Dehydrogenase Is Regulated by $\beta$ -Catenin/TCF and Promotes Radioresistance in Prostate Cancer Progenitor Cells. <i>Cancer Research</i> , 2015, 75, 1482-1494.                                       | 0.4 | 195       |
| 12 | A Reliable Tool to Determine Cell Viability in Complex 3-D Culture: The Acid Phosphatase Assay. <i>Journal of Biomolecular Screening</i> , 2007, 12, 925-937.                                                     | 2.6 | 178       |
| 13 | The anti-malarial atovaquone increases radiosensitivity by alleviating tumour hypoxia. <i>Nature Communications</i> , 2016, 7, 12308.                                                                             | 5.8 | 173       |
| 14 | The fibroblast: Sentinel cell and local immune modulator in tumor tissue. <i>International Journal of Cancer</i> , 2004, 108, 173-180.                                                                            | 2.3 | 163       |
| 15 | Discovery of the cancer stem cell related determinants of radioresistance. <i>Radiotherapy and Oncology</i> , 2013, 108, 378-387.                                                                                 | 0.3 | 159       |
| 16 | Potential of fibroblasts to regulate the formation of three-dimensional vessel-like structures from endothelial cells in vitro. <i>American Journal of Physiology - Cell Physiology</i> , 2006, 290, C1385-C1398. | 2.1 | 155       |
| 17 | A Heterologous 3-D Coculture Model of Breast Tumor Cells and Fibroblasts to Study Tumor-Associated Fibroblast Differentiation. <i>Experimental Cell Research</i> , 2001, 266, 74-86.                              | 1.2 | 124       |
| 18 | Tumor-associated fibroblasts recruit blood monocytes into tumor tissue. <i>European Journal of Immunology</i> , 2003, 33, 1311-1320.                                                                              | 1.6 | 123       |

| #  | ARTICLE                                                                                                                                                                                                         | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Metabolic classification of human rectal adenocarcinomas: a novel guideline for clinical oncologists?. <i>Journal of Cancer Research and Clinical Oncology</i> , 2003, 129, 321-326.                            | 1.2 | 93        |
| 20 | <i>In vivo</i> Imaging of the Systemic Recruitment of Fibroblasts to the Angiogenic Rim of Ovarian Carcinoma Tumors. <i>Cancer Research</i> , 2007, 67, 9180-9189.                                              | 0.4 | 90        |
| 21 | Cancer stem cell related markers of radioresistance in head and neck squamous cell carcinoma. <i>Oncotarget</i> , 2015, 6, 34494-34509.                                                                         | 0.8 | 88        |
| 22 | Nanoparticles for radiooncology: Mission, vision, challenges. <i>Biomaterials</i> , 2017, 120, 155-184.                                                                                                         | 5.7 | 87        |
| 23 | Cancer Stem Cells as a Predictive Factor in Radiotherapy. <i>Seminars in Radiation Oncology</i> , 2012, 22, 151-174.                                                                                            | 1.0 | 83        |
| 24 | Microarrays for the scalable production of metabolically relevant tumour spheroids: a tool for modulating chemosensitivity traits. <i>Lab on A Chip</i> , 2011, 11, 419-428.                                    | 3.1 | 78        |
| 25 | Brave Little World: Spheroids as an <i>in vitro</i> Model to Study Tumor-Immune-Cell Interactions. <i>Cell Cycle</i> , 2006, 5, 691-695.                                                                        | 1.3 | 77        |
| 26 | GLS-driven glutamine catabolism contributes to prostate cancer radiosensitivity by regulating the redox state, stemness and ATG5-mediated autophagy. <i>Theranostics</i> , 2021, 11, 7844-7868.                 | 4.6 | 70        |
| 27 | Importance of CCL2-CCR2A/2B signaling for monocyte migration into spheroids of breast cancer-derived fibroblasts. <i>Immunobiology</i> , 2010, 215, 737-747.                                                    | 0.8 | 58        |
| 28 | The CD98 Heavy Chain Is a Marker and Regulator of Head and Neck Squamous Cell Carcinoma Radiosensitivity. <i>Clinical Cancer Research</i> , 2019, 25, 3152-3163.                                                | 3.2 | 53        |
| 29 | The why and how of amino acid analytics in cancer diagnostics and therapy. <i>Journal of Biotechnology</i> , 2017, 242, 30-54.                                                                                  | 1.9 | 48        |
| 30 | Three-dimensional cell culture induces novel proliferative and metabolic alterations associated with oncogenic transformation. , 1996, 66, 578-586.                                                             |     | 47        |
| 31 | Three-dimensional fibroblast-tumor cell interaction causes downregulation of RACK1 mRNA expression in breast cancer cells <i>in vitro</i> . <i>International Journal of Cancer</i> , 2002, 102, 129-136.        | 2.3 | 45        |
| 32 | Single amino acid arginine starvation efficiently sensitizes cancer cells to canavanine treatment and irradiation. <i>International Journal of Cancer</i> , 2012, 130, 2164-2175.                               | 2.3 | 41        |
| 33 | MISpheroid: a knowledgebase and transparency tool for minimum information in spheroid identity. <i>Nature Methods</i> , 2021, 18, 1294-1303.                                                                    | 9.0 | 38        |
| 34 | Characterization and modulation of fibroblast/endothelial cell co-cultures for the <i>in vitro</i> preformation of three-dimensional tubular networks. <i>Cell Biology International</i> , 2011, 35, 1097-1110. | 1.4 | 37        |
| 35 | Three-dimensional tissue structure affects sensitivity of fibroblasts to TGF- $\beta$ 1. <i>American Journal of Physiology - Cell Physiology</i> , 2003, 284, C209-C219.                                        | 2.1 | 33        |
| 36 | CD133 expression is not selective for tumor-initiating or radioresistant cell populations in the CRC cell line HCT-116. <i>Radiotherapy and Oncology</i> , 2010, 94, 375-383.                                   | 0.3 | 32        |

| #  | ARTICLE                                                                                                                                                                                 | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Arginine deprivation induces endoplasmic reticulum stress in human solid cancer cells. <i>International Journal of Biochemistry and Cell Biology</i> , 2016, 70, 29-38.                 | 1.2 | 32        |
| 38 | Spectral and spatial shaping of laser-driven proton beams using a pulsed high-field magnet beamline. <i>Scientific Reports</i> , 2020, 10, 9118.                                        | 1.6 | 31        |
| 39 | Lactate adversely affects the in vitro formation of endothelial cell tubular structures through the action of TGF- $\beta$ 1. <i>Experimental Cell Research</i> , 2007, 313, 2531-2549. | 1.2 | 25        |
| 40 | Arginine Deprivation Therapy: Putative Strategy to Eradicate Glioblastoma Cells by Radiosensitization. <i>Molecular Cancer Therapeutics</i> , 2018, 17, 393-406.                        | 1.9 | 25        |
| 41 | Mutant IDH1 Differently Affects Redox State and Metabolism in Glial Cells of Normal and Tumor Origin. <i>Cancers</i> , 2019, 11, 2028.                                                  | 1.7 | 23        |
| 42 | Reciprocal interactions between tumour cell populations enhance growth and reduce radiation sensitivity in prostate cancer. <i>Communications Biology</i> , 2021, 4, 6.                 | 2.0 | 23        |
| 43 | An ovarian spheroid based tumor model that represents vascularized tumors and enables the investigation of nanomedicine therapeutics. <i>Nanoscale</i> , 2020, 12, 1894-1903.           | 2.8 | 22        |
| 44 | Identification of genes expressed in tumor-associated macrophages. <i>Immunobiology</i> , 2003, 207, 351-359.                                                                           | 0.8 | 21        |
| 45 | Genome and Transcriptome Profiles of CD133-Positive Colorectal Cancer Cells. <i>American Journal of Pathology</i> , 2011, 178, 1478-1488.                                               | 1.9 | 20        |
| 46 | A Complex Scenario and Underestimated Challenge: The Tumor Microenvironment, ER Stress, and Cancer Treatment. <i>Current Medicinal Chemistry</i> , 2018, 25, 2465-2502.                 | 1.2 | 20        |
| 47 | Three-dimensional environment renders cancer cells profoundly less susceptible to a single amino acid starvation. <i>Amino Acids</i> , 2013, 45, 1221-1230.                             | 1.2 | 16        |
| 48 | Relevance of disease- and organ-specific endothelial cells for in vitro research. <i>Cell Biology International</i> , 2010, 34, 1231-1238.                                              | 1.4 | 15        |
| 49 | Efficacy of Beta1 Integrin and EGFR Targeting in Sphere-Forming Human Head and Neck Cancer Cells. <i>Journal of Cancer</i> , 2016, 7, 736-745.                                          | 1.2 | 15        |
| 50 | Impact of exogenous lactate on survival and radioresponse of carcinoma cells in vitro. <i>International Journal of Radiation Biology</i> , 2009, 85, 989-1001.                          | 1.0 | 14        |
| 51 | Arginine starvation in colorectal carcinoma cells: Sensing, impact on translation control and cell cycle distribution. <i>Experimental Cell Research</i> , 2016, 341, 67-74.            | 1.2 | 13        |
| 52 | Fibroblastic reaction and vascular maturation in human colon cancers. <i>International Journal of Radiation Biology</i> , 2009, 85, 1013-1025.                                          | 1.0 | 11        |
| 53 | Microenvironmentally-driven Plasticity of CD44 isoform expression determines Engraftment and Stem-like Phenotype in CRC cell lines. <i>Theranostics</i> , 2020, 10, 7599-7621.          | 4.6 | 11        |
| 54 | Mathematical model for the thermal enhancement of radiation response: thermodynamic approach. <i>Scientific Reports</i> , 2021, 11, 5503.                                               | 1.6 | 11        |

| #  | ARTICLE                                                                                                                                                                                                                                         | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Models for Translational Proton Radiobiologyâ€”From Bench to Bedside and Back. <i>Cancers</i> , 2021, 13, 4216.                                                                                                                                 | 1.7 | 11        |
| 56 | Co-application of canavanine and irradiation uncouples anticancer potential of arginine deprivation from citrulline availability. <i>Oncotarget</i> , 2016, 7, 73292-73308.                                                                     | 0.8 | 9         |
| 57 | SATB1 as oncogenic driver and potential therapeutic target in head & neck squamous cell carcinoma (HNSCC). <i>Scientific Reports</i> , 2020, 10, 8615.                                                                                          | 1.6 | 8         |
| 58 | Dual role of ER stress in response to metabolic co-targeting and radiosensitivity in head and neck cancer cells. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 3021-3044.                                                             | 2.4 | 8         |
| 59 | Validation of CD98hc as a Therapeutic Target for a Combination of Radiation and Immunotherapies in Head and Neck Squamous Cell Carcinoma. <i>Cancers</i> , 2022, 14, 1677.                                                                      | 1.7 | 7         |
| 60 | Phosphorous metabolites and steady-state energetics of transformed fibroblasts during three-dimensional growth. <i>American Journal of Physiology - Cell Physiology</i> , 2002, 283, C1287-C1297.                                               | 2.1 | 6         |
| 61 | Macromolecule Extravasationâ€”Xenograft Size Matters: A Systematic Study Using Probe-Based Confocal Laser Endomicroscopy (pCLE). <i>Molecular Imaging and Biology</i> , 2013, 15, 693-702.                                                      | 1.3 | 5         |
| 62 | Intracellular Amplifiers of Reactive Oxygen Species Affecting Mitochondria as Radiosensitizers. <i>Cancers</i> , 2022, 14, 208.                                                                                                                 | 1.7 | 5         |
| 63 | Validity of a patient-derived system of tissue-specific human endothelial cells: interleukin-6 as a surrogate marker in the coronary system. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 293, H1721-H1728. | 1.5 | 4         |
| 64 | Efficient Heat Shock Response Affects Hyperthermia-Induced Radiosensitization in a Tumor Spheroid Control Probability Assay. <i>Cancers</i> , 2021, 13, 3168.                                                                                   | 1.7 | 3         |
| 65 | Indospicine combined with arginine deprivation triggers cancer cell death via caspaseâ€”dependent apoptosis. <i>Cell Biology International</i> , 2021, 45, 518-527.                                                                             | 1.4 | 2         |
| 66 | Targeting of p21-Activated Kinase 4 Radiosensitizes Glioblastoma Cells via Impaired DNA Repair. <i>Cells</i> , 2022, 11, 2133.                                                                                                                  | 1.8 | 2         |
| 67 | Tumor-Derived Lactic Acid Modulates Dendritic Cell Activation and Differentiation.. <i>Blood</i> , 2004, 104, 4246-4246.                                                                                                                        | 0.6 | 1         |