Cornelia Kasper

List of Publications by Year
in descending order

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117 papers	5,717 citations	101496 36 h-index	85498 71 g-index
126 all docs	126 docs citations	126 times ranked	8982 citing authors

#	Article	IF	Citations
1	Different populations and sources of human mesenchymal stem cells (MSC): A comparison of adult and neonatal tissue-derived MSC. Cell Communication and Signaling, 2011, 9, 12.	2.7	1,340
2	Isolation, cultivation, and characterization of human mesenchymal stem cells. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2018, 93, 19-31.	1.1	374
3	Effects of hypoxic culture conditions on umbilical cord-derived human mesenchymal stem cells. Cell Communication and Signaling, 2010, 8, 18.	2.7	192
4	Suspension Culture of Human Pluripotent Stem Cells in Controlled, Stirred Bioreactors. Tissue Engineering - Part C: Methods, 2012, 18, 772-784.	1.1	172
5	Flow cytometry in biotechnology. Applied Microbiology and Biotechnology, 2001, 56, 350-360.	1.7	162
6	Growth and Differentiation Properties of Mesenchymal Stromal Cell Populations Derived from Whole Human Umbilical Cord. Stem Cell Reviews and Reports, 2011, 7, 17-31.	5.6	145
7	Hypoxia Conditioned Mesenchymal Stem Cell-Derived Extracellular Vesicles Induce Increased Vascular Tube Formation in vitro. Frontiers in Bioengineering and Biotechnology, 2019, 7, 292.	2.0	129
8	Identification of subpopulations in mesenchymal stem cell-like cultures from human umbilical cord. Cell Communication and Signaling, 2009, 7, 6.	2.7	116
9	Lab-on-a-chip technologies for stem cell analysis. Trends in Biotechnology, 2014, 32, 245-253.	4.9	110
10	Mesenchymal stem cells and progenitor cells in connective tissue engineering and regenerative medicine: is there a future for transplantation?. Langenbeck's Archives of Surgery, 2011, 396, 489-497.	0.8	109
11	Freeze-Thaw Cycles Enhance Decellularization of Large Tendons. Tissue Engineering - Part C: Methods, 2014, 20, 276-284.	1.1	106
12	Growth and differentiation characteristics of equine mesenchymal stromal cells derived from different sources. Veterinary Journal, 2013, 195, 98-106.	0.6	98
13	Mesenchymal Stem or Stromal Cells from Amnion and Umbilical Cord Tissue and Their Potential for Clinical Applications. Cells, 2012, 1, 1061-1088.	1.8	93
14	Artificial Skin â€“ Culturing of Different Skin Cell Lines for Generating an Artificial Skin Substitute on Cross-Weaved Spider Silk Fibres. PLoS ONE, 2011, 6, e21833.	1.1	93
15	Fast isolation of protein receptors from streptococci G by means of macroporous affinity discs. Journal of Chromatography A, 1998, 798, 65-72.	1.8	76
16	Three dimensional spheroid cell culture for nanoparticle safety testing. Journal of Biotechnology, 2015, 205, 120-129.	1.9	74
17	Isolation, Characterization, Differentiation, and Application of Adipose-Derived Stem Cells. , 2010, 123, 55-105.		61
18	Optimization of Culture Conditions for the Expansion of Umbilical Cord-Derived Mesenchymal Stem or Stromal Cell-Like Cells Using Xeno-Free Culture Conditions. Tissue Engineering - Part C: Methods, 2011, 17, 485-493.	1.1	61

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19	Antitumoral Gold and Silver Complexes with Ferrocenyl-Amide Phosphines. Organometallics, 2013, 32, 6069-6078.	1.1	59
20	Dynamic Cultivation of Mesenchymal Stem Cell Aggregates. Bioengineering, 2018, 5, 48.	1.6	59
21	Interactions between Spider Silk and Cells â€“ NIH/3T3 Fibroblasts Seeded on Miniature Weaving Frames. PLoS ONE, 2010, 5, e12032.	1.1	56
22	An improvement of potato pulp protein hydrolyzation process by the combination of protease enzyme systems. Enzyme and Microbial Technology, 2007, 40, 508-514.	1.6	55
23	Preparation and Reinforcement of Dualâ€Porous Biocompatible Cellulose Scaffolds for Tissue Engineering. Macromolecular Materials and Engineering, 2015, 300, 911-924.	1.7	52
24	Induction of Tenogenic Differentiation Mediated by Extracellular Tendon Matrix and Short-Term Cyclic Stretching. Stem Cells International, 2016, 2016, 1-11.	1.2	52
25	BMP2-loaded nanoporous silica nanoparticles promote osteogenic differentiation of human mesenchymal stem cells. RSC Advances, 2013, 3, 24222.	1.7	50
26	Bundles of Spider Silk, Braided into Sutures, Resist Basic Cyclic Tests: Potential Use for Flexor Tendon Repair. PLoS ONE, 2013, 8, e61100.	1.1	50
27	Application of collagen matrices for cartilage tissue engineering. Experimental and Toxicologic Pathology, 2006, 57, 305-311.	2.1	48
28	The Total Synthesis of (â^')-Callystatin A. Chemistry - A European Journal, 2003, 9, 1129-1136.	1.7	46
29	3D Printing of Cell Culture Devices: Assessment and Prevention of the Cytotoxicity of Photopolymers for Stereolithography. Materials, 2020, 13, 3011.	1.3	46
30	Waterâ€soluble aldehydeâ€bearing polymers of 2â€deoxyâ€2â€methacrylamidoâ€<scp>D</scp>â€glucose for bone tissue engineering. Journal of Applied Polymer Science, 2008, 108, 2386-2397.	1.3	45
31	First investigation of spider silk as a braided microsurgical suture. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 97B, 381-387.	1.6	45
32	Potential and limitations of microscopy and Raman spectroscopy for live-cell analysis of 3D cell cultures. Journal of Biotechnology, 2015, 205, 70-81.	1.9	44
33	The Chemistry and Biology of Ratjadone. ChemBioChem, 2001, 2, 709-714.	1.3	43
34	Dynamic cultivation of human mesenchymal stem cells in a rotating bed bioreactor system based on the ZÂ®RP platform. Biotechnology Progress, 2009, 25, 1762-1771.	1.3	42
35	Mesenchymal Stromal Cells Derived from Human Umbilical Cord Tissues: Primitive Cells with Potential for Clinical and Tissue Engineering Applications. , 2009, 123, 29-54.		42
36	Human Umbilical Cord-Derived Mesenchymal Stem Cells Utilize Activin-A to Suppress Interferon-ÃŽÂ³ Production by Natural Killer Cells. Frontiers in Immunology, 2014, 5, 662.	2.2	42

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37	Large-scale production and homogenous purification of long chain polysialic acids from E. coli K1. Journal of Biotechnology, 2008, 135, 202-209.	1.9	40
38	Adsorption and separation of proteins by a smectitic clay mineral. Bioprocess and Biosystems Engineering, 2010, 33, 847-861.	1.7	40
39	Role of gamma-secretase in human umbilical-cord derived mesenchymal stem cell mediated suppression of NK cell cytotoxicity. Cell Communication and Signaling, 2014, 12, 63.	2.7	40
40	Innovative Modular Membrane Adsorber System for High-Throughput Downstream Screening for Protein Purification. Biotechnology Progress, 2006, 22, 1215-1219.	1.3	38
41	Interaction of Size-Tailored PEGylated Iron Oxide Nanoparticles with Lipid Membranes and Cells. ACS Biomaterials Science and Engineering, 2017, 3, 249-259.	2.6	38
42	Development and Characterization of a Parallelizable Perfusion Bioreactor for 3D Cell Culture. Bioengineering, 2017, 4, 51.	1.6	38
43	High performance flow injection analysis of recombinant Protein G. Journal of Biotechnology, 1999, 69, 1-7.	1.9	34
44	Mechanical and flow characterization of SponceramÂ® carriers: Evaluation by homogenization theory and experimental validation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 87B, 42-48.	1.6	32
45	Osteogenic differentiation of umbilical cord and adipose derived stem cells onto highly porous 45S5 Bioglass^{Â®}â€based scaffolds. Journal of Biomedical Materials Research - Part A, 2015, 103, 1029-1037.	2.1	32
46	Group 11 complexes with amino acid derivatives: Synthesis and antitumoral studies. Journal of Inorganic Biochemistry, 2016, 156, 133-144.	1.5	32
47	Towards Physiologic Culture Approaches to Improve Standard Cultivation of Mesenchymal Stem Cells. Cells, 2021, 10, 886.	1.8	32
48	Adsorption and separation of proteins by a synthetic hydrotalcite. Colloids and Surfaces B: Biointerfaces, 2011, 87, 217-225.	2.5	31
49	Cultivation of MC3T3-E1 cells on a newly developed material (SponceramÂ®) using a rotating bed system bioreactor. Journal of Biomedical Materials Research - Part A, 2007, 80A, 268-275.	2.1	29
50	Nanoporous silica nanoparticles as biomaterials: evaluation of different strategies for the functionalization with polysialic acid by step-by-step cytocompatibility testing. Journal of Materials Science: Materials in Medicine, 2015, 26, 125.	1.7	29
51	Synthesis and Biological Evaluation of a Polysialic Acid-Based Hydrogel as Enzymatically Degradable Scaffold Material for Tissue Engineering. Biomacromolecules, 2008, 9, 2353-2359.	2.6	28
52	Preparation of bioactive soluble human leukemia inhibitory factor from recombinant Escherichia coli using thioredoxin as fusion partner. Protein Expression and Purification, 2010, 73, 51-57.	0.6	28
53	Immunosuppressive capabilities of mesenchymal stromal cells are maintained under hypoxic growth conditions and after gamma irradiation. Cytotherapy, 2015, 17, 152-162.	0.3	28
54	Hypoxic Three-Dimensional Scaffold-Free Aggregate Cultivation of Mesenchymal Stem Cells in a Stirred Tank Reactor. Bioengineering, 2017, 4, 47.	1.6	28

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55	Fast and efficient protein purification using membrane adsorber systems. Journal of Biotechnology, 2006, 121, 361-367.	1.9	27
56	Application of a Parallelizable Perfusion Bioreactor for Physiologic 3D Cell Culture. Cells Tissues Organs, 2017, 203, 316-326.	1.3	27
57	Impact of Source and Manufacturing of Collagen Matrices on Fibroblast Cell Growth and Platelet Aggregation. Materials, 2017, 10, 1086.	1.3	27
58	Potential for Osteogenic and Chondrogenic Differentiation of MSC. Advances in Biochemical Engineering/Biotechnology, 2012, 129, 73-88.	0.6	25
59	Cytokine production using membrane adsorbers: Human basic fibroblast growth factor produced by Escherichia coli. Engineering in Life Sciences, 2012, 12, 29-38.	2.0	25
60	Characterization and Application of a Disposable Rotating Bed Bioreactor for Mesenchymal Stem Cell Expansion. Bioengineering, 2014, 1, 231-245.	1.6	25
61	Application of different strain regimes in twoâ€dimensional and threeâ€dimensional adipose tissueâ€“derived stem cell cultures induces osteogenesis: Implications for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 94A, 927-936.	2.1	24
62	Heterogeneity of mesenchymal stem cell-derived extracellular vesicles is highly impacted by the tissue/cell source and culture conditions. Cell and Bioscience, 2022, 12, 51.	2.1	24
63	Flow cytometry: Interesting tool for studying binding behavior of DNA on inorganic layered double hydroxide (LDH). Cytometry, 2004, 62A, 65-69.	1.8	23
64	Uncertainty budgeting in fold change determination and implications for non-targeted metabolomics studies in model systems. Analyst, The, 2017, 142, 80-90.	1.7	23
65	The Power of LC-MS Based Multiomics: Exploring Adipogenic Differentiation of Human Mesenchymal Stem/Stromal Cells. Molecules, 2019, 24, 3615.	1.7	23
66	Application of conjoint liquid chromatography with monolithic disks for the simultaneous determination of immunoglobulin G and other proteins present in a cell culture medium. Journal of Chromatography A, 2009, 1216, 2671-2675.	1.8	22
67	Comparison of polysialic acid production in Escherichia coli K1 during batch cultivation and fed-batch cultivation applying two different control strategies. Journal of Biotechnology, 2011, 154, 222-229.	1.9	22
68	Collagen biomaterial doped with colominic acid for cell culture applications with regard to peripheral nerve repair. Journal of Biotechnology, 2007, 131, 335-345.	1.9	21
69	Whartonâ€™s jelly mesenchymal stem cells promote wound healing and tissue regeneration. Stem Cell Research and Therapy, 2014, 5, 62.	2.4	21
70	Analysis of oxygen-dependent cytokine expression in human mesenchymal stem cells derived from umbilical cord. Cell and Tissue Research, 2013, 353, 117-122.	1.5	20
71	Development of multifunctional polymer-mineral composite materials for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2005, 75A, 333-341.	2.1	19
72	Design and Characterization of a Rotating Bed System Bioreactor for Tissue Engineering Applications. Biotechnology Progress, 2008, 24, 140-147.	1.3	18

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73	Isolation and purification of blood group antigens using immuno-affinity chromatography on short monolithic columns. Journal of Chromatography A, 2011, 1218, 706-710.	1.8	18
74	Macroporous methacrylate-based monoliths as platforms for DNA microarrays. Talanta, 2012, 93, 139-146.	2.9	18
75	Stem Cell Differentiation Depending on Different Surfaces. Advances in Biochemical Engineering/Biotechnology, 2011, 126, 263-283.	0.6	17
76	Adipose-derived stem cells cultivated on electrospun l-lactide/glycolide copolymer fleece and gelatin hydrogels under flow conditions â€“ aiming physiological reality in hypodermis tissue engineering. Burns, 2015, 41, 163-171.	1.1	17
77	A study on polysialic acid as a biomaterial for cell culture applications. Journal of Biomedical Materials Research - Part A, 2008, 85A, 1-13.	2.1	16
78	A Differential Pressure Laminar Flow Reactor Supports Osteogenic Differentiation and Extracellular Matrix Formation from Adipose Mesenchymal Stem Cells in a Macroporous Ceramic Scaffold. BioResearch Open Access, 2012, 1, 145-156.	2.6	15
79	Functionalized PLGA-doped zirconium oxide ceramics for bone tissue regeneration. Biomedical Microdevices, 2013, 15, 1055-1066.	1.4	15
80	Cytotoxicity of titanium and silicon dioxide nanoparticles. Journal of Physics: Conference Series, 2009, 170, 012022.	0.3	14
81	Toxicological Issues of Nanoparticles Employed in Photocatalysis. Green, 2011, 1, .	0.4	14
82	Separation of patatins and protease inhibitors from potato fruit juice with clay minerals as cation exchangers. Journal of Separation Science, 2012, 35, 1596-1602.	1.3	14
83	Fast and efficient screening system for new biomaterials in tissue engineering: A model for peripheral nerve regeneration. Journal of Biomedical Materials Research - Part A, 2007, 81A, 736-747.	2.1	13
84	A study on the influence of biocompatible composites with bioactive ligands toward their effect on cell adhesion and growth for the application in bone tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 153-162.	1.6	13
85	A rotating bed system bioreactor enables cultivation of primary osteoblasts on wellâ€characterized sponceramÂ® regarding structural and flow properties. Biotechnology Progress, 2010, 26, 671-678.	1.3	11
86	From 3D to 3D: isolation of mesenchymal stem/stromal cells into a three-dimensional human platelet lysate matrix. Stem Cell Research and Therapy, 2019, 10, 248.	2.4	11
87	Downstream processing of high chain length polysialic acid using membrane adsorbers and clay minerals for application in tissue engineering. Engineering in Life Sciences, 2013, 13, 140-148.	2.0	10
88	Skin Regeneration, Repair, and Reconstruction. BioMed Research International, 2015, 2015, 1-1.	0.9	9
89	Advanced Dynamic Cell and Tissue Culture. Bioengineering, 2018, 5, 65.	1.6	9
90	Extracellular Matrix Synthesis and Remodeling by Mesenchymal Stromal Cells Is Context-Sensitive. International Journal of Molecular Sciences, 2022, 23, 1758.	1.8	9

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91	Transcriptome Analysis. , 2011, 127, 1-25.		8
92	Alginate Coreâ€“Shell Capsules for 3D Cultivation of Adipose-Derived Mesenchymal Stem Cells. Bioengineering, 2022, 9, 66.	1.6	8
93	Synthesis of New Polysialic Acid Derivatives. Macromolecular Bioscience, 2010, 10, 1028-1033.	2.1	7
94	Iterative Cellular Screening System for Nanoparticle Safety Testing. Journal of Nanomaterials, 2015, 2015, 1-16.	1.5	7
95	Generation and characterization of a functional human adiposeâ€derived multipotent mesenchymal stromal cell line. Biotechnology and Bioengineering, 2019, 116, 1417-1426.	1.7	6
96	Physiologic isolation and expansion of human mesenchymal stem/stromal cells for manufacturing of cellâ€based therapy products. Engineering in Life Sciences, 2022, 22, 361-372.	2.0	6
97	Physical methods for synchronization of a human production cell line. BMC Proceedings, 2011, 5, P49.	1.8	5
98	Osteogenic Differentiation of adipose mesenchymal stem cells with BMP-2 embedded microspheres in a rotating bed bioreactor. BMC Proceedings, 2011, 5, P74.	1.8	5
99	Characterization and improvement of cell line performance via flow cytometry and cell sorting. Engineering in Life Sciences, 2010, 10, 130-138.	2.0	3
100	Innovative Platform for the Advanced Online Monitoring of Three-Dimensional Cells and Tissue Cultures. Cells, 2022, 11, 412.	1.8	3
101	Ersatzteillager Mensch? Tissue Engineering. Chemie in Unserer Zeit, 2005, 39, 394-401.	0.1	2
102	Cell Culture Conditions: Cultivation of Stem Cells Under Dynamic Conditions. , 2018, , 1-33.		2
103	Advanced Online Monitoring of In Vitro Human 3D Full-Thickness Skin Equivalents. Pharmaceutics, 2022, 14, 1436.	2.0	2
104	Strategies in umbilical cord-derived mesenchymal stem cells expansion: influence of oxygen, culture medium and cell separation. BMC Proceedings, 2011, 5, P88.	1.8	1
105	Novel Production Technology to Automate the Generation of Hanging Drops for Mass Production of Organotypic Microtissues. Chemie-Ingenieur-Technik, 2011, 83, 2170-2176.	0.4	1
106	Lab Equipment for 3D Cell Culture. Learning Materials in Biosciences, 2021, , 27-67.	0.2	1
107	Cell Culture Conditions: Cultivation of Stem Cells Under Dynamic Conditions. , 2020, , 415-447.		1
108	Tissue Engineering auf der Biotechnica. Nachrichten Aus Der Chemie, 2001, 49, 1073-1075.	0.0	0

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109	Identification of viruses in Acute Lower Respiratory Infections (ALRI) in Lao People's Democratic Republic. BMC Proceedings, 2011, 5, P74.	1.8	0
110	Comparison of the activity and pluripotency maintaining potential of human leukemia inhibitory factor (LIF) produced in E.coliand CHO cells. BMC Proceedings, 2011, 5, P109.	1.8	0
111	Production and purification of TGFb-1 in CHO-Cells. BMC Proceedings, 2011, 5, P134.	1.8	0
112	Increasing productivity of hybridoma cell lines by sorting by side scattering light. BMC Proceedings, 2011, 5, P83.	1.8	0
113	Expansion of Mesenchymal Stem Cells Derived from Umbilical Cord in Media Containing Human Serum (Method). , 2013, , 13-23.		0
114	Application of Scaffold-Free 3D Models. Learning Materials in Biosciences, 2021, , 147-174.	0.2	0
115	Editorial: Advanced Cell Culture Technologies to Boost Cell-Based Therapies. Frontiers in Bioengineering and Biotechnology, 2021, 9, 727298.	2.0	0
116	In Vitro Testing of a New Substance with Anti-Tumor Activity on Mammalian Cells Using Flow Cytometry. , 2001, , 3-5.		0
117	Biofunctional Polymer-Mineral Composites as Scaffolds for Bone Tissue Engineering. , 2010, , 591-597.		0