Rachel J Waddington

List of Publications by Year
in descending order

92 papers	3,447 citations	126907 33 h-index	161849 54 g-index
103 all docs	103 docs citations	103 times ranked	3874 citing authors

#	Article	IF	Citations
1	Dental Pulp Stem Cell Heterogeneity: Finding Superior Quality â€œNeedlesâ€•in a Dental Pulpal â€œHaystackâ€• for Regenerative Medicine-Based Applications. Stem Cells International, 2022, 2022, 1-20.	2.5	13
2	Identifying the Efficacy of Extracellular Vesicles in Osteogenic Differentiation: An EV-Lution in Regenerative Medicine. Frontiers in Dental Medicine, 2022, 3, .	1.4	1
3	Differential SOD2 and GSTZ1 profiles contribute to contrasting dental pulp stem cell susceptibilities to oxidative damage and premature senescence. Stem Cell Research and Therapy, 2021, 12, 142.	5.5	10
4	Exploring a Chemotactic Role for EVs from Progenitor Cell Populations of Human Exfoliated Deciduous Teeth for Promoting Migration of NaÃ¯ve BMSCs in Bone Repair Process. Stem Cells International, 2021, 2021, 1-7.	2.5	8
5	Modification of gingival proteoglycans by reactive oxygen species: potential mechanism of proteoglycan degradation during periodontal diseases. Free Radical Research, 2021, 55, 970-981.	3.3	2
6	Evaluation of Dental Pulp Stem Cell Heterogeneity and Behaviour in 3D Type I Collagen Gels. BioMed Research International, 2020, 2020, 1-12.	1.9	13
7	Interrogating the Osteogenic Potential of Implant SurfacesIn Vitro: A Review of Current Assays. Tissue Engineering - Part B: Reviews, 2020, 26, 217-229.	4.8	5
8	Discrimination of Dental Pulp Stem Cell Regenerative Heterogeneity by Single-Cell Raman Spectroscopy. Tissue Engineering - Part C: Methods, 2019, 25, 489-499.	2.1	16
9	Efficacy of copolymer scaffolds delivering human demineralised dentine matrix for bone regeneration. Journal of Tissue Engineering, 2019, 10, 204173141985270.	5.5	16
10	Array analysis for T-cell associated cytokines in gingival crevicular fluid: Identifying altered profiles associated with periodontal disease status. Journal of Dentistry, 2019, 85, 39-46.	4.1	9
11	Effects of high glucose conditions on the expansion and differentiation capabilities of mesenchymal stromal cells derived from rat endosteal niche. BMC Molecular and Cell Biology, 2019, 20, 51.	2.0	21
12	Real-time binding kinetic analyses of the interaction of the dietary stain orange II with dentin matrix. Journal of Dentistry, 2019, 80, 80-88.	4.1	2
13	Liposomal Delivery of Demineralized Dentin Matrix for Dental Tissue Regeneration. Tissue Engineering - Part A, 2018, 24, 1057-1065.	3.1	24
14	Isolation and Characterisation of Mesenchymal Stem Cells from Rat Bone Marrow and the Endosteal Niche: A Comparative Study. Stem Cells International, 2018, 2018, 1-14.	2.5	41
15	Variation in human dental pulp stem cell ageing profiles reflect contrasting proliferative and regenerative capabilities. BMC Cell Biology, 2017, 18, 12.	3.0	77
16	Analysing the bioactive makeup of demineralised dentine matrix on bone marrow mesenchymal stem cells for enhanced bone repair. , 2017, 34, 1-14.		35
17	Clonal Heterogeneity in the Neuronal and Glial Differentiation of Dental Pulp Stem/Progenitor Cells. Stem Cells International, 2016, 2016, 1-10.	2.5	29
18	An assessment of early colonisation of implant-abutment metal surfaces by single species and co-cultured bacterial periodontal pathogens. Journal of Dentistry, 2016, 53, 64-72.	4.1	12

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19	Growth Factor Liberation and DPSC Response Following Dentine Conditioning. Journal of Dental Research, 2016, 95, 1298-1307.	5.2	47
20	Osteoclastogenesis-Related Cytokines and Peri-Prosthetic Osteolysis in Revision Metal-On-Metal Total Hip Replacements. HIP International, 2015, 25, 355-360.	1.7	6
21	Elucidating the cellular actions of demineralised dentine matrix extract on a clonal dental pulp stem cell population in orchestrating dental tissue repair. Journal of Tissue Engineering, 2015, 6, 204173141558631.	5.5	29
22	A 3D ex vivo mandible slice system for longitudinal culturing of transplanted dental pulp progenitor cells. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2015, 87, 921-928.	1.5	7
23	Differential influence of fluoride concentration on the synthesis of bone matrix glycoproteins within mineralizing bone cellsin vitro. Acta Odontologica Scandinavica, 2014, 72, 1066-1069.	1.6	10
24	Quantification of clonal heterogeneity of mesenchymal progenitor cells in dental pulp and bone marrow. Connective Tissue Research, 2014, 55, 62-67.	2.3	23
25	Development of an Ex Vivo Coculture System to Model Pulpal Infection by Streptococcus anginosus Group Bacteria. Journal of Endodontics, 2013, 39, 49-56.	3.1	9
26	Differential cellular and microbial responses to nano-/micron-scale titanium surface roughness induced by hydrogen peroxide treatment. Journal of Biomaterials Applications, 2013, 28, 144-160.	2.4	12
27	A Novel Ex vivo Culture Model for Inflammatory Bone Destruction. Journal of Dental Research, 2013, 92, 728-734.	5.2	22
28	Impact of bidirectional relationships between streptococcus anginosus group and host tissue matrix components on cellular activity: role in establishment of infection. Microbiology Discovery, 2013, 1, 4.	0.7	0
29	In vivo monitoring of the bone healing process around different titanium alloy implant surfaces placed into fresh extraction sockets. Journal of Dentistry, 2012, 40, 338-346.	4.1	25
30	An ex vivo culture model for orthodontically induced root resorption. Journal of Dentistry, 2012, 40, 406-415.	4.1	14
31	Real-time monitoring of the adherence of Streptococcus anginosus group bacteria to extracellular matrix decorin and biglycan proteoglycans in biofilm formation. Research in Microbiology, 2012, 163, 436-447.	2.1	8
32	Is there anything to be gained by augmenting the implant surface?. Faculty Dental Journal, 2012, 3, 28-33.	0.2	1
33	Delayed osteoblast differentiation and altered inflammatory response around implants placed in incisor sockets of type 2 diabetic rats. Clinical Oral Implants Research, 2011, 22, 578-586.	4.5	53
34	Characterization of Oxidative Stress Status during Diabetic Bone Healing. Cells Tissues Organs, 2011, 194, 307-312.	2.3	19
35	TGF-beta1 Exposure from Bone Surfaces by Chemical Treatment Modalities. , 2011, 21, 193-201.		8
36	AnEx VivoRodent Mandible Culture Model for Bone Repair. Tissue Engineering - Part C: Methods, 2010, 16, 1287-1296.	2.1	27

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37	TGF-Î²/Extracellular Matrix Interactions in Dentin Matrix: A Role in Regulating Sequestration and Protection of Bioactivity. Calcified Tissue International, 2009, 85, 66-74.	3.1	72
38	Dental pulp stem cells: what, where, how?. International Journal of Paediatric Dentistry, 2009, 19, 61-70.	1.8	128
39	Isolation of Distinct Progenitor Stem Cell Populations from Dental Pulp. Cells Tissues Organs, 2009, 189, 268-274.	2.3	141
40	Lipopolysaccharide alters decorin and biglycan synthesis in rat alveolar bone osteoblasts: consequences for bone repair during periodontal disease. European Journal of Oral Sciences, 2008, 116, 207-216.	1.5	34
41	Identification of dentine sialoprotein in gingival crevicular fluid during physiological root resorption and orthodontic tooth movement. European Journal of Orthodontics, 2008, 30, 307-314.	2.4	35
42	Decorin Regulates Endothelial Cell Motility on Collagen I through Activation of Insulin-like Growth Factor I Receptor and Modulation of Î±2Î²1 Integrin Activity. Journal of Biological Chemistry, 2008, 283, 17406-17415.	3.4	93
43	Bespoke Human Hypertrophic Chondrocytic Cell Lines Provide the Osteoinductive Signals Required for Vascularized Bone Formation. Tissue Engineering, 2007, 13, 133-145.	4.6	7
44	Serum from Postmenopausal Women Directs Differentiation of Human Clonal Osteoprogenitor Cells from an Osteoblastic toward an Adipocytic Phenotype. Calcified Tissue International, 2007, 80, 233-243.	3.1	21
45	Substitution of bovine dentine sialoprotein with chondroitin sulfate glycosaminoglycan chains. European Journal of Oral Sciences, 2006, 114, 89-92.	1.5	14
46	Adsorption and interactions of dentine phosphoprotein with hydroxyapatite and collagen. European Journal of Oral Sciences, 2006, 114, 223-231.	1.5	33
47	Modulation of Collagen Fibrillogenesis by Dentinal Proteoglycans. Calcified Tissue International, 2005, 76, 127-135.	3.1	38
48	Extracellular matrix metabolites as potential biomarkers of disease activity in wound fluid: lessons learned from other inflammatory diseases?. British Journal of Dermatology, 2004, 150, 401-413.	1.5	100
49	Comparison of oxidative stress biomarker profiles between acute and chronic wound environments. Wound Repair and Regeneration, 2004, 12, 419-429.	3.0	115
50	Dentinal Proteoglycans Demonstrate an Increasing Order of Affinity for Hydroxyapatite Crystals During the Transition of Predentine to Dentine. Calcified Tissue International, 2004, 75, 197-204.	3.1	17
51	Fluoride-induced changes to proteoglycan structure synthesised within the dentineâ€“pulp complex in vitro. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2004, 1689, 142-151.	3.8	20
52	The Influence of Fluoride Exposure on Dentin Mineralization Using an in Vitro Organ Culture Model. Calcified Tissue International, 2003, 73, 470-475.	3.1	16
53	The influence of fluoride on the cellular morphology and synthetic activity of the rat dentineâ€“pulp complex in vitro. Archives of Oral Biology, 2003, 48, 39-46.	1.8	18
54	Odontoblast transport of sulphateâ€”the in vitro influence of fluoride. Archives of Oral Biology, 2003, 48, 377-387.	1.8	4

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55	Comparison of the antioxidant properties of wound dressing materialsâ€“carboxymethylcellulose, hyaluronan benzyl ester and hyaluronan, towards polymorphonuclear leukocyte-derived reactive oxygen species. Biomaterials, 2003, 24, 1549-1557.	11.4	89
56	Changing profiles of proteoglycans in the transition of predentine to dentine. Matrix Biology, 2003, 22, 153-161.	3.6	60
57	Identification of Proteinaceous Material in the Bone of the Dinosaur Iguanodon. Connective Tissue Research, 2003, 44, 41-46.	2.3	14
58	Altered Expression of Matrix Metalloproteinases Within Mineralizing Bone Cells In Vitro in the Presence of Fluoride. Connective Tissue Research, 2003, 44, 88-95.	2.3	22
59	Molecular Interaction of Recombinant Decorin and Biglycan with Type I Collagen Influences Crystal Growth. Connective Tissue Research, 2003, 44, 189-195.	2.3	47
60	Identification of Proteinaceous Material in the Bone of the Dinosaur Iguanodon. Connective Tissue Research, 2003, 44, 41-46.	2.3	4
61	Differential roles for small leucine-rich proteoglycans in bone formation. , 2003, 6, 12-21.		147
62	Hyaluronan and its Potential Role in Periodontal Healing. Dental Update, 2002, 29, 144-148.	0.2	57
63	The Interaction of Recombinant Decorin with Î±2HS-Glycoproteinâ€”Implications for Structural and Functional Investigations. Protein Expression and Purification, 2002, 25, 180-188.	1.3	7
64	Comparison of the antioxidant properties of HYAFFÂ®-11p75, AQUACELÂ® and hyaluronan towards reactive oxygen species in vitro. Biomaterials, 2002, 23, 2255-2264.	11.4	55
65	Interaction of bone proteoglycans and proteoglycan components with hydroxyapatite. Biochimica Et Biophysica Acta - General Subjects, 2001, 1568, 118-128.	2.4	37
66	Proteoglycans and Orthodontic Tooth Movement. Journal of Orthodontics, 2001, 28, 281-290.	1.0	45
67	Fluoride alters casein kinase II and alkaline phosphatase activity in vitro with potential implications for dentine mineralization. Archives of Oral Biology, 2001, 46, 343-351.	1.8	22
68	Proteoglycans in Dentinogenesis. Critical Reviews in Oral Biology and Medicine, 2001, 12, 331-349.	4.4	160
69	Connective tissue elements as diagnostic aids in periodontology. Periodontology 2000, 2000, 24, 193-214.	13.4	44
70	The Isolation and Detection of Non-Collagenous Proteins from the Compact Bone of the DinosaurIguanodon. Connective Tissue Research, 2000, 41, 249-259.	2.3	7
71	Periodontal Disease Mechanisms: Reactive oxygen species: a potential role in the pathogenesis of periodontal diseases. Oral Diseases, 2000, 6, 138-151.	3.0	325
72	Adsorption of glycosaminoglycans onto hydroxyapatite using chromatography. Biomaterials, 1999, 20, 309-314.	11.4	18

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73	Effect of environmental haemin upon the physiology and biochemistry ofPrevotella intermediaR78. Letters in Applied Microbiology, 1999, 29, 31-36.	2.2	5
74	Altered Phosphorylation of Rat Dentine Phosphoproteins by Fluoride In Vivo. Calcified Tissue International, 1999, 64, 234-238.	3.1	22
75	Immunochemical detection of the proteoglycans decorin and biglycan in human gingival crevicular fluid from sites of advanced periodontitis. Archives of Oral Biology, 1998, 43, 287-295.	1.8	20
76	Structural analysis of proteoglycans synthesized by mineralizing bone cells in vitro in the presence of fluoride. Matrix Biology, 1998, 17, 255-268.	3.6	34
77	The Modification of Alveolar Bone Proteoglycans by Reactive Oxygen SpeciesIn Vitro. Connective Tissue Research, 1998, 37, 13-28.	2.3	39
78	Calciumâ€•and hydroxyapatiteâ€‘binding properties of glucuronic acidâ€‘rich and iduronic acidâ€‘rich glycosaminoglycans and proteoglycans. European Journal of Oral Sciences, 1998, 106, 267-273.	1.5	47
79	Degradation of glycosaminoglycans by reactive oxygen species derived from stimulated polymorphonuclear leukocytes. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1997, 1362, 221-231.	3.8	130
80	A biochemical and immuno-electron microscopical analysis of chondroitin sulphate-rich proteoglycans in human alveolar bone. The Histochemical Journal, 1997, 29, 1-9.	0.6	45
81	Modification of the proteoglycans of rat incisor dentin ? predentin during in vivo fluorosis. European Journal of Oral Sciences, 1996, 104, 285-291.	1.5	18
82	Relationship of sulphated glycosaminoglycans in human gingival crevicular fluid with active periodontal disease. Journal of Periodontal Research, 1996, 31, 168-170.	2.7	14
83	Hydrolytic and depolymerising enzyme activity of Prevotella intermedia and Prevotella nigrescens. Oral Diseases, 1996, 2, 272-278.	3.0	21
84	The influence of fluoride on the adsorption of proteoglycans and glycosaminoglycans to hydroxyapatite. Calcified Tissue International, 1995, 56, 236-239.	3.1	12
85	The chemical modification of glycosaminoglycan structure by oxygen-derived species in vitro. Biochimica Et Biophysica Acta - General Subjects, 1995, 1244, 245-252.	2.4	68
86	Characterization of proteoglycan metabolites in human gingival crevicular fluid during orthodontic tooth movement. Archives of Oral Biology, 1994, 39, 361-368.	1.8	32
87	Changes in the composition of glycosaminoglycans during normal palatogenesis in the rat. Archives of Oral Biology, 1994, 39, 401-407.	1.8	27
88	The influence of fluoride on proteoglycan structure using a rat odontoblast in vitro system. Calcified Tissue International, 1993, 52, 392-398.	3.1	33
89	Structural characterization of human alveolar bone proteoglycans. Archives of Oral Biology, 1991, 36, 859-866.	1.8	50
90	Levels of glycosaminoglycans in peri-implant sulcus fluid as a means of monitoring bone response to endosseous dental implants. Clinical Oral Implants Research, 1991, 2, 179-185.	4.5	8

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91	Glycosaminoglycans of human alveolar bone. Archives of Oral Biology, 1989, 34, 587-589.	1.8	58
92	The Glycosaminoglycan Constituents of Alveolar and Basal Bone of the Rabbit. Connective Tissue Research, 1988, 17, 171-180.	2.3	38