Franklin R Tay

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4648019/publications.pdf

Version: 2024-02-01

276 papers

15,881 citations

65 h-index 22832 112 g-index

281 all docs

281 docs citations

times ranked

281

11264 citing authors

#	Article	IF	CITATIONS
1	Single-step adhesives are permeable membranes. Journal of Dentistry, 2002, 30, 371-382.	4.1	507
2	Quaternary ammonium-based biomedical materials: State-of-the-art, toxicological aspects and antimicrobial resistance. Progress in Polymer Science, 2017, 71, 53-90.	24.7	423
3	Metalâ€Based Nanomaterials in Biomedical Applications: Antimicrobial Activity and Cytotoxicity Aspects. Advanced Functional Materials, 2020, 30, 1910021.	14.9	404
4	Geometric Factors Affecting Dentin Bonding in Root Canals: A Theoretical Modeling Approach. Journal of Endodontics, 2005, 31, 584-589.	3.1	363
5	Monoblocks in Root Canals: A Hypothetical or a Tangible Goal. Journal of Endodontics, 2007, 33, 391-398.	3.1	349
6	Guided tissue remineralisation of partially demineralised human dentine. Biomaterials, 2008, 29, 1127-1137.	11.4	303
7	Effect of Vapor Lock on Root Canal Debridement by Using a Side-vented Needle for Positive-pressure Irrigant Delivery. Journal of Endodontics, 2010, 36, 745-750.	3.1	297
8	Dentin bonding systems: From dentin collagen structure to bond preservation and clinical applications. Dental Materials, 2018, 34, 78-96.	3.5	281
9	Role of Dentin MMPs in Caries Progression and Bond Stability. Journal of Dental Research, 2015, 94, 241-251.	5.2	275
10	Calcium Phosphate Phase Transformation Produced by the Interaction of the Portland Cement Component of White Mineral Trioxide Aggregate with a Phosphate-containing Fluid. Journal of Endodontics, 2007, 33, 1347-1351.	3.1	259
11	Water treeinga potential mechanism for degradation of dentin adhesives. American Journal of Dentistry, 2003, 16, 6-12.	0.1	258
12	Mechanisms of degradation of the hybrid layer in adhesive dentistry and therapeutic agents to improve bond durabilityâ€"A literature review. Dental Materials, 2016, 32, e41-e53.	3.5	254
13	Bonding of universal adhesives to dentine – Old wine in new bottles?. Journal of Dentistry, 2015, 43, 525-536.	4.1	247
14	Advances in Antimicrobial Microneedle Patches for Combating Infections. Advanced Materials, 2020, 32, e2002129.	21.0	237
15	Have dentin adhesives become too hydrophilic?. Journal of the Canadian Dental Association, 2003, 69, 726-31.	0.6	226
16	Collagen intrafibrillar mineralization as a result of the balance between osmotic equilibrium and electroneutrality. Nature Materials, 2017, 16, 370-378.	27.5	210
17	Novel Biomedical Applications of Crosslinked Collagen. Trends in Biotechnology, 2019, 37, 464-491.	9.3	192
18	Resin bonding to cervical sclerotic dentin: A review. Journal of Dentistry, 2004, 32, 173-196.	4.1	187

#	Article	IF	CITATIONS
19	How can nanoleakage occur in self-etching adhesive systems that demineralize and infiltrate simultaneously?. Journal of Adhesive Dentistry, 2002, 4, 255-69.	0.5	186
20	Adhesive performance of a multi-mode adhesive system: 1-Year in vitro study. Journal of Dentistry, 2014, 42, 603-612.	4.1	177
21	3D and 4D printing in dentistry and maxillofacial surgery: Printing techniques, materials, and applications. Acta Biomaterialia, 2021, 122, 26-49.	8.3	175
22	Considerations and Caveats in Combating ESKAPE Pathogens against Nosocomial Infections. Advanced Science, 2020, 7, 1901872.	11.2	173
23	Recent progress in the industrial and biomedical applications of tragacanth gum: A review. Carbohydrate Polymers, 2019, 212, 450-467.	10.2	172
24	Aging Affects Two Modes of Nanoleakage Expression in Bonded Dentin. Journal of Dental Research, 2003, 82, 537-541.	5.2	168
25	Single-bottle adhesives behave as permeable membranes after polymerization. I. In vivo evidence. Journal of Dentistry, 2004, 32, 611-621.	4.1	167
26	Ultrastructural Evaluation of the Apical Seal in Roots Filled with a Polycaprolactone-Based Root Canal Filling Material. Journal of Endodontics, 2005, 31, 514-519.	3.1	164
27	Advances in Dental Materials through Nanotechnology: Facts, Perspectives and Toxicological Aspects. Trends in Biotechnology, 2015, 33, 621-636.	9.3	159
28	Surface treatments on titanium implants via nanostructured ceria for antibacterial and anti-inflammatory capabilities. Acta Biomaterialia, 2019, 94, 627-643.	8.3	153
29	A review of the bioactivity of hydraulic calcium silicate cements. Journal of Dentistry, 2014, 42, 517-533.	4.1	152
30	Advancing antimicrobial strategies for managing oral biofilm infections. International Journal of Oral Science, 2019, 11, 28.	8.6	150
31	Biomimetic Remineralization of Resin-bonded Acid-etched dentin. Journal of Dental Research, 2009, 88, 719-724.	5.2	147
32	Polymeric and inorganic nanoscopical antimicrobial fillers in dentistry. Acta Biomaterialia, 2020, 101, 69-101.	8.3	143
33	Bonding BisGMA to Dentin—a Proof of Concept for Hydrophobic Dentin Bonding. Journal of Dental Research, 2007, 86, 1034-1039.	5.2	141
34	Self-Etching Adhesives Increase Collagenolytic Activity in Radicular Dentin. Journal of Endodontics, 2006, 32, 862-868.	3.1	138
35	Factors contributing to the incompatibility between simplified-step adhesives and chemically-cured or dual-cured composites. Part I. Single-step self-etching adhesive. Journal of Adhesive Dentistry, 2003, 5, 27-40.	0.5	137
36	Resin Permeation into Acid-conditioned, Moist, and Dry Dentin: A Paradigm using Water-free Adhesive Primers. Journal of Dental Research, 1996, 75, 1034-1044.	5.2	132

#	Article	IF	Citations
37	Metal-Based Nanostructures/PLGA Nanocomposites: Antimicrobial Activity, Cytotoxicity, and Their Biomedical Applications. ACS Applied Materials & Samp; Interfaces, 2020, 12, 3279-3300.	8.0	121
38	Vital pulp therapy: histopathology and histobacteriology-based guidelines to treat teeth with deep caries and pulp exposure. Journal of Dentistry, 2019, 86, 41-52.	4.1	120
39	An ultrastructural study of the influence of acidity of self-etching primers and smear layer thickness on bonding to intact dentin. Journal of Adhesive Dentistry, 2000, 2, 83-98.	0.5	119
40	Intrafibrillar silicified collagen scaffold modulates monocyte to promote cell homing, angiogenesis and bone regeneration. Biomaterials, 2017, 113, 203-216.	11.4	109
41	Biological Activities and Potential Oral Applications of N-Acetylcysteine: Progress and Prospects. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-14.	4.0	103
42	Susceptibility of a Polycaprolactone-Based Root Canal Filling Material to Degradation. I. Alkaline Hydrolysis. Journal of Endodontics, 2005, 31, 593-598.	3.1	101
43	Is hard tissue formation in the dental pulp after the death of the primary odontoblasts a regenerative or a reparative process?. Journal of Dentistry, 2014, 42, 1156-1170.	4.1	100
44	The past, present and future perspectives of matrix metalloproteinase inhibitors., 2020, 207, 107465.		99
45	Effect of smear layers on the bonding of a self-etching primer to dentin. Journal of Adhesive Dentistry, 2000, 2, 99-116.	0.5	96
46	Effect of delayed activation of light-cured resin composites on bonding of all-in-one adhesives. Journal of Adhesive Dentistry, 2001, 3, 207-25.	0.5	96
47	Ability of new obturation materials to improve the seal of the root canal system: A review. Acta Biomaterialia, 2014, 10, 1050-1063.	8.3	94
48	Carbodiimide Inactivation of MMPs and Effect on Dentin Bonding. Journal of Dental Research, 2014, 93, 263-268.	5.2	93
49	Comparison of resin bonding improvements to zirconia between one-bottle universal adhesives and tribochemical silica coating, which is better?. Dental Materials, 2016, 32, 403-411.	3.5	93
50	Potential applications of antimicrobial peptides and their mimics in combating caries and pulpal infections. Acta Biomaterialia, 2017, 49, 16-35.	8.3	91
51	Microbeâ€Mediated Extracellular and Intracellular Mineralization: Environmental, Industrial, and Biotechnological Applications. Advanced Materials, 2020, 32, e1907833.	21.0	91
52	Water treeing in simplified dentin adhesivesdéjà vu?. Operative Dentistry, 2005, 30, 561-79.	1.2	87
53	Cytotoxicity and osteogenic potential of silicate calcium cements as potential protective materials for pulpal revascularization. Dental Materials, 2015, 31, 1510-1522.	3.5	86
54	Defying ageing: An expectation for dentine bonding with universal adhesives?. Journal of Dentistry, 2016, 45, 43-52.	4.1	85

#	Article	IF	Citations
55	Antimicrobial gum bio-based nanocomposites and their industrial and biomedical applications. Chemical Communications, 2019, 55, 14871-14885.	4.1	84
56	Hierarchical Intrafibrillar Nanocarbonated Apatite Assembly Improves the Nanomechanics and Cytocompatibility of Mineralized Collagen. Advanced Functional Materials, 2013, 23, 1404-1411.	14.9	83
57	Bioactive tri/dicalcium silicate cements for treatment of pulpal and periapical tissues. Acta Biomaterialia, 2019, 96, 35-54.	8.3	82
58	Advances in Antimicrobial Organic and Inorganic Nanocompounds in Biomedicine. Advanced Therapeutics, 2020, 3, 2000024.	3.2	82
59	Complementarity and Uncertainty in Intrafibrillar Mineralization of Collagen. Advanced Functional Materials, 2016, 26, 6858-6875.	14.9	79
60	Contribution of biomimetic collagen-ligand interaction to intrafibrillar mineralization. Science Advances, 2019, 5, eaav9075.	10.3	79
61	Biomimetic remineralization as a progressive dehydration mechanism of collagen matrices – Implications in the aging of resin–dentin bonds. Acta Biomaterialia, 2010, 6, 3729-3739.	8.3	77
62	Distribution of nanofillers from a simplified-step adhesive in acid-conditioned dentin. Journal of Adhesive Dentistry, 1999, 1, 103-17.	0.5	72
63	Primum non nocere – The effects of sodium hypochlorite on dentin as used in endodontics. Acta Biomaterialia, 2017, 61, 144-156.	8.3	71
64	Dental adhesives of the future. Journal of Adhesive Dentistry, 2002, 4, 91-103.	0.5	70
65	Endocytosis of abiotic nanomaterials and nanobiovectors: Inhibition of membrane trafficking. Nano Today, 2021, 40, 101279.	11.9	69
66	Effectiveness of Resin-Coated Gutta-Percha Cones and a Dual-Cured, Hydrophilic Methacrylate Resin-Based Sealer in Obturating Root Canals. Journal of Endodontics, 2005, 31, 659-664.	3.1	68
67	Susceptibility of a Polycaprolactone-Based Root Canal Filling Material to Degradation. II. Gravimetric Evaluation of Enzymatic Hydrolysis. Journal of Endodontics, 2005, 31, 737-741.	3.1	66
68	Single-step, self-etch adhesives behave as permeable membranes after polymerization. Part II. Silver tracer penetration evidence. American Journal of Dentistry, 2004, 17, 315-22.	0.1	66
69	Can quaternary ammonium methacrylates inhibit matrix MMPs and cathepsins?. Dental Materials, 2015, 31, e25-e32.	3.5	65
70	Contribution of Mitophagy to Cellâ€Mediated Mineralization: Revisiting a 50â€Yearâ€Old Conundrum. Advanced Science, 2018, 5, 1800873.	11,2	65
71	Water distribution in dentin matrices: Bound vs. unbound water. Dental Materials, 2015, 31, 205-216.	3.5	63
72	The Glass-ionomer Phase in Resin-based Restorative Materials. Journal of Dental Research, 2001, 80, 1808-1812.	5. 2	60

#	Article	IF	Citations
73	Recent Advances in Stimulusâ€Responsive Nanocarriers for Gene Therapy. Advanced Science, 2021, 8, 2100540.	11.2	60
74	Cytotoxic aquatic pollutants and their removal by nanocomposite-based sorbents. Chemosphere, 2020, 258, 127324.	8.2	59
75	Osmotic Blistering in Enamel Bonded with One-step Self-etch Adhesives. Journal of Dental Research, 2004, 83, 290-295.	5.2	58
76	Coupling of 10-methacryloyloxydecyldihydrogenphosphate to tetragonal zirconia: Effect of pH reaction conditions on coordinate bonding. Dental Materials, 2015, 31, e218-e225.	3.5	58
77	Bondability of Resilon to a Methacrylate-Based Root Canal Sealer. Journal of Endodontics, 2006, 32, 133-137.	3.1	57
78	Importance of age on the dynamic mechanical behavior of intertubular and peritubular dentin. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 42, 229-242.	3.1	57
79	Antibacterial and remineralizing orthodontic adhesive containing quaternary ammonium resin monomer and amorphous calcium phosphate nanoparticles. Journal of Dentistry, 2018, 72, 53-63.	4.1	57
80	Pulpotomy for carious pulp exposures in permanent teeth: A systematic review and meta-analysis. Journal of Dentistry, 2019, 84, 1-8.	4.1	57
81	Tubular Occlusion Prevents Water-treeing and Through-and-Through Fluid Movement in a Single-bottle, One-step Self-etch Adhesive Model. Journal of Dental Research, 2005, 84, 891-896.	5.2	56
82	Paucity of Nanolayering in Resin-Dentin Interfaces of MDP-based Adhesives. Journal of Dental Research, 2016, 95, 380-387.	5.2	55
83	Single-step, self-etch adhesives behave as permeable membranes after polymerization. Part I. Bond strength and morphologic evidence. American Journal of Dentistry, 2004, 17, 271-8.	0.1	55
84	Potential latrogenic Tetracycline Staining of Endodontically Treated Teeth via NaOCl/MTAD Irrigation: A Preliminary Report. Journal of Endodontics, 2006, 32, 354-358.	3.1	54
85	Cross-linking effect on dentin bond strength and MMPs activity. Dental Materials, 2018, 34, 288-295.	3.5	51
86	Clinical/Translational Aspects of Advanced Glycation End-Products. Trends in Endocrinology and Metabolism, 2019, 30, 959-973.	7.1	51
87	Effect of different conditioning protocols on adhesion of a GIC to dentin. Journal of Adhesive Dentistry, 2001, 3, 153-67.	0.5	50
88	\hat{I}^2 2-adrenergic signal transduction plays a detrimental role in subchondral bone loss of temporomandibular joint in osteoarthritis. Scientific Reports, 2015, 5, 12593.	3.3	49
89	Effect of nanolayering of calcium salts of phosphoric acid ester monomers on the durability of resin-dentin bonds. Acta Biomaterialia, 2016, 38, 190-200.	8.3	49
90	Electroconductive multi-functional polypyrrole composites for biomedical applications. Applied Materials Today, 2021, 24, 101117.	4.3	49

#	Article	IF	CITATIONS
91	Effects of adsorbed and templated nanosilver in mesoporous calcium-silicate nanoparticles on inhibition of bacteria colonization of dentin. International Journal of Nanomedicine, 2014, 9, 5217.	6.7	48
92	Biphasic silica/apatite co-mineralized collagen scaffolds stimulate osteogenesis and inhibit RANKL-mediated osteoclastogenesis. Acta Biomaterialia, 2015, 19, 23-32.	8.3	48
93	Chitosan-Based Extrafibrillar Demineralization for Dentin Bonding. Journal of Dental Research, 2019, 98, 186-193.	5.2	48
94	Novel nanotechnology and near-infrared photodynamic therapy to kill periodontitis-related biofilm pathogens and protect the periodontium. Dental Materials, 2019, 35, 1665-1681.	3.5	46
95	Evaluation of several instrumentation techniques and irrigation methods on the percentage of untouched canal wall and accumulated dentine debris in Câ€shaped canals. International Endodontic Journal, 2019, 52, 1354-1365.	5.0	46
96	Advances in biogenically synthesized shaped metal- and carbon-based nanoarchitectures and their medicinal applications. Advances in Colloid and Interface Science, 2020, 283, 102236.	14.7	46
97	Bonding of a self-etching primer to non-carious cervical sclerotic dentin: interfacial ultrastructure and microtensile bond strength evaluation. Journal of Adhesive Dentistry, 2000, 2, 9-28.	0.5	46
98	Aggressiveness of self-etch adhesives on unground enamel. Operative Dentistry, 2004, 29, 309-16.	1.2	46
99	Synergistic mechanism of Ag+ \hat{a} e"Zn2+ in anti-bacterial activity against Enterococcus faecalis and its application against dentin infection. Journal of Nanobiotechnology, 2018, 16, 10.	9.1	45
100	MMP-8-Responsive Polyethylene Glycol Hydrogel for Intraoral Drug Delivery. Journal of Dental Research, 2019, 98, 564-571.	5.2	44
101	Involvement of prenucleation clusters in calcium phosphate mineralization of collagen. Acta Biomaterialia, 2021, 120, 213-223.	8.3	44
102	Biofabricated Nanostructures and Their Composites in Regenerative Medicine. ACS Applied Nano Materials, 2020, 3, 6210-6238.	5.0	43
103	Microporous, Demineralized Collagen Matrices in Intact Radicular Dentin Created by Commonly Used Calcium-depleting Endodontic Irrigants. Journal of Endodontics, 2007, 33, 1086-1090.	3.1	41
104	Micro–Computed Tomography Assessment ofÂApical Accessory Canal Morphologies. Journal of Endodontics, 2016, 42, 798-802.	3.1	40
105	Effect of a novel quaternary ammonium silane on dentin protease activities. Journal of Dentistry, 2017, 58, 19-27.	4.1	40
106	Novel root canal sealer with dimethylaminohexadecyl methacrylate, nano-silver and nano-calcium phosphate to kill bacteria inside root dentin and increase dentin hardness. Dental Materials, 2019, 35, 1479-1489.	3.5	40
107	Reduction in Antimicrobial Substantivity of MTAD After Initial Sodium Hypochlorite Irrigation. Journal of Endodontics, 2006, 32, 970-975.	3.1	39
108	Anti-biofilm efficacy of root canal irrigants against in-situ Enterococcus faecalis biofilms in root canals, isthmuses and dentinal tubules. Journal of Dentistry, 2018, 79, 68-76.	4.1	39

#	Article	IF	Citations
109	Optimizing resin-dentin bond stability using a bioactive adhesive with concomitant antibacterial properties and anti-proteolytic activities. Acta Biomaterialia, 2018, 75, 171-182.	8.3	39
110	Chlorhexidine preserves the hybrid layer in vitro after 10-years aging. Dental Materials, 2020, 36, 672-680.	3.5	38
111	Adhesive permeability affects composite coupling to dentin treated with a self-etch adhesive. Operative Dentistry, 2003, 28, 610-21.	1.2	38
112	The effects of water on degradation of the zirconia-resin bond. Journal of Dentistry, 2017, 64, 23-29.	4.1	37
113	Changes in the radicular pulp-dentine complex in healthy intact teeth and in response to deep caries or restorations: A histological and histobacteriological study. Journal of Dentistry, 2018, 73, 76-90.	4.1	36
114	Biological and synthetic template-directed syntheses of mineralized hybrid and inorganic materials. Progress in Materials Science, 2021, 116, 100712.	32.8	35
115	The overwet phenomenon: a scanning electron microscopic study of surface moisture in the acid-conditioned, resin-dentin interface. American Journal of Dentistry, 1996, 9, 109-14.	0.1	35
116	A Novel Dental Sealant Containing Dimethylaminohexadecyl Methacrylate Suppresses the Cariogenic Pathogenicity of Streptococcus mutans Biofilms. International Journal of Molecular Sciences, 2019, 20, 3491.	4.1	34
117	Biomimetic Intrafibrillar Mineralization of Type I Collagen with Intermediate Precursors-loaded Mesoporous Carriers. Scientific Reports, 2015, 5, 11199.	3.3	33
118	Activation of $\hat{l}\pm 2A$ -adrenergic signal transduction in chondrocytes promotes degenerative remodelling of temporomandibular joint. Scientific Reports, 2016, 6, 30085.	3.3	33
119	Evaluation of the smear layer removal and decalcification effect of QMix, maleic acid and EDTA on root canal dentine. Journal of Dentistry, 2016, 51, 62-68.	4.1	33
120	Extrafibrillar collagen demineralization-based chelate-and-rinse technique bridges the gap between wet and dry dentin bonding. Acta Biomaterialia, 2017, 57, 435-448.	8.3	33
121	Effect of a novel quaternary ammonium silane cavity disinfectant on durability of resin–dentine bond. Journal of Dentistry, 2017, 60, 77-86.	4.1	33
122	Antibacterial efficacy of an endodontic sonic-powered irrigation system: An in vitro study. Journal of Dentistry, 2018, 75, 105-112.	4.1	33
123	Smear Layer Removal Using Passive Ultrasonic Irrigation and Different Concentrations of Sodium Hypochlorite. Journal of Endodontics, 2020, 46, 1738-1744.	3.1	33
124	Nonspherical Metalâ€Based Nanoarchitectures: Synthesis and Impact of Size, Shape, and Composition on Their Biological Activity. Small, 2021, 17, e2007073.	10.0	33
125	Effect of flavonoids on the mechanical properties of demineralised dentine. Journal of Dentistry, 2014, 42, 1178-1184.	4.1	32
126	Bioactive low-shrinkage-stress nanocomposite suppresses S. mutans biofilm and preserves tooth dentin hardness. Acta Biomaterialia, 2020, 114, 146-157.	8.3	32

#	Article	IF	CITATIONS
127	On the durability of resin–dentin bonds: Identifying the weakest links. Dental Materials, 2015, 31, 1109-1118.	3 . 5	31
128	Efficacy of 3D conforming nickel titanium rotary instruments in eliminating canal wall bacteria from oval-shaped root canals. Journal of Dentistry, 2015, 43, 597-604.	4.1	31
129	Translation of a solution-based biomineralization concept into a carrier-based delivery system via the use of expanded-pore mesoporous silica. Acta Biomaterialia, 2016, 31, 378-387.	8.3	31
130	Substantivity of Carbodiimide Inhibition on Dentinal Enzyme Activity over Time. Journal of Dental Research, 2017, 96, 902-908.	5.2	31
131	Bimodal antibacterial system based on quaternary ammonium silane-coupled core-shell hollow mesoporous silica. Acta Biomaterialia, 2019, 85, 229-240.	8.3	31
132	Pathological calcification in osteoarthritis: an outcome or a disease initiator?. Biological Reviews, 2020, 95, 960-985.	10.4	31
133	Matrix stiffening by self-mineralizable guided bone regeneration. Acta Biomaterialia, 2021, 125, 112-125.	8.3	31
134	Water-dependent Interfacial Transition Zone in Resin-modified Glass-ionomer Cement/Dentin Interfaces. Journal of Dental Research, 2004, 83, 644-649.	5.2	30
135	Intrafibrillar-silicified collagen scaffolds enhance the osteogenic capacity of human dental pulp stem cells. Journal of Dentistry, 2014, 42, 839-849.	4.1	30
136	In Vitro Biocompatibility and Oxidative Stress Profiles of Different Hydraulic Calcium Silicate Cements. Journal of Endodontics, 2014, 40, 255-260.	3.1	30
137	Protein-repelling adhesive resin containing calcium phosphate nanoparticles with repeated ion-recharge and re-releases. Journal of Dentistry, 2018, 78, 91-99.	4.1	30
138	Antimicrobial activity of a quaternary ammonium methacryloxy silicate-containing acrylic resin: a randomised clinical trial. Scientific Reports, 2016, 6, 21882.	3.3	29
139	Micro-CT evaluation of apical delta morphologies in human teeth. Scientific Reports, 2016, 6, 36501.	3.3	29
140	Novel bioactive root canal sealer with antibiofilm and remineralization properties. Journal of Dentistry, 2019, 83, 67-76.	4.1	29
141	Inhibition of endogenous human dentin MMPs by Gluma. Dental Materials, 2014, 30, 752-758.	3.5	28
142	Cross-linked dry bonding: A new etch-and-rinse technique. Dental Materials, 2016, 32, 1124-1132.	3.5	27
143	Enamel remineralization via poly(amido amine) and adhesive resin containing calcium phosphate nanoparticles. Journal of Dentistry, 2020, 92, 103262.	4.1	27
144	Novel Bioactive and Therapeutic Root Canal Sealers with Antibacterial and Remineralization Properties. Materials, 2020, 13, 1096.	2.9	27

#	Article	IF	Citations
145	Ultrastructure of Intraradicular Dentin After Irrigation with BioPure MTAD. II. The Consequence of Obturation with an Epoxy Resin-Based Sealer. Journal of Endodontics, 2006, 32, 473-477.	3.1	26
146	Norepinephrine Regulates Condylar Bone Loss via Comorbid Factors. Journal of Dental Research, 2015, 94, 813-820.	5.2	26
147	No-waiting dentine self-etch concept—Merit or hype. Journal of Dentistry, 2017, 62, 54-63.	4.1	26
148	Self-healing adhesive with antibacterial activity in water-aging for 12 months. Dental Materials, 2019, 35, 1104-1116.	3.5	26
149	Histologic Response of Human Pulp and Periapical Tissues to Tricalcium Silicate–based Materials: A Series of Successfully Treated Cases. Journal of Endodontics, 2020, 46, 307-317.	3.1	26
150	Effect of chemical interaction on the bonding strengths of self-etching adhesives to deproteinised dentine. Journal of Dentistry, 2015, 43, 973-980.	4.1	25
151	Novel Coating of Surgical Suture Confers Antimicrobial Activity Against <i>Porphyromonas gingivalis</i> and <i>Enterococcus faecalis</i> Journal of Periodontology, 2015, 86, 788-794.	3.4	25
152	Chemical affinity of 10-methacryloyloxydecyl dihydrogen phosphate to dental zirconia: Effects of molecular structure and solvents. Dental Materials, 2017, 33, e415-e427.	3.5	25
153	Effect of benzalkonium chloride on dentin bond strength and endogenous enzymatic activity. Journal of Dentistry, 2019, 85, 25-32.	4.1	25
154	Development of a new class of self-healing and therapeutic dental resins. Polymer Degradation and Stability, 2019, 163, 87-99.	5.8	25
155	Multifunctional Nanomachinery for Enhancement of Bone Healing. Advanced Materials, 2022, 34, e2107924.	21.0	25
156	Water movement across bonded dentin - too much of a good thing. Journal of Applied Oral Science, 2004, 12, 12-25.	1.8	24
157	Zoledronate and Ion-releasing Resins Impair Dentin Collagen Degradation. Journal of Dental Research, 2014, 93, 999-1004.	5.2	24
158	Dipentaerythritol penta-acrylate phosphate - an alternative phosphate ester monomer for bonding of methacrylates to zirconia. Scientific Reports, 2016, 6, 39542.	3.3	24
159	Selective demineralisation of dentine extrafibrillar minerals—A potential method to eliminate water-wet bonding in the etch-and-rinse technique. Journal of Dentistry, 2016, 52, 55-62.	4.1	24
160	Polymer conjugation optimizes EDTA as a calcium-chelating agent that exclusively removes extrafibrillar minerals from mineralized collagen. Acta Biomaterialia, 2019, 90, 424-440.	8.3	24
161	Mechanical disruption of dentin collagen fibrils during resin-dentin bond testing. Journal of Adhesive Dentistry, 2000, 2, 175-92.	0.5	24
162	Polyphosphate-crosslinked collagen scaffolds for hemostasis and alveolar bone regeneration after tooth extraction. Bioactive Materials, 2022, 15, 68-81.	15.6	24

#	Article	IF	Citations
163	Hydrophilicity of dentin bonding systems influences in vitro Streptococcus mutans biofilm formation. Dental Materials, 2014, 30, 926-935.	3.5	23
164	Bioinspired Collagen-Apatite Nanocomposites for Bone Regeneration. Journal of Endodontics, 2016, 42, 1226-1232.	3.1	23
165	Investigation of ethanol infiltration into demineralized dentin collagen fibrils using molecular dynamics simulations. Acta Biomaterialia, 2016, 36, 175-185.	8.3	23
166	Biodegradable mesoporous delivery system for biomineralization precursors. International Journal of Nanomedicine, 2017, Volume 12, 839-854.	6.7	23
167	Isocyanate-terminated urethane-based dental adhesive bridges dentinal matrix collagen with adhesive resin. Acta Biomaterialia, 2019, 83, 140-152.	8.3	23
168	Novel multifunctional nanocomposite for root caries restorations to inhibit periodontitis-related pathogens. Journal of Dentistry, 2019, 81, 17-26.	4.1	23
169	In vitro evaluation of composite containing DMAHDM and calcium phosphate nanoparticles on recurrent caries inhibition at bovine enamel-restoration margins. Dental Materials, 2020, 36, 1343-1355.	3.5	23
170	Adopting the Principles of Collagen Biomineralization for Intrafibrillar Infiltration of Yttriaâ€stabilized Zirconia into Threeâ€Dimensional Collagen Scaffolds. Advanced Functional Materials, 2014, 24, 1895-1903.	14.9	22
171	InÂVitro Evaluation of Antibacterial Effect of AH Plus Incorporated with Quaternary Ammonium Epoxy Silicate against Enterococcus faecalis. Journal of Endodontics, 2014, 40, 1611-1615.	3.1	22
172	Effect of polyacrylic acid on dentin protease activities. Dental Materials, 2015, 31, 901-906.	3.5	22
173	Association between bruxism and symptomatic gastroesophageal reflux disease: A case-control study. Journal of Dentistry, 2018, 77, 51-58.	4.1	22
174	Pulp and dentine responses to selective caries excavation: A histological and histobacteriological human study. Journal of Dentistry, 2020, 100, 103430.	4.1	22
175	Macrophages enhance mesenchymal stem cell osteogenesis via down-regulation of reactive oxygen species. Journal of Dentistry, 2020, 94, 103297.	4.1	22
176	Effects of a Dicalcium and Tetracalcium Phosphate-Based Desensitizer on In Vitro Dentin Permeability. PLoS ONE, 2016, 11, e0158400.	2.5	22
177	Mechanism of bioactive molecular extraction from mineralized dentin by calcium hydroxide and tricalcium silicate cement. Dental Materials, 2018, 34, 317-330.	3.5	21
178	Experimental use of an acrolein-based primer as collagen cross-linker for dentine bonding. Journal of Dentistry, 2018, 68, 85-90.	4.1	21
179	Poly(amido amine) and rechargeable adhesive containing calcium phosphate nanoparticles for long-term dentin remineralization. Journal of Dentistry, 2019, 85, 47-56.	4.1	21
180	Water-associated attributes in the contemporary dentin bonding milieu. Journal of Dentistry, 2018, 74, 79-89.	4.1	20

#	Article	IF	Citations
181	Quaternary ammonium silane-based antibacterial and anti-proteolytic cavity cleanser. Dental Materials, 2018, 34, 1814-1827.	3.5	20
182	Effect of Chitosan as a Cross-Linker on Matrix Metalloproteinase Activity and Bond Stability with Different Adhesive Systems. Marine Drugs, 2020, 18, 263.	4.6	20
183	Effects of quaternary ammonium-methacrylates on the mechanical properties of unfilled resins. Dental Materials, 2014, 30, 1213-1223.	3.5	19
184	Synthesis of antimicrobial silsesquioxane–silica hybrids by hydrolytic co-condensation of alkoxysilanes. Polymer Chemistry, 2014, 5, 454-462.	3.9	18
185	Effect of carbodiimide on the fatigue crack growth resistance of resin–dentin bonds. Dental Materials, 2016, 32, 211-222.	3.5	18
186	On the stiffness of demineralized dentin matrices. Dental Materials, 2016, 32, 161-170.	3.5	18
187	Extracellular DNA: A Missing Link in the Pathogenesis of Ectopic Mineralization. Advanced Science, 2022, 9, e2103693.	11.2	18
188	Effects of a discoloration-resistant calcium aluminosilicate cement on the viability and proliferation of undifferentiated human dental pulp stem cells. Scientific Reports, 2015, 5, 17177.	3.3	17
189	Effects of Acid Treatment on Dental Zirconia: An In Vitro Study. PLoS ONE, 2015, 10, e0136263.	2.5	17
190	Occlusal loading and cross-linking effects on dentin collagen degradation in physiological conditions. Dental Materials, 2016, 32, 192-199.	3.5	17
191	Protection against HEMA-Induced Mitochondrial Injury <i>In Vitro</i> by Nrf2 Activation. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-13.	4.0	17
192	Simultaneous Regeneration of Bone and Nerves Through Materials and Architectural Design: Are We There Yet?. Advanced Functional Materials, 2020, 30, 2003542.	14.9	17
193	Effect of Matrix Metalloproteinase-inhibiting Solutions and Aging Methods on Dentin Bond Strength. Journal of Adhesive Dentistry, 2015, 17, 347-52.	0.5	17
194	Bonding of Resin Cement to Zirconia with High Pressure Primer Coating. PLoS ONE, 2014, 9, e101174.	2.5	16
195	Effect of carboidiimide on thermal denaturation temperature of dentin collagen. Dental Materials, 2016, 32, 492-498.	3.5	16
196	Effect of a oneâ€step selfâ€etch adhesive on endogenous dentin matrix metalloproteinases. European Journal of Oral Sciences, 2017, 125, 168-172.	1.5	16
197	Herpes Zoster Involving the Second Division ofÂthe Trigeminal Nerve: Case Report and LiteratureÂReview. Journal of Endodontics, 2017, 43, 1569-1573.	3.1	16
198	Zymography of Hybrid Layers Created Using Extrafibrillar Demineralization. Journal of Dental Research, 2018, 97, 409-415.	5.2	16

#	Article	IF	CITATIONS
199	Micro–computed Tomographic Evaluation of the Prevalence, Distribution, and Morphologic Features of Accessory Canals in Chinese Permanent Teeth. Journal of Endodontics, 2019, 45, 994-999.	3.1	16
200	Non-spherical nanostructures in nanomedicine: From noble metal nanorods to transition metal dichalcogenide nanosheets. Applied Materials Today, 2021, 24, 101107.	4.3	16
201	Autophagic LC3 ⁺ calcified extracellular vesicles initiate cartilage calcification in osteoarthritis. Science Advances, 2022, 8, eabn1556.	10.3	16
202	Quality of Obturation Achieved by a Non–gutta-percha–based Root Filling System in Single-rooted Canals. Journal of Endodontics, 2014, 40, 2003-2008.	3.1	15
203	Intrafibrillar silicified collagen scaffold promotes in-situ bone regeneration by activating the monocyte p38 signaling pathway. Acta Biomaterialia, 2018, 67, 354-365.	8.3	15
204	Associations among gastroesophageal reflux disease, mental disorders, sleep and chronic temporomandibular disorder: a caseâ€"control study. Cmaj, 2019, 191, E909-E915.	2.0	15
205	Isocyanate-terminated urethane-based methacrylate for in situ collagen scaffold modification. Materials Science and Engineering C, 2020, 112, 110902.	7.3	15
206	Upregulation of mitochondrial dynamics is responsible for osteogenic differentiation of mesenchymal stem cells cultured on self-mineralized collagen membranes. Acta Biomaterialia, 2021, 136, 137-146.	8.3	15
207	Bonding ability of 4-META self-etching primer used with 4-META/MMA-TBB resin to enamel and dentine: Primary vs permanent teeth. Journal of Dentistry, 2014, 42, 425-431.	4.1	14
208	Repair of composites: Effect of laser and different surface treatments. International Journal of Adhesion and Adhesives, 2015, 59, 1-6.	2.9	14
209	Revival of nitrogen-containing bisphosphonate-induced inhibition of osteoclastogenesis and osteoclast function by water-soluble microfibrous borate glass. Acta Biomaterialia, 2016, 31, 312-325.	8.3	14
210	The effects of ethanol on the size-exclusion characteristics of type I dentin collagen to adhesive resin monomers. Acta Biomaterialia, 2016, 33, 235-241.	8.3	14
211	Hollow mesoporous zirconia delivery system for biomineralization precursors. Acta Biomaterialia, 2018, 67, 366-377.	8.3	14
212	A potential therapeutic target for regulating osteoporosis via suppression of osteoclast differentiation. Journal of Dentistry, 2019, 82, 91-97.	4.1	14
213	Pit and fissure sealing. Bonding of bulk-cured, low-filled, light-curing resins to bacteria-contaminated uncut enamel in high c-factor cavities. American Journal of Dentistry, 2005, 18, 28-36.	0.1	14
214	Can long-term dentine bonding created in real life be forecasted by parameters established in the laboratory?. Scientific Reports, 2016, 6, 37799.	3.3	13
215	Effects of EDC crosslinking on the stiffness of dentin hybrid layers evaluated by nanoDMA over time. Dental Materials, 2017, 33, 904-914.	3.5	13
216	Release of ICTP and CTX telopeptides from demineralized dentin matrices: Effect of time, mass and surface area. Dental Materials, 2018, 34, 452-459.	3.5	13

#	Article	IF	Citations
217	Carbodiimide inactivation of matrix metalloproteinases in radicular dentine. Journal of Dentistry, 2019, 82, 56-62.	4.1	13
218	Susceptibility of a polycaprolactone-based root canal filling material to degradation. Evidence of biodegradation from a simulated field test. American Journal of Dentistry, 2007, 20, 365-9.	0.1	13
219	Susceptibility of contemporary single-bottle self-etch dentine adhesives to intrinsic water permeation. Journal of Dentistry, 2017, 66, 52-61.	4.1	12
220	Management of Large Radicular Lesions Using Decompression: A Case Series and Review of the Literature. Journal of Endodontics, 2019, 45, 651-659.	3.1	12
221	Comparison of the use of d-enantiomeric and l-enantiomeric antimicrobial peptides incorporated in a calcium-chelating irrigant against Enterococcus faecalis root canal wall biofilms. Journal of Dentistry, 2019, 91, 103231.	4.1	12
222	Mineralogenic characteristics of osteogenic lineage-committed human dental pulp stem cells following their exposure to a discoloration-free calcium aluminosilicate cement. Dental Materials, 2016, 32, 1235-1247.	3.5	11
223	Effects of smear layer removal agents on the physical properties and microstructure of mineral trioxide aggregate cement. Journal of Dentistry, 2017, 66, 32-36.	4.1	11
224	Novel antibacterial and therapeutic dental polymeric composites with the capability to self-heal cracks and regain mechanical properties. European Polymer Journal, 2020, 129, 109604.	5.4	11
225	Evaluation of a Collagen-Reactive Monomer with Advanced Bonding Durability. Journal of Dental Research, 2020, 99, 813-819.	5.2	11
226	Role of Chlorhexidine on Long-term Bond Strength of Self-adhesive Composite Cements to Intraradicular Dentin. Journal of Adhesive Dentistry, 2017, 19, 341-348.	0.5	11
227	Microfibrous borate bioactive glass dressing sequesters bone-bound bisphosphonate in the presence of simulated body fluid. Journal of Materials Chemistry B, 2015, 3, 959-963.	5.8	10
228	Effects of multiple firings on the low-temperature degradation of dental yttria-stabilized tetragonal zirconia. Journal of Prosthetic Dentistry, 2016, 115, 495-500.	2.8	10
229	Antimicrobial efficacy of an apical negative pressure root canal irrigation system against intracanal microorganisms. Journal of Dentistry, 2018, 72, 71-75.	4.1	10
230	Quaternary ammonium silane, calcium and phosphorus-loaded PLGA submicron particles against Enterococcus faecalis infection of teeth: An in vitro and in vivo study. Materials Science and Engineering C, 2020, 111, 110856.	7.3	10
231	Applications of Cryogenic Electron Microscopy in Biomineralization Research. Journal of Dental Research, 2022, 101, 505-514.	5.2	10
232	Improved secondary caries resistance via augmented pressure displacement of antibacterial adhesive. Scientific Reports, 2016, 6, 22269.	3.3	9
233	Effect of high-power-laser with and without graphite coating on bonding of resin cement to lithium disilicate ceramic. Scientific Reports, 2017, 7, 17422.	3.3	9
234	Biochemical and immunohistochemical identification of MMP-7 in human dentin. Journal of Dentistry, 2018, 79, 90-95.	4.1	9

#	Article	IF	CITATIONS
235	The effect of food medium on the wear behaviour of veneering porcelain: An in vitro study using the three-body abrasion mode. Journal of Dentistry, 2019, 83, 87-94.	4.1	9
236	Topical application of phenytoin or nifedipine-loaded PLGA microspheres promotes periodontal regeneration in vivo. Archives of Oral Biology, 2019, 97, 42-51.	1.8	9
237	Improving the wear performance of feldspathic veneering porcelain by ion-exchange strengthening. Journal of Dentistry, 2019, 90, 103210.	4.1	8
238	N-Acetyl Cysteine as a Novel Polymethyl Methacrylate Resin Component: Protection against Cell Apoptosis and Genotoxicity. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-12.	4.0	8
239	Oropharyngeal Secretion as Alternative for SARS-CoV-2 Detection. Journal of Dental Research, 2020, 99, 1199-1205.	5.2	8
240	In vitro Streptococcus mutans biofilm formation on surfaces of chlorhexidine-containing dentin bonding systems. International Journal of Adhesion and Adhesives, 2017, 75, 23-30.	2.9	7
241	Effect of Canal Anastomosis on Periapical Fluid Pressure Build-up during Needle Irrigation in Single Roots with Double Canals using a Polycarbonate Model. Scientific Reports, 2017, 7, 1582.	3.3	7
242	Micro-computed tomography evaluation of root canal filling quality with apical negative pressure. Journal of Dentistry, 2020, 100, 103431.	4.1	7
243	The Janus Nature of Nanohydroxyapatite in Tumor Progression. Advanced Functional Materials, 2022, 32, 2107599.	14.9	7
244	Differences in the microstructure and fatigue properties of dentine between residents of North and South America. Archives of Oral Biology, 2014, 59, 1001-1012.	1.8	6
245	Collagen Mineralization: Complementarity and Uncertainty in Intrafibrillar Mineralization of Collagen (Adv. Funct. Mater. 38/2016). Advanced Functional Materials, 2016, 26, 6850-6850.	14.9	6
246	Fatigue resistance of dentin bonds prepared with two- vs. three-step adhesives: Effect of carbodiimide. Dental Materials, 2017, 33, 1340-1350.	3.5	6
247	Influence of de/remineralization of enamel on the tensile bond strength of etch-and-rinse and self-etching adhesives. American Journal of Dentistry, 2016, 29, 289-293.	0.1	6
248	A mechanistic study of the interaction of water-soluble borate glass with apatite-bound heterocyclic nitrogen-containing bisphosphonates. Acta Biomaterialia, 2016, 31, 339-347.	8.3	5
249	Effect of simulated intraosseous sinusoidal pressure on NaOCl extrusion. Journal of Dentistry, 2018, 78, 46-50.	4.1	5
250	Insights into cathepsin-B activity in mature dentin matrix. Archives of Oral Biology, 2020, 117, 104830.	1.8	5
251	Indirect posterior restorations using a new chairside microhybrid resin composite system. Journal of Adhesive Dentistry, 2001, 3, 89-99.	0.5	5
252	A feasible method to eliminate nanoleakage in dentin hybrid layers. Journal of Adhesive Dentistry, 2014, 16, 429-34.	0.5	5

#	Article	IF	CITATIONS
253	Bioactivity of Mineral Trioxide Aggregate and Mechanism of Action. , 2014, , 61-85.		4
254	Caries-resistant bonding layer in dentin. Scientific Reports, 2016, 6, 32740.	3.3	3
255	In vivo and in vitro radiotherapy increased dentin enzymatic activity. Journal of Dentistry, 2020, 100, 103429.	4.1	3
256	Effect of intraoral mechanical stress application on the expression of a force-responsive prognostic marker associated with system disease progression. Journal of Dentistry, 2017, 57, 57-65.	4.1	2
257	Insights into the January 2020 Issue of the Journal of Endodontics. Journal of Endodontics, 2020, 46, 1-2.	3.1	2
258	Eskape Infection Control: Considerations and Caveats in Combating ESKAPE Pathogens against Nosocomial Infections (Adv. Sci. 1/2020). Advanced Science, 2020, 7, 2070004.	11.2	2
259	Insights into the May 2020 Issue of the Journal of Endodontics. Journal of Endodontics, 2020, 46, 561-562.	3.1	2
260	Air Entrapment in Demineralized Dentin Adversely Affects Bonding. Journal of Adhesive Dentistry, 2018, 20, 249-259.	0.5	2
261	Effect of passive ultrasonic irrigation on diffusion of hydroxyl ion through radicular dentine. Clinical Oral Investigations, 2016, 20, 247-252.	3.0	1
262	Guided Tissue Remineralization of Resin-Bonded Acid-Etched Dentin. Nature Precedings, 2008, , .	0.1	0
263	Cervical Sclerotic Dentin: Resin Bonding. , 2016, , 97-125.		0
264	Insights into the August 2019 Issue of the Journal of Endodontics. Journal of Endodontics, 2019, 45, 963-964.	3.1	0
265	Insights into the July 2019 Issue of the Journal of Endodontics. Journal of Endodontics, 2019, 45, 829-830.	3.1	0
266	Insights into the December 2019 Issue of the Journal of Endodontics. Journal of Endodontics, 2019, 45, 1433-1434.	3.1	0
267	Insights into the September 2019 Issue of the Journal of Endodontics. Journal of Endodontics, 2019, 45, 1087-1088.	3.1	0
268	Insights into the October 2019 Issue of the Journal of Endodontics. Journal of Endodontics, 2019, 45, 1173-1174.	3.1	0
269	Insights into the November 2019 Issue of the Journal of Endodontics. Journal of Endodontics, 2019, 45, 1277-1278.	3.1	0
270	Insights into the April 2020 Issue of the Journal of Endodontics. Journal of Endodontics, 2020, 46, 453-454.	3.1	0

#	Article	IF	CITATIONS
271	Insights into the August 2020 Issue of the JOE. Journal of Endodontics, 2020, 46, 1015-1016.	3.1	O
272	Insights into the September 2020 Issue of the Journal of Endodontics. Journal of Endodontics, 2020, 46, 1165-1166.	3.1	0
273	Insights into the June 2020 Issue of the JOE. Journal of Endodontics, 2020, 46, 705-706.	3.1	O
274	Insights into the July 2020 Issue of the Journal of Endodontics. Journal of Endodontics, 2020, 46, 907-908.	3.1	0
275	Insights into the March 2020 Issue of the Journal of Endodontics. Journal of Endodontics, 2020, 46, 343-344.	3.1	O
276	Insights into the February 2020 Issue of the Journal of Endodontics. Journal of Endodontics, 2020, 46, 147-148.	3.1	O