Takanori Iwata

List of Publications by Year in descending order

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159525 143943 3,743 124 30 57 citations h-index g-index papers 129 129 129 4117 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Periodontal regeneration with multi-layered periodontal ligament-derived cell sheets in a canine model. Biomaterials, 2009, 30, 2716-2723.	5.7	335
2	Comparison of different tissue-derived stem cell sheets for periodontal regeneration in a canine 1-wall defect model. Biomaterials, 2011, 32, 5819-5825.	5.7	263
3	Validation of human periodontal ligamentâ€derived cells as a reliable source for cytotherapeutic use. Journal of Clinical Periodontology, 2010, 37, 1088-1099.	2.3	172
4	Tissue factor triggers procoagulation in transplanted mesenchymal stem cells leading to thromboembolism. Biochemical and Biophysical Research Communications, 2013, 431, 203-209.	1.0	171
5	Allogeneic Transplantation of an Adipose-Derived Stem Cell Sheet Combined With Artificial Skin Accelerates Wound Healing in a Rat Wound Model of Type 2 Diabetes and Obesity. Diabetes, 2015, 64, 2723-2734.	0.3	148
6	Periodontal regeneration with autologous periodontal ligament-derived cell sheets – A safety and efficacy study in ten patients. Regenerative Therapy, 2018, 9, 38-44.	1.4	146
7	Cell sheet engineering and its application for periodontal regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 343-356.	1.3	126
8	Dentin Sialophosphoprotein Is Processed by MMP-2 and MMP-20 in Vitro and in Vivo. Journal of Biological Chemistry, 2006, 281, 38235-38243.	1.6	113
9	Cell sheet engineering and other novel cellâ€based approaches to periodontal regeneration. Periodontology 2000, 2009, 51, 220-238.	6.3	104
10	Assessment of cell sheets derived from human periodontal ligament cells: a pre-clinical study. Cell and Tissue Research, 2010, 341, 397-404.	1.5	100
11	Current and future periodontal tissue engineering. Periodontology 2000, 2011, 56, 166-187.	6.3	92
12	Functional role of acetylcholine and the expression of cholinergic receptors and components in osteoblasts. FEBS Letters, 2010, 584, 817-824.	1.3	71
13	Processing of Ameloblastin by MMP-20. Journal of Dental Research, 2007, 86, 153-157.	2.5	70
14	Porcine Dentin Sialoprotein Is a Proteoglycan with Glycosaminoglycan Chains Containing Chondroitin 6-Sulfate. Journal of Biological Chemistry, 2005, 280, 1552-1560.	1.6	66
15	Noggin Blocks Osteoinductive Activity of Porcine Enamel Extracts. Journal of Dental Research, 2002, 81, 387-391.	2.5	63
16	Multipotent mesenchymal stromal cell sheet therapy for bisphosphonate-related osteonecrosis of the jaw in a rat model. Acta Biomaterialia, 2016, 42, 400-410.	4.1	60
17	Development of Osteogenic Cell Sheets for Bone Tissue Engineering Applications. Tissue Engineering - Part A, 2011, 17, 1507-1515.	1.6	59
18	Exosomes derived from clinicalâ€grade oral mucosal epithelial cell sheets promote wound healing. Journal of Extracellular Vesicles, 2019, 8, 1565264.	5.5	59

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19	Current Status and Future Development of Cell Transplantation Therapy for Periodontal Tissue Regeneration. International Journal of Dentistry, 2012, 2012, 1-8.	0.5	53
20	Tissue Engineering in Periodontal Tissue. Anatomical Record, 2014, 297, 16-25.	0.8	53
21	Alloplastic Bone Substitutes for Periodontal and Bone Regeneration in Dentistry: Current Status and Prospects. Materials, 2021, 14, 1096.	1.3	52
22	Application of Ligature-Induced Periodontitis in Mice to Explore the Molecular Mechanism of Periodontal Disease. International Journal of Molecular Sciences, 2021, 22, 8900.	1.8	52
23	Allogeneic Transplantation of Periodontal Ligament-Derived Multipotent Mesenchymal Stromal Cell Sheets in Canine Critical-Size Supra-Alveolar Periodontal Defect Model. BioResearch Open Access, 2016, 5, 22-36.	2.6	49
24	Spheroid culture enhances osteogenic potential of periodontal ligament mesenchymal stem cells. Journal of Periodontal Research, 2018, 53, 870-882.	1.4	42
25	Thermoresponsive polymer-modified microfibers for cell separations. Acta Biomaterialia, 2017, 53, 81-92.	4.1	40
26	Porcine Dentin Sialophosphoprotein. Journal of Biological Chemistry, 2008, 283, 14835-14844.	1.6	39
27	Application of Periodontal Ligament-Derived Multipotent Mesenchymal Stromal Cell Sheets for Periodontal Regeneration. International Journal of Molecular Sciences, 2019, 20, 2796.	1.8	38
28	Endothelial cells enhance the in vivo bone-forming ability of osteogenic cell sheets. Laboratory Investigation, 2014, 94, 663-673.	1.7	36
29	Porcine Enamel Protein Fractions Contain Transforming Growth Factor-β1. Journal of Periodontology, 2006, 77, 1688-1694.	1.7	35
30	Diverse functions of secreted frizzled-related proteins in the osteoblastogenesis of human multipotent mesenchymal stromal cells. Biomaterials, 2013, 34, 3270-3278.	5.7	34
31	<i>Porphyromonas gingivalis</i> impairs glucose uptake in skeletal muscle associated with altering gut microbiota. FASEB Journal, 2021, 35, e21171.	0.2	30
32	Effect of heat treatment on bioactivities of enamel matrix derivatives in human periodontal ligament (HPDL) cells. Journal of Periodontal Research, 2004, 39, 249-256.	1.4	29
33	ZBTB16 as a Downstream Target Gene of Osterix Regulates Osteoblastogenesis of Human Multipotent Mesenchymal Stromal Cells. Journal of Cellular Biochemistry, 2016, 117, 2423-2434.	1.2	27
34	Re-initiation of Oral Food Intake Following Enteral Nutrition Alters Oral and Gut Microbiota Communities. Frontiers in Cellular and Infection Microbiology, 2019, 9, 434.	1.8	27
35	Discriminating Microbial Community Structure Between Peri-Implantitis and Periodontitis With Integrated Metagenomic, Metatranscriptomic, and Network Analysis. Frontiers in Cellular and Infection Microbiology, 2020, 10, 596490.	1.8	27
36	Netrinâ€4 derived from murine vascular endothelial cells inhibits osteoclast differentiation in vitro and prevents bone loss in vivo. FEBS Letters, 2014, 588, 2262-2269.	1.3	26

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37	Co-cultured spheroids of human periodontal ligament mesenchymal stem cells and vascular endothelial cells enhance periodontal tissue regeneration. Regenerative Therapy, 2020, 14, 59-71.	1.4	25
38	Proteomic analysis of enamel matrix using a two-dimensional protein fractionation system. European Journal of Oral Sciences, 2006, 114, 266-271.	0.7	24
39	In Vitro Cytological Responses against Laser Photobiomodulation for Periodontal Regeneration. International Journal of Molecular Sciences, 2020, 21, 9002.	1.8	24
40	Repair Mechanism of Osteochondral Defect Promoted by Bioengineered Chondrocyte Sheet. Tissue Engineering - Part A, 2015, 21, 1131-1141.	1.6	22
41	Three case reports of aggressive periodontitis associated with Porphyromonas gingivalis in younger patients. Journal of Periodontal Research, 2002, 37, 324-332.	1.4	21
42	Effects of Low-Level Er:YAG Laser Irradiation on Proliferation and Calcification of Primary Osteoblast-Like Cells Isolated From Rat Calvaria. Frontiers in Cell and Developmental Biology, 2020, 8, 459.	1.8	20
43	Association of periodontal pocket area with type 2 diabetes and obesity: a cross-sectional study. BMJ Open Diabetes Research and Care, 2021, 9, e002139.	1.2	20
44	Xenogeneic transplantation of human adipose-derived stem cell sheets accelerate angiogenesis and the healing of skin wounds in a Zucker Diabetic Fatty rat model of obese diabetes. Regenerative Therapy, 2017, 6, 65-73.	1.4	19
45	Creation and Transplantation of an Adipose-derived Stem Cell (ASC) Sheet in a Diabetic Wound-healing Model. Journal of Visualized Experiments, 2017, , .	0.2	19
46	RNA sequencing for ligature induced periodontitis in mice revealed important role of S100A8 and S100A9 for periodontal destruction. Scientific Reports, 2019, 9, 14663.	1.6	19
47	rhBMP-2 Pre-Treated Human Periodontal Ligament Stem Cell Sheets Regenerate a Mineralized Layer Mimicking Dental Cementum. International Journal of Molecular Sciences, 2020, 21, 3767.	1.8	19
48	Periodontal regenerative therapy in patients with type 2 diabetes using minimally invasive surgical technique with enamel matrix derivative under 3â€year observation: A prospective cohort study. Journal of Periodontology, 2021, 92, 1262-1273.	1.7	19
49	Relationship between NAFLD and Periodontal Disease from the View of Clinical and Basic Research, and Immunological Response. International Journal of Molecular Sciences, 2021, 22, 3728.	1.8	18
50	A role for c-Kit in the maintenance of undifferentiated human mesenchymal stromal cells. Biomaterials, 2014, 35, 3618-3626.	5.7	17
51	Differentiation of odontoblasts is negatively regulated by MEPE via its C-terminal fragment. Biochemical and Biophysical Research Communications, 2010, 398, 406-412.	1.0	16
52	Patient-reported outcomes of laser-assisted pain control following non-surgical and surgical periodontal therapy: A systematic review and meta-analysis. PLoS ONE, 2020, 15, e0238659.	1.1	16
53	Characterization of proliferation, differentiation potential, and gene expression among clonal cultures of human dental pulp cells. Human Cell, 2020, 33, 490-501.	1.2	16
54	<i>Porphyromonas gingivalis</i> , the most influential pathogen in redâ€complex bacteria: A crossâ€sectional study on the relationship between bacterial count and clinical periodontal status in Japan. Journal of Periodontology, 2021, 92, 1719-1729.	1.7	16

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55	Poor oral hygiene and dental caries predict high mortality rate in hemodialysis: a 3-year cohort study. Scientific Reports, 2020, 10, 21872.	1.6	16
56	Discrimination of Bacterial Community Structures among Healthy, Gingivitis, and Periodontitis Statuses through Integrated Metatranscriptomic and Network Analyses. MSystems, 2021, 6, e0088621.	1.7	16
57	Porcine dentin matrix protein 1: gene structure, cDNA sequence, and expression in teeth. European Journal of Oral Sciences, 2006, 114, 33-41.	0.7	15
58	Combined effect of canagliflozin and exercise training on high-fat diet-fed mice. American Journal of Physiology - Endocrinology and Metabolism, 2020, 318, E492-E503.	1.8	15
59	Impaired dental implant osseointegration in rat with streptozotocinâ€induced diabetes. Journal of Periodontal Research, 2022, 57, 412-424.	1.4	15
60	Establishment of porcine pulp-derived cell lines and expression of recombinant dentin sialoprotein and recombinant dentin matrix protein-1. European Journal of Oral Sciences, 2007, 115, 48-56.	0.7	14
61	Requirement of Integrin \hat{I}^2 3 for Iron Transportation during Enamel Formation. Journal of Dental Research, 2012, 91, 1154-1159.	2.5	14
62	Oral keratinocyte-derived exosomes regulate proliferation of fibroblasts and epithelial cells. Biochemical and Biophysical Research Communications, 2019, 514, 706-712.	1.0	14
63	Residual periodontal pocket treatment with Er:YAG laser-assisted comprehensive periodontal pocket therapy: a retrospective study. Clinical Oral Investigations, 2022, 26, 761-771.	1.4	14
64	A systematic sequencing-based approach for microbial contaminant detection and functional inference. BMC Biology, 2019, 17, 72.	1.7	13
65	Allogeneic multipotent mesenchymal stromal cell sheet transplantation promotes healthy healing of wounds caused by zoledronate and dexamethasone in canine mandibular bones. Regenerative Therapy, 2019, 10, 77-83.	1.4	13
66	The key royal jelly component 10-hydroxy-2-decenoic acid protects against bone loss by inhibiting NF-κB signaling downstream of FFAR4. Journal of Biological Chemistry, 2020, 295, 12224-12232.	1.6	13
67	Dual effect of molecular mobility and functional groups of polyrotaxane surfaces on the fate of mesenchymal stem cells. Biomaterials Science, 2021, 9, 675-684.	2.6	13
68	Accuracy of cone beam computed tomography in evaluation of palatal mucosa thickness. Journal of Clinical Periodontology, 2020, 47, 479-488.	2.3	12
69	Cell Sheets for Periodontal Tissue Engineering. Current Oral Health Reports, 2015, 2, 252-256.	0.5	11
70	RNA-sequencing reveals positional memory of multipotent mesenchymal stromal cells from oral and maxillofacial tissue transcriptomes. BMC Genomics, 2020, 21, 417.	1.2	11
71	Endotoxemia by Porphyromonas gingivalis Alters Endocrine Functions in Brown Adipose Tissue. Frontiers in Cellular and Infection Microbiology, 2020, 10, 580577.	1.8	11
72	Effects of Antioxidant in Adjunct with Periodontal Therapy in Patients with Type 2 Diabetes: A Systematic Review and Meta-Analysis. Antioxidants, 2021, 10, 1304.	2.2	11

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73	Porcine SPARC: isolation from dentin, cDNA sequence, and computer model. European Journal of Oral Sciences, 2006, 114, 78-85.	0.7	10
74	Laser irradiation decreases sclerostin expression in bone and osteogenic cells. FASEB Journal, 2020, 34, 12877-12893.	0.2	10
75	<i>Ex Vivo</i> Evaluation of Gingival Ablation with Various Laser Systems and Electroscalpel. Photobiomodulation, Photomedicine, and Laser Surgery, 2020, 38, 364-373.	0.7	10
76	Association between circulating tumor necrosis factor receptors and oral bacterium in patients receiving hemodialysis: a cross-sectional study. Clinical and Experimental Nephrology, 2021, 25, 58-65.	0.7	10
77	Comparison of Periodontal Bacteria of Edo and Modern Periods Using Novel Diagnostic Approach for Periodontitis With Micro-CT. Frontiers in Cellular and Infection Microbiology, 2021, 11, 723821.	1.8	10
78	Clinical comparison of an electricâ€powered ionic toothbrush and a manual toothbrush in plaque reduction: A randomized clinical trial. International Journal of Dental Hygiene, 2021, 19, 93-98.	0.8	9
79	Direct homophilic interaction of LAMP2A with the two-domain architecture revealed by site-directed photo-crosslinks and steric hindrances in mammalian cells. Autophagy, 2021, 17, 4286-4304.	4.3	9
80	Netrin-4 Promotes Differentiation and Migration of Osteoblasts. In Vivo, 2018, 31, 793-799.	0.6	9
81	First-in-human autologous oral mucosal epithelial sheet transplantation to prevent anastomotic re-stenosis in congenital esophageal atresia. Stem Cell Research and Therapy, 2022, 13, 35.	2.4	9
82	MEPE Activated by Furin Promotes Pulpal Cell Adhesion. Journal of Dental Research, 2011, 90, 529-534.	2.5	8
83	The effect of antimicrobial photodynamic therapy using yellow-green LED and rose bengal on Porphyromonas gingivalis. Photodiagnosis and Photodynamic Therapy, 2020, 32, 102033.	1.3	8
84	Comprehensive and Sequential Gene Expression Analysis of Bone Healing Process Following Er:YAG Laser Ablation. Photobiomodulation, Photomedicine, and Laser Surgery, 2021, 39, 100-112.	0.7	8
85	Single Cell RNA Sequencing Reveals Critical Functions of Mkx in Periodontal Ligament Homeostasis. Frontiers in Cell and Developmental Biology, 2022, 10, 795441.	1.8	8
86	Promotion of mouse ameloblast proliferation by Lgr5 mediated integrin signaling. Journal of Cellular Biochemistry, 2013, 114, 2138-2147.	1.2	7
87	Afadin requirement for cytokine expressions in keratinocytes during chemically induced inflammation in mice. Genes To Cells, 2014, 19, 842-852.	0.5	7
88	Cytological character of mini pig mesenchymal stromal cells from various tissues and the attempt of cell sheet formation. Regenerative Therapy, 2017, 6, 83-89.	1.4	7
89	Enhanced new bone formation in canine maxilla by a graft of electrically polarized βâ€tricalcium phosphate. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 2820-2826.	1.6	7
90	Influence of aging on periodontal regenerative therapy using enamel matrix derivative: A 3â€year prospective cohort study. Journal of Clinical Periodontology, 2022, 49, 123-133.	2.3	7

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91	Influence of the bone graft materials used for guided bone regeneration on subsequent peri-implant inflammation: an experimental ligature-induced peri-implantitis model in Beagle dogs. International Journal of Implant Dentistry, 2022, 8, 3.	1.1	7
92	Improved Enzymatic Treatment for Accurate Cell Counting from Extracellular Matrix–Rich Periodontal Ligament Cell Sheets. International Journal of Oral and Maxillofacial Implants, 2014, 29, e117-e121.	0.6	6
93	Bone phenotype in melanocortin 2 receptor-deficient mice. Bone Reports, 2020, 13, 100713.	0.2	6
94	A large-scale observational study to investigate the current status of diabetic complications and their prevention in Japan (JDCP study 6): baseline dental and oral findings. Diabetology International, 2021, 12, 52-61.	0.7	6
95	Porphyromonas gingivalis Administration Induces Gestational Obesity, Alters Gene Expression in the Liver and Brown Adipose Tissue in Pregnant Mice, and Causes Underweight in Fetuses. Frontiers in Cellular and Infection Microbiology, 2021, 11, 745117.	1.8	6
96	The ceramide analogue N-(1-hydroxy-3-morpholino-1-phenylpropan-2-yl)decanamide induces large lipid droplet accumulation and highlights the effect of LAMP-2 deficiency on lipid droplet degradation. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 126891.	1.0	5
97	Effects of combined use of recombinant human fibroblast growth factorâ€2 and βâ€tricalcium phosphate on ridge preservation in dehiscence bone defects after tooth extraction: A splitâ€mouth study in dogs. Journal of Periodontal Research, 2021, 56, 298-305.	1.4	5
98	Association between periodontal inflammation and serum lipid profile in a healthy population: A crossâ€sectional study. Journal of Periodontal Research, 2021, 56, 1037-1045.	1.4	5
99	Improved epithelial cell–cell adhesion using molecular mobility of supramolecular surfaces. Biomaterials Science, 2021, 9, 7151-7158.	2.6	5
100	Novel flapless esthetic procedure for the elimination of extended gingival metal tattoos adjacent to prosthetic teeth: Er:YAG laser micro-keyhole surgery. Journal of Prosthodontic Research, 2021, , .	1.1	4
101	Low-Level Erbium-Doped Yttrium Aluminum Garnet Laser Irradiation Induced Alteration of Gene Expression in Osteogenic Cells from Rat Calvariae. Photobiomodulation, Photomedicine, and Laser Surgery, 2021, 39, 566-577.	0.7	4
102	Association of type 2 diabetes with periodontitis and tooth loss in patients undergoing hemodialysis. PLoS ONE, 2022, 17, e0267494.	1.1	4
103	Tissue Adhesion-Anisotropic Polyrotaxane Hydrogels Bilayered with Collagen. Gels, 2021, 7, 168.	2.1	3
104	Effect of Amelotin on Bone Growth in the Murine Calvarial Defect Model. Annals of Biomedical Engineering, 2021, 49, 3676-3684.	1.3	3
105	Effect of Periodontal Disease on Long-Term Outcomes After Percutaneous Coronary Intervention for De Novo Coronary Lesions in Non-Smokers. Circulation Journal, 2022, 86, 811-818.	0.7	3
106	Intelligent Surfaces for Cell-Sheet Engineering. , 2011, , 517-527.		2
107	A comparative questionnaire study of patient complaint levels between magnetostrictive ultrasonic scaler (Cavitron \hat{A}^{\otimes}) and piezoelectric ultrasonic scalers. International Journal of Dental Hygiene, 2020, 19, 273-278.	0.8	2
108	A novel minimallyâ€invasive approach for metal tattoo removal with Er: YAG laser. Journal of Esthetic and Restorative Dentistry, 2021, 33, 550-559.	1.8	2

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109	Patientâ€specific establishment of bacterial composition within the periâ€implant microbiota during the earliest weeks after implant uncovering. Journal of Periodontal Research, 2021, 56, 964-971.	1.4	2
110	Non-surgical treatment for periodontitis and peri-implantitis: longitudinal clinical and bacteriological findingsâ€"A case report with a 7-year follow-up evaluation. SAGE Open Medical Case Reports, 2021, 9, 2050313X2110291.	0.2	2
111	Novel Cell Therapy Using Mesenchymal Stromal Cell Sheets for Medication-Related Osteonecrosis of the Jaw. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	2.0	2
112	Periodontal Disease and Chronic Kidney Disease: the Impact of Oral Health on Inflammation and Nutrition in Patients Undergoing Hemodialysis. Current Oral Health Reports, 0, , .	0.5	2
113	Non-neuronal regulation and repertoire of cholinergic receptors in organs. Biomolecular Concepts, 2010, 1, 357-366.	1.0	1
114	Ridge reconstruction in damaged extraction sockets using tunnel βâ€tricalcium phosphate blocks: A 6â€month histological study in beagle dogs. Journal of Periodontal Research, 2020, 55, 496-502.	1.4	1
115	Application of digital prosthodontics and connective tissue grafting in the management of peri-implant mucosal recession around a malpositioned 1-piece implant: A clinical report. Journal of Prosthetic Dentistry, $2021, , .$	1.1	1
116	Surface-tethering of methylated polyrotaxanes with 4-vinylbenzyl groups onto poly(ether ether) Tj ETQq0 0 0 rg	BT /Oyerlo	ock 10 Tf 50 4
117	Two-stage approach for class II mandibular furcation defect with insufficient keratinized mucosa: a case report with 3 years' follow-up. Journal of International Medical Research, 2021, 49, 030006052110445.	0.4	1
118	Cell Sheet Engineering for Periodontal Regeneration. , 2014, , .		O
119	Synergy of molecularly mobile polyrotaxane surfaces with endothelial cell co-culture for mesenchymal stem cell mineralization. RSC Advances, 2021, 11, 18685-18692.	1.7	0
120	Cytological responses of periodontal tissue against low-level Er:YAG laser photobiomodulation. Journal of Japanese Society for Laser Dentistry, 2021, 31, 53-57.	0.1	0
121	Association between periodontal bacteria and degenerative aortic stenosis: a pilot study. Journal of Periodontal and Implant Science, 2021, 51, 226.	0.9	0
122	Application of stem cell based "Cell Sheet Engineering" for periodontal regeneration. Journal of Japanese Society of Periodontology, 2015, 57, 53-60.	0.1	0
123	PCR detection and new therapies for COVID-19. Journal of Periodontal and Implant Science, 2020, 50, 133.	0.9	0
124	Current Status of Clinical Practice of Periodontal Therapy by Predoctoral Dental Students at Tokyo Medical and Dental University (TMDU). Journal of Japanese Society of Periodontology, 2020, 62, 38-46.	0.1	0