

# Wilhelm K Aicher

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

100 papers	3,837 citations	31 h-index	59 g-index
109 ext. papers	4,199 ext. citations	6.4 avg, IF	4.81 L-index

#	Paper	IF	Citations
100	Generation of pluripotent stem cells from adult human testis. <i>Nature</i> , <b>2008</b> , 456, 344-9	50.4	415
99	A conserved family of nuclear proteins containing structural elements of the finger protein encoded by Krüppel, a Drosophila segmentation gene. <i>Cell</i> , <b>1986</b> , 47, 1025-32	56.2	404
98	Toll-like receptor engagement enhances the immunosuppressive properties of human bone marrow-derived mesenchymal stem cells by inducing indoleamine-2,3-dioxygenase-1 via interferon-beta and protein kinase R. <i>Stem Cells</i> , <b>2009</b> , 27, 909-19	5.8	224
97	Bone morphogenetic protein (BMP)-2 enhances the expression of type II collagen and aggrecan in chondrocytes embedded in alginate beads. <i>Osteoarthritis and Cartilage</i> , <b>2004</b> , 12, 559-67	6.2	155
96	Substrate dependent differences in morphology and elasticity of living osteoblasts investigated by atomic force microscopy. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2000</b> , 19, 367-379	6	146
95	Expression of sentrin, a novel antiapoptotic molecule, at sites of synovial invasion in rheumatoid arthritis. <i>Arthritis and Rheumatism</i> , <b>2000</b> , 43, 599-607		130
94	Expression of the collagenolytic and Ras-induced cysteine proteinase cathepsin L and proliferation-associated oncogenes in synovial cells of MRL/l mice and patients with rheumatoid arthritis. <i>Matrix Biology</i> , <b>1990</b> , 10, 349-61		122
93	Selective induction of Th2 cells in murine Peyer's patches by oral immunization. <i>International Immunology</i> , <b>1992</b> , 4, 433-45	4.9	108
92	Interleukin-16, produced by synovial fibroblasts, mediates chemoattraction for CD4+ T lymphocytes in rheumatoid arthritis. <i>European Journal of Immunology</i> , <b>1998</b> , 28, 2661-71	6.1	98
91	Human Mesenchymal Stromal Cells from Different Sources Diverge in Their Expression of Cell Surface Proteins and Display Distinct Differentiation Patterns. <i>Stem Cells International</i> , <b>2016</b> , 2016, 5646384	5.84	88
90	Remodeling of articular cartilage and subchondral bone after bone grafting and matrix-associated autologous chondrocyte implantation for osteochondritis dissecans of the knee. <i>American Journal of Sports Medicine</i> , <b>2011</b> , 39, 764-73	6.8	79
89	Phenotypic and functional heterogeneity of human bone marrow- and amnion-derived MSC subsets. <i>Annals of the New York Academy of Sciences</i> , <b>2012</b> , 1266, 94-106	6.5	74
88	Human term placenta-derived mesenchymal stromal cells are less prone to osteogenic differentiation than bone marrow-derived mesenchymal stromal cells. <i>Stem Cells and Development</i> , <b>2011</b> , 20, 635-46	4.4	70
87	Evaluation of the osteogenic and chondrogenic differentiation capacities of equine adipose tissue-derived mesenchymal stem cells. <i>American Journal of Veterinary Research</i> , <b>2010</b> , 71, 1228-36	1.1	70
86	Cartilage destruction mediated by synovial fibroblasts does not depend on proliferation in rheumatoid arthritis. <i>American Journal of Pathology</i> , <b>2003</b> , 162, 1549-57	5.8	63
85	Supramolecular conjugates of carbon nanotubes and DNA by a solid-state reaction. <i>Biomacromolecules</i> , <b>2005</b> , 6, 2919-22	6.9	57
84	Regeneration of cartilage and bone by defined subsets of mesenchymal stromal cells--potential and pitfalls. <i>Advanced Drug Delivery Reviews</i> , <b>2011</b> , 63, 342-51	18.5	56

83	The integrin alpha9beta1 on hematopoietic stem and progenitor cells: involvement in cell adhesion, proliferation and differentiation. <i>Haematologica</i> , <b>2009</b> , 94, 1493-501	6.6	56
82	The spatial organisation of joint surface chondrocytes: review of its potential roles in tissue functioning, disease and early, preclinical diagnosis of osteoarthritis. <i>Annals of the Rheumatic Diseases</i> , <b>2014</b> , 73, 645-53	2.4	46
81	Animal serum-free expansion and differentiation of human mesenchymal stromal cells. <i>Cytotherapy</i> , <b>2010</b> , 12, 143-53	4.8	46
80	Ribozymes that inhibit the production of matrix metalloproteinase 1 reduce the invasiveness of rheumatoid arthritis synovial fibroblasts. <i>Arthritis and Rheumatism</i> , <b>2004</b> , 50, 1448-56		46
79	Retroviral gene transfer of an antisense construct against membrane type 1 matrix metalloproteinase reduces the invasiveness of rheumatoid arthritis synovial fibroblasts. <i>Arthritis and Rheumatism</i> , <b>2005</b> , 52, 2010-4		46
78	Matrix metalloproteinases in stem cell mobilization. <i>Matrix Biology</i> , <b>2015</b> , 44-46, 175-83	11.4	45
77	Transforming growth factor-beta enhances secretory component and major histocompatibility complex class I antigen expression on rat IEC-6 intestinal epithelial cells. <i>Cytokine</i> , <b>1991</b> , 3, 543-50	4	43
76	Biomimetic TiO-chitosan/sodium alginate blended nanocomposite scaffolds for tissue engineering applications. <i>Materials Science and Engineering C</i> , <b>2020</b> , 110, 110710	8.3	43
75	Cathepsin X is secreted by human osteoblasts, digests CXCL-12 and impairs adhesion of hematopoietic stem and progenitor cells to osteoblasts. <i>Haematologica</i> , <b>2010</b> , 95, 1452-60	6.6	39
74	Low osteogenic differentiation potential of placenta-derived mesenchymal stromal cells correlates with low expression of the transcription factors Runx2 and Twist2. <i>Stem Cells and Development</i> , <b>2013</b> , 22, 2859-72	4.4	37
73	Human mesenchymal stromal cells express CD14 cross-reactive epitopes. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , <b>2011</b> , 79, 635-45	4.6	37
72	Peyer's patch B cells with memory cell characteristics undergo terminal differentiation within 24 hours in response to interleukin-6. <i>Cytokine</i> , <b>1991</b> , 3, 107-16	4	36
71	Human Placenta-Derived CD146-Positive Mesenchymal Stromal Cells Display a Distinct Osteogenic Differentiation Potential. <i>Stem Cells and Development</i> , <b>2015</b> , 24, 1558-69	4.4	33
70	Loss of spatial organization and destruction of the pericellular matrix in early osteoarthritis in vivo and in a novel in vitro methodology. <i>Osteoarthritis and Cartilage</i> , <b>2016</b> , 24, 1200-9	6.2	32
69	The geometrical shape of mesenchymal stromal cells measured by quantitative shape descriptors is determined by the stiffness of the biomaterial and by cyclic tensile forces. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2017</b> , 11, 3508-3522	4.4	31
68	TGF-beta enhances the integrin alpha2beta1-mediated attachment of mesenchymal stem cells to type I collagen. <i>Stem Cells and Development</i> , <b>2010</b> , 19, 645-56	4.4	30
67	Comparison of marker gene expression in chondrocytes from patients receiving autologous chondrocyte transplantation versus osteoarthritis patients. <i>Arthritis Research and Therapy</i> , <b>2007</b> , 9, R60	5.7	30
66	Enhanced biocompatibility for SAOS-2 osteosarcoma cells by surface coating with hydrophobic epoxy resins. <i>Cellular Physiology and Biochemistry</i> , <b>2003</b> , 13, 155-64	3.9	30

65	Efficient generation of transgenic BALB/c mice using BALB/c embryonic stem cells. <i>Journal of Immunological Methods</i> , <b>1999</b> , 223, 255-60	2.5	27
64	Onset of preclinical osteoarthritis: the angular spatial organization permits early diagnosis. <i>Arthritis and Rheumatism</i> , <b>2011</b> , 63, 1637-47		25
63	Transcription factor early growth response 1 activity up-regulates expression of tissue inhibitor of metalloproteinases 1 in human synovial fibroblasts. <i>Arthritis and Rheumatism</i> , <b>2003</b> , 48, 348-59		25
62	Hematopoietic Stem and Progenitor Cell Expansion in Contact with Mesenchymal Stromal Cells in a Hanging Drop Model Uncovers Disadvantages of 3D Culture. <i>Stem Cells International</i> , <b>2016</b> , 2016, 4148053	5.3	24
61	Maintenance of "stem cell" features of cartilage cell sub-populations during in vitro propagation. <i>Journal of Translational Medicine</i> , <b>2013</b> , 11, 27	8.5	23
60	Characterization and functional analysis of osteoblast-derived fibulins in the human hematopoietic stem cell niche. <i>Experimental Hematology</i> , <b>2008</b> , 36, 1022-34	3.1	23
59	Nanostructured thermosensitive polymers with radical scavenging ability. <i>Chemistry - A European Journal</i> , <b>2007</b> , 13, 569-73	4.8	23
58	Serum response elements activate and cAMP responsive elements inhibit expression of transcription factor Egr-1 in synovial fibroblasts of rheumatoid arthritis patients. <i>International Immunology</i> , <b>1999</b> , 11, 47-61	4.9	23
57	Rheological and biological properties of a hydrogel support for cells intended for intervertebral disc repair. <i>BMC Musculoskeletal Disorders</i> , <b>2012</b> , 13, 54	2.8	22
56	Processing of CXCL12 by different osteoblast-secreted cathepsins. <i>Stem Cells and Development</i> , <b>2012</b> , 21, 1924-35	4.4	22
55	Stretching human mesenchymal stromal cells on stiffness-customized collagen type I generates a smooth muscle marker profile without growth factor addition. <i>Scientific Reports</i> , <b>2016</b> , 6, 35840	4.9	21
54	Identification of an aptamer binding to human osteogenic-induced progenitor cells. <i>Nucleic Acid Therapeutics</i> , <b>2013</b> , 23, 44-61	4.8	21
53	Choice of xenogenic-free expansion media significantly influences the myogenic differentiation potential of human bone marrow-derived mesenchymal stromal cells. <i>Cytotherapy</i> , <b>2016</b> , 18, 344-59	4.8	20
52	Mesenchymal stromal cells for sphincter regeneration. <i>Advanced Drug Delivery Reviews</i> , <b>2015</b> , 82-83, 123-36	18.5	19
51	Release of matrix metalloproteinase-8 during physiological trafficking and induced mobilization of human hematopoietic stem cells. <i>Stem Cells and Development</i> , <b>2013</b> , 22, 1307-18	4.4	19
50	Transcription factor Egr-1 activates collagen expression in immortalized fibroblasts or fibrosarcoma cells. <i>Biological Chemistry</i> , <b>2002</b> , 383, 1845-53	4.5	19
49	Smooth Muscle-Like Cells Generated from Human Mesenchymal Stromal Cells Display Marker Gene Expression and Electrophysiological Competence Comparable to Bladder Smooth Muscle Cells. <i>PLoS ONE</i> , <b>2015</b> , 10, e0145153	3.7	18
48	Effects of the <i>lpr/lpr</i> mutation on T and B cell populations in the lamina propria of the small intestine, a mucosal effector site. <i>International Immunology</i> , <b>1992</b> , 4, 959-68	4.9	18

47	A sensitive refining of in vitro and in vivo toxicological behavior of green synthesized ZnO nanoparticles from the shells of <i>Jatropha curcas</i> for multifunctional biomaterials development. <i>Ecotoxicology and Environmental Safety</i> , <b>2019</b> , 184, 109621	7	17
46	Bisphosphonates modulate vital functions of human osteoblasts and affect their interactions with breast cancer cells. <i>Breast Cancer Research and Treatment</i> , <b>2013</b> , 140, 35-48	4.4	17
45	Mesenchymal Stromal Cells for Sphincter Regeneration: Role of Laminin Isoforms upon Myogenic Differentiation. <i>PLoS ONE</i> , <b>2015</b> , 10, e0137419	3.7	17
44	Biocompatibility correlation of polymeric materials using human osteosarcoma cells. <i>Die Naturwissenschaften</i> , <b>2000</b> , 87, 351-4	2	17
43	Osteoblast-secreted factors enhance the expression of dysadherin and CCL2-dependent migration of renal carcinoma cells. <i>International Journal of Cancer</i> , <b>2012</b> , 130, 288-99	7.5	16
42	Stress-vs-time signals allow the prediction of structurally catastrophic events during fracturing of immature cartilage and predetermine the biomechanical, biochemical, and structural impairment. <i>Journal of Structural Biology</i> , <b>2013</b> , 183, 501-511	3.4	15
41	Laminin-5 and type I collagen promote adhesion and osteogenic differentiation of animal serum-free expanded human mesenchymal stromal cells. <i>Orthopedic Reviews</i> , <b>2012</b> , 4, e36	1.2	15
40	DOCA and TGF-beta induce early growth response gene-1 (Egr-1) expression. <i>Cellular Physiology and Biochemistry</i> , <b>2008</b> , 22, 465-74	3.9	14
39	Labelling and tracking of human mesenchymal stromal cells in preclinical studies and large animal models of degenerative diseases. <i>Current Stem Cell Research and Therapy</i> , <b>2014</b> , 9, 444-50	3.6	13
38	Attachment to laminin-111 facilitates transforming growth factor beta-induced expression of matrix metalloproteinase-3 in synovial fibroblasts. <i>Annals of the Rheumatic Diseases</i> , <b>2007</b> , 66, 446-51	2.4	13
37	Cell-based therapy for the deficient urinary sphincter. <i>Current Urology Reports</i> , <b>2013</b> , 14, 476-87	2.9	12
36	Induction of endostatin expression in meniscal fibrochondrocytes by co-culture with endothelial cells. <i>Archives of Orthopaedic and Trauma Surgery</i> , <b>2009</b> , 129, 1137-43	3.6	12
35	The active form of leflunomide, HMR1726, facilitates TNF-alpha and IL-17 induced MMP-1 and MMP-3 expression. <i>Cellular Physiology and Biochemistry</i> , <b>2006</b> , 17, 69-78	3.9	12
34	Precise injection of human mesenchymal stromal cells in the urethral sphincter complex of C57BL/6 mice without unspecific bulking effects. <i>Neurourology and Urodynamics</i> , <b>2017</b> , 36, 1723-1733	2.3	11
33	Synovial fibroblasts from rheumatoid arthritis patients differ in their regulation of IL-16 gene activity in comparison to osteoarthritis fibroblasts. <i>Cellular Physiology and Biochemistry</i> , <b>2004</b> , 14, 293-300	3.9	11
32	Intestinal intraepithelial lymphocyte T cells are resistant to lpr gene-induced T cell abnormalities. <i>European Journal of Immunology</i> , <b>1992</b> , 22, 137-45	6.1	11
31	Towards a Treatment of Stress Urinary Incontinence: Application of Mesenchymal Stromal Cells for Regeneration of the Sphincter Muscle. <i>Journal of Clinical Medicine</i> , <b>2014</b> , 3, 197-215	5.1	10
30	Regulatory functions for murine intraepithelial lymphocytes in mucosal responses. <i>Immunologic Research</i> , <b>1991</b> , 10, 324-30	4.3	10

29	A novel waterjet technology for transurethral cystoscopic injection of viable cells in the urethral sphincter complex. <i>Neurourology and Urodynamics</i> , <b>2020</b> , 39, 594-602	2.3	10
28	Influence of solvents on the changes in structure, purity, and in vitro characteristics of green-synthesized ZnO nanoparticles from <i>Costus igneus</i> . <i>Applied Nanoscience (Switzerland)</i> , <b>2018</b> , 8, 1353-1360	3.3	10
27	Regenerative medicine and injection therapies in stress urinary incontinence. <i>Nature Reviews Urology</i> , <b>2020</b> , 17, 151-161	5.5	9
26	Bone marrow-derived mesenchymal stromal cells differ in their attachment to fibronectin-derived peptides from term placenta-derived mesenchymal stromal cells. <i>Stem Cell Research and Therapy</i> , <b>2016</b> , 7, 29	8.3	9
25	Modeling chondrocyte patterns by elliptical cluster processes. <i>Journal of Structural Biology</i> , <b>2012</b> , 177, 447-58	3.4	9
24	Antitumour activity of Helix hemocyanin against bladder carcinoma permanent cell lines. <i>Biotechnology and Biotechnological Equipment</i> , <b>2019</b> , 33, 20-32	1.6	8
23	Regeneration of degenerated urinary sphincter muscles: improved stem cell-based therapies and novel imaging technologies. <i>Cell Transplantation</i> , <b>2015</b> , 24, 2171-83	4	7
22	Influence of standard haemodialysis treatment on transcription of human serum- and glucocorticoid-inducible kinase SGK1 and taurine transporter TAUT in blood leukocytes. <i>Nephrology Dialysis Transplantation</i> , <b>2005</b> , 20, 768-74	4.3	7
21	Immunoregulatory confluence: T cells, Fc receptors and cytokines for IgA immune responses. <i>International Reviews of Immunology</i> , <b>1990</b> , 6, 263-73	4.6	6
20	Labeling Mesenchymal Stromal Cells with PKH26 or VybrantDil Significantly Diminishes their Migration, but does not affect their Viability, Attachment, Proliferation and Differentiation Capacities. <i>Journal of Tissue Science &amp; Engineering</i> , <b>2017</b> , 08,		5
19	Allogenic Use of Human Placenta-Derived Stromal Cells as a Highly Active Subtype of Mesenchymal Stromal Cells for Cell-Based Therapies. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	5
18	Expression of Desmoglein 2, Desmocollin 3 and Plakophilin 2 in Placenta and Bone Marrow-Derived Mesenchymal Stromal Cells. <i>Stem Cell Reviews and Reports</i> , <b>2017</b> , 13, 258-266	6.4	4
17	Hydrojet-based delivery of footprint-free iPSC-derived cardiomyocytes into porcine myocardium. <i>Scientific Reports</i> , <b>2020</b> , 10, 16787	4.9	4
16	Expression patterns of the immune checkpoint ligand CD276 in urothelial carcinoma. <i>BMC Urology</i> , <b>2021</b> , 21, 60	2.2	4
15	Treatment of Stress Urinary Incontinence with Muscle Stem Cells and Stem Cell Components: Chances, Challenges and Future Prospects. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	4
14	Rapid and precise delivery of cells in the urethral sphincter complex by a novel needle-free waterjet technology. <i>BJU International</i> , <b>2021</b> , 127, 463-472	5.6	4
13	Wet chemical preparation of herbal nanocomposites from medicinal plant leaves for enhanced coating on textile fabrics with multifunctional properties. <i>SN Applied Sciences</i> , <b>2020</b> , 2, 1	1.8	3
12	Injection of Porcine Adipose Tissue-Derived Stromal Cells by a Novel Waterjet Technology. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	3

11	Establishing and monitoring of urethral sphincter deficiency in a large animal model. <i>World Journal of Urology</i> , <b>2017</b> , 35, 1977-1986	4	2
10	Comparative phenotypic transcriptional characterization of human full-term placenta-derived mesenchymal stromal cells compared to bone marrow-derived mesenchymal stromal cells after differentiation in myogenic medium. <i>Placenta</i> , <b>2017</b> , 49, 64-67	3.4	2
9	Conrad et al. reply. <i>Nature</i> , <b>2010</b> , 465, E3-E3	50.4	2
8	Interleukin-18 is regulated by G protein pathways and protein kinase signals in human fibroblasts. <i>Rheumatology International</i> , <b>2004</b> , 24, 1-8	3.6	1
7	Novel Techniques to Improve Precise Cell Injection. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	1
6	Elevated Expression of the Immune Checkpoint Ligand CD276 (B7-H3) in Urothelial Carcinoma Cell Lines Correlates Negatively with the Cell Proliferation.. <i>International Journal of Molecular Sciences</i> , <b>2022</b> , 23,	6.3	1
5	CD24: A Marker for an Extended Expansion Potential of Urothelial Cancer Cell Organoids In Vitro?. <i>International Journal of Molecular Sciences</i> , <b>2022</b> , 23, 5453	6.3	1
4	Urinary Tract Tumor Organoids Reveal Eminent Differences in Drug Sensitivities When Compared to 2-Dimensional Culture Systems. <i>International Journal of Molecular Sciences</i> , <b>2022</b> , 23, 6305	6.3	1
3	Expression of CD146 and Regenerative Cytokines by Human Placenta-Derived Mesenchymal Stromal Cells upon Expansion in Different GMP-Compliant Media. <i>Stem Cells International</i> , <b>2021</b> , 2021, 6662201	5	
2	Replacing Needle Injection by a Novel Waterjet Technology Grants Improved Muscle Cell Delivery in Target Tissues.. <i>Cell Transplantation</i> , <b>2022</b> , 31, 9636897221080943	4	
1	Silica incorporated chitosan-sodium alginate nanocomposite scaffolds for tissue engineering applications. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 1-13	3	