Roberto Ruggiero Braga

List of Publications by Year
in descending order

116	6,285	61945	74108
papers	citations	43 h-index	75 g-index

116	116	116	3671
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Factors involved in the development of polymerization shrinkage stress in resin-composites: A systematic review. Dental Materials, 2005, 21, 962-970.	1.6	535
2	Adhesion to tooth structure: A critical review of â€œmacroâ€•test methods. Dental Materials, 2010, 26, e38-e49.	1.6	268
3	Monomers used in resin composites: degree of conversion, mechanical properties and water sorption/solubility. Brazilian Dental Journal, 2012, 23, 508-514.	0.5	255
4	Monomer conversion, microhardness, internal marginal adaptation, and shrinkage stress of bulk-fill resin composites. Dental Materials, 2015, 31, 1542-1551.	1.6	203
5	Polymerization stress, shrinkage and elastic modulus of current low-shrinkage restorative composites. Dental Materials, 2010, 26, 1144-1150.	1.6	193
6	Mechanical properties of resin cements with different activation modes. Journal of Oral Rehabilitation, 2002, 29, 257-262.	1.3	187
7	A<scp>lternatives in</scp> P<scp>olymerization</scp> C<scp>ontraction</scp> S<scp>tress</scp> M<scp>anagement</scp>. Critical Reviews in Oral Biology and Medicine, 2004, 15, 176-184.	4.4	181
8	Influence of BisGMA, TEGDMA, and BisEMA contents on viscosity, conversion, and flexural strength of experimental resins and composites. European Journal of Oral Sciences, 2009, 117, 442-446.	0.7	152
9	Contraction stress of flowable composite materials and their efficacy as stress-relieving layers. Journal of the American Dental Association, 2003, 134, 721-728.	0.7	145
10	BisGMA/TEGDMA ratio and filler content effects on shrinkage stress. Dental Materials, 2011, 27, 520-526.	1.6	137
11	Polymerization contraction stress of low-shrinkage composites and its correlation with microleakage in class V restorations. Journal of Dentistry, 2004, 32, 407-412.	1.7	135
12	Ethanol Wet-bonding Challenges Current Anti-degradation Strategy. Journal of Dental Research, 2010, 89, 1499-1504.	2.5	134
13	Sorption, solubility, shrinkage and mechanical properties of â€œlow-shrinkageâ€•commercial resin composites. Dental Materials, 2013, 29, 398-404.	1.6	132
14	Evaluation of micro-tensile, shear and tensile tests determining the bond strength of three adhesive systems. Dental Materials, 1998, 14, 394-398.	1.6	121
15	Influence of cavity dimensions and their derivatives (volume and â€˜Câ€™ factor) on shrinkage stress development and microleakage of composite restorations. Dental Materials, 2006, 22, 818-823.	1.6	116
16	Contraction stress related to composite inorganic content. Dental Materials, 2010, 26, 704-709.	1.6	112
17	Characterization of dimethacrylate polymeric networks: A study of the crosslinked structure formed by monomers used in dental composites. European Polymer Journal, 2011, 47, 162-170.	2.6	102
18	Polymerization contraction stress in dual-cure cements and its effect on interfacial integrity of bonded inlays. Journal of Dentistry, 2002, 30, 333-340.	1.7	99

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19	Correlation between clinical performance and degree of conversion of resin cements: a literature review. Journal of Applied Oral Science, 2015, 23, 358-368.	0.7	97
20	One-year stability of resinâ€“dentin bonds created with a hydrophobic ethanol-wet bonding technique. Dental Materials, 2010, 26, 380-386.	1.6	94
21	Influence of radiant exposure on contraction stress, degree of conversion and mechanical properties of resin composites. Dental Materials, 2006, 22, 799-803.	1.6	92
22	Do Low-shrink Composites Reduce Polymerization Shrinkage Effects?. Journal of Dental Research, 2011, 90, 596-601.	2.5	86
23	Influence of matrix composition on polymerization stress development of experimental composites. Dental Materials, 2010, 26, 697-703.	1.6	83
24	Degree of conversion and mechanical properties of a BisGMA:TEGDMA composite as a function of the applied radiant exposure. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 503-509.	1.6	79
25	Influence of photoactivation method on conversion, mechanical properties, degradation in ethanol and contraction stress of resin-based materials. Journal of Dentistry, 2005, 33, 773-779.	1.7	76
26	Contraction Stress Determinants in Dimethacrylate Composites. Journal of Dental Research, 2008, 87, 367-371.	2.5	76
27	Relationship between contraction stress and degree of conversion in restorative composites. Dental Materials, 2004, 20, 939-946.	1.6	74
28	Ion release and mechanical properties of calcium silicate and calcium hydroxide materials used for pulp capping. International Endodontic Journal, 2015, 48, 89-94.	2.3	70
29	Influence of shade and storage time on the flexural strength, flexural modulus, and hardness of composites used for indirect restorations. Journal of Prosthetic Dentistry, 2001, 86, 289-296.	1.1	69
30	Calcium phosphates as ion-releasing fillers in restorative resin-based materials. Dental Materials, 2019, 35, 3-14.	1.6	67
31	Factors Affecting Photopolymerization Stress in Dental Composites. Journal of Dental Research, 2008, 87, 1043-1047.	2.5	62
32	A comparative study of bulk-fill composites: degree of conversion, post-gel shrinkage and cytotoxicity. Brazilian Oral Research, 2018, 32, e17.	0.6	61
33	Mechanical properties and ion release from bioactive restorative composites containing glass fillers and calcium phosphate nano-structured particles. Dental Materials, 2015, 31, 726-733.	1.6	59
34	Effect of light curing units on the polymerization of bulk fill resin-based composites. Dental Materials, 2018, 34, 1211-1221.	1.6	56
35	Effect of metal primers on microtensile bond strength between zirconia and resin cements. Journal of Prosthetic Dentistry, 2011, 105, 296-303.	1.1	55
36	Composite Depth of Cure Obtained with QTH and LED Units Assessed by Microhardness and Micro-Raman Spectroscopy. Operative Dentistry, 2007, 32, 79-83.	0.6	54

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37	Influence of irradiant energy on degree of conversion, polymerization rate and shrinkage stress in an experimental resin composite system. Dental Materials, 2008, 24, 1164-1168.	1.6	52
38	Trends in restorative composites research: what is in the future?. Brazilian Oral Research, 2017, 31, e55.	0.6	52
39	Antibacterial resin-based composite containing chlorhexidine for dental applications. Dental Materials, 2019, 35, 909-918.	1.6	52
40	Composite shrinkage stress as a function of specimen dimensions and compliance of the testing system. Dental Materials, 2007, 23, 204-210.	1.6	48
41	Effect of Immediate or Delayed Light Activation on Curing Kinetics and Shrinkage Stress of Dual-Cure Resin Cements. Operative Dentistry, 2011, 36, 196-204.	0.6	48
42	A critical view on biaxial and short-beam uniaxial flexural strength tests applied to resin composites using Weibull, fractographic and finite element analyses. Dental Materials, 2010, 26, 83-90.	1.6	47
43	Contraction stress related to degree of conversion and reaction kinetics. Journal of Dental Research, 2002, 81, 114-8.	2.5	46
44	Effect of temperature on composite polymerization stress and degree of conversion. Dental Materials, 2014, 30, 613-618.	1.6	45
45	Bis-GMA co-polymerizations: Influence on conversion, flexural properties, fracture toughness and susceptibility to ethanol degradation of experimental composites. Dental Materials, 2009, 25, 1136-1141.	1.6	43
46	Vertical Root Fracture in Upper Premolars with Endodontic Posts: Finite Element Analysis. Journal of Endodontics, 2009, 35, 117-120.	1.4	43
47	Improved polymerization efficiency of methacrylate-based cements containing an iodonium salt. Dental Materials, 2013, 29, 1251-1255.	1.6	42
48	Influence of time and adhesive system on the extrusion shear strength between feldspathic porcelain and bovine dentin. Dental Materials, 2000, 16, 303-310.	1.6	40
49	Pilot study on the early shear strength of porcelain-dentin bonding using dual-cure cements. Journal of Prosthetic Dentistry, 1999, 81, 285-289.	1.1	36
50	Fiber post cementation strategies: effect of mechanical cycling on push-out bond strength and cement polymerization stress. Journal of Adhesive Dentistry, 2012, 14, 471-8.	0.3	35
51	Tailoring of physical properties in highly filled experimental nanohybrid resin composites. Dental Materials, 2011, 27, 664-669.	1.6	34
52	Bioactive composites containing TEGDMA-functionalized calcium phosphate particles: Degree of conversion, fracture strength and ion release evaluation. Dental Materials, 2016, 32, e374-e381.	1.6	34
53	Polymerization stress of resin composites as a function of system compliance. Dental Materials, 2008, 24, 645-652.	1.6	33
54	Pulse-delay Curing: Influence of Initial Irradiance and Delay Time on Shrinkage Stress and Microhardness of Restorative Composites. Operative Dentistry, 2006, 31, 610-615.	0.6	32

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55	Effect of diphenyliodonium hexafluorophosphate on the physical and chemical properties of ethanolic solvated resins containing camphorquinone and 1-phenyl-1,2-propanedione sensitizers as initiators. Dental Materials, 2016, 32, 756-764.	1.6	32
56	Development of novel dental restorative composites with dibasic calcium phosphate loaded chitosan fillers. Dental Materials, 2020, 36, 551-559.	1.6	32
57	Understanding Contradictory Data in Contraction Stress Tests. Journal of Dental Research, 2011, 90, 365-370.	2.5	31
58	A comparative study between crack analysis and a mechanical test for assessing the polymerization stress of restorative composites. Dental Materials, 2012, 28, 632-641.	1.6	31
59	Subcritical crack growth and in vitro lifetime prediction of resin composites with different filler distributions. Dental Materials, 2012, 28, 985-995.	1.6	30
60	Fracture toughness and cyclic fatigue resistance of resin composites with different filler size distributions. Dental Materials, 2014, 30, 742-751.	1.6	30
61	Characterization of Water Sorption, Solubility, and Roughness of Silorane- and Methacrylate-based Composite Resins. Operative Dentistry, 2014, 39, 264-272.	0.6	29
62	The use of bioactive particles and biomimetic analogues for increasing the longevity of resin-dentin interfaces: A literature review. Dental Materials Journal, 2020, 39, 62-68.	0.8	29
63	Influence of the bonding substrate in dental composite polymerization stress testing. Acta Biomaterialia, 2010, 6, 547-551.	4.1	28
64	A comparative evaluation of polymerization stress data obtained with four different mechanical testing systems. Dental Materials, 2012, 28, 680-686.	1.6	28
65	Calcium phosphate nanoparticles functionalized with a dimethacrylate monomer. Materials Science and Engineering C, 2014, 45, 122-126.	3.8	28
66	Calcium and phosphate release from resinâ€based materials containing different calcium orthophosphate nanoparticles. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 1670-1678.	1.6	28
67	Effect of Curing Light and Exposure Time on the Polymerization of Bulk-Fill Resin-Based Composites in Molar Teeth. Operative Dentistry, 2020, 45, E141-E155.	0.6	28
68	Polymerization stress, flow and dentine bond strength of two resinâ€based root canal sealers. International Endodontic Journal, 2009, 42, 867-873.	2.3	27
69	Mapping camphorquinone consumption, conversion and mechanical properties in methacrylates with systematically varied CQ/amine compositions. Dental Materials, 2014, 30, 1274-1279.	1.6	27
70	Mechanical characterization and ion release of bioactive dental composites containing calcium phosphate particles. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 84, 161-167.	1.5	27
71	In Vitro Wear Simulation Measurements of Composite versus Resin-Modified Glass Ionomer Luting Cements for All-Ceramic Restorations. Journal of Esthetic and Restorative Dentistry, 2002, 14, 368-376.	1.8	25
72	Experimental and FE displacement and polymerization stress of bonded restorations as a function of the C-Factor, volume and substrate stiffness. Journal of Dentistry, 2014, 42, 140-148.	1.7	25

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73	Photoinitiator content in restorative composites: influence on degree of conversion, reaction kinetics, volumetric shrinkage and polymerization stress. American Journal of Dentistry, 2009, 22, 206-10.	0.1	24
74	Alternatives in polymerization contraction stress management. Journal of Applied Oral Science, 2004, 12, 1-11.	0.7	23
75	Streptococcus mutans adherence and biofilm formation on experimental composites containing dicalcium phosphate dihydrate nanoparticles. Journal of Materials Science: Materials in Medicine, 2017, 28, 108.	1.7	23
76	Ion-releasing dental restorative composites containing functionalized brushite nanoparticles for improved mechanical strength. Dental Materials, 2018, 34, 746-755.	1.6	23
77	Correlation between polymerization stress and interfacial integrity of composites restorations assessed by different in vitro tests. Dental Materials, 2014, 30, 984-992.	1.6	21
78	Effect of immediate and delayed light activation on the mechanical properties and degree of conversion in dual-cured resin cements. Journal of Oral Science, 2012, 54, 261-266.	0.7	20
79	Microâ€‹scp›CT‹/scp› evaluation of calcium hydroxide removal through passive ultrasonic irrigation associated with or without an additional instrument. International Endodontic Journal, 2015, 48, 768-773.	2.3	20
80	In vitro remineralization of artificial enamel caries with resin composites containing calcium phosphate particles. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 1542-1550.	1.6	20
81	Influence of polymeric matrix on the physical and chemical properties of experimental composites. Brazilian Oral Research, 2015, 29, S1806-83242015000100307.	0.6	19
82	Composite polymerization stress as a function of specimen configuration assessed by crack analysis and finite element analysis. Dental Materials, 2013, 29, 1026-1033.	1.6	18
83	Replacement of glass particles by multidirectional short glass fibers in experimental composites: Effects on degree of conversion, mechanical properties and polymerization shrinkage. Dental Materials, 2016, 32, e204-e210.	1.6	18
84	Influence of the base and diluent monomer on network characteristics and mechanical properties of neat resin and composite materials. Odontology / the Society of the Nippon Dental University, 2015, 103, 160-168.	0.9	17
85	Synthesis and characterization of silver phosphate/calcium phosphate mixed particles capable of silver nanoparticle formation by photoreduction. Materials Science and Engineering C, 2017, 76, 464-471.	3.8	17
86	Compatibility of dental adhesives and dual-cure cements. American Journal of Dentistry, 2003, 16, 235-8.	0.1	17
87	Evaluation of flexural modulus, flexural strength and degree of conversion in BISGMA/TEGDMA resin filled with montmorillonite nanoparticles. Journal of Composite Materials, 2017, 51, 927-937.	1.2	16
88	Polymer-based material containing calcium phosphate particles functionalized with a dimethacrylate monomer for use in restorative dentistry. Journal of Biomaterials Applications, 2017, 31, 871-877.	1.2	16
89	Polymerization stress related to radiant exposure and its effect on microleakage of composite restorations. Journal of Dentistry, 2007, 35, 946-952.	1.7	15
90	Influence of curing light attenuation caused by aesthetic indirect restorative materials on resin cement polymerization. European Journal of Dentistry, 2010, 4, 314-23.	0.8	14

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91	Influence of local factors on composite shrinkage stress development--a finite element analysis. Journal of Adhesive Dentistry, 2007, 9, 499-503.	0.3	14
92	Effect of photoactivation protocol and radiant exposure on monomer conversion and flexural strength of a resin composite after water and ethanol storage. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 82B, 89-92.	1.6	13
93	Tensile bond strength of filled and unfilled adhesives to dentin. American Journal of Dentistry, 2000, 13, 73-6.	0.1	13
94	Effect of diphenyliodonium hexafluorophosphate salt on experimental infiltrants containing different diluents. Odontology / the Society of the Nippon Dental University, 2019, 107, 202-208.	0.9	12
95	Influence of specimen dimensions and their derivatives (C-factor and volume) on polymerization stress determined in a high compliance testing system. Dental Materials, 2013, 29, 1034-1039.	1.6	10
96	Development of calcium phosphate/ethylene glycol dimethacrylate particles for dental applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 708-715.	1.6	10
97	Shrinkage stress and mechanical properties of photoactivated composite resin using the argon ion laser. Applied Physics B: Lasers and Optics, 2009, 96, 79-84.	1.1	9
98	Effect of calcium orthophosphate: Reinforcing glass ratio and prolonged water storage on flexural properties of remineralizing composites. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103637.	1.5	9
99	How far do calcium release measurements properly reflect its multiple roles in dental tissue mineralization?. Clinical Oral Investigations, 2019, 23, 501-501.	1.4	8
100	Effect of Temperature and pH on Calcium Phosphate Precipitation. Crystal Research and Technology, 2021, 56, 2100094.	0.6	8
101	Influence of the base and diluent methacrylate monomers on the polymerization stress and its determinants. Journal of Applied Polymer Science, 2012, 123, 2985-2991.	1.3	7
102	Polymerization stress of experimental composites containing random short glass fibers. Dental Materials, 2016, 32, 1079-1084.	1.6	7
103	Physicochemical properties of dental resins formulated with amine-free photoinitiation systems. Dental Materials, 2021, 37, 1358-1365.	1.6	7
104	Development of brushite particles synthesized in the presence of acidic monomers for dental applications. Materials Science and Engineering C, 2020, 116, 111178.	3.8	5
105	Current Developments on Enamel and Dentin Remineralization. Current Oral Health Reports, 2019, 6, 257-263.	0.5	4
106	Effect of temperature and reactant concentration on calcium phosphate precipitation. Journal of Crystal Growth, 2020, 552, 125909.	0.7	3
107	Experimental dentin adhesives containing calcium orthophosphate particles: Effect on dentin bond strength, micro-permeability and collagen degradation. International Journal of Adhesion and Adhesives, 2021, 107, 102828.	1.4	3
108	Effects of the crosslinking of chitosan/DCPA particles in the antimicrobial and mechanical properties of dental restorative composites. Dental Materials, 2022, 38, 1482-1491.	1.6	3

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109	Effect of Bioactive Composites on Microhardness of Enamel Exposed to Carious Challenge. European journal of prosthodontics and restorative dentistry, The, 2018, 26, 122-128.	0.3	2
110	Multifunctional Restorative Dental Materials: Remineralization and Antibacterial Effect. , 2021, , 115-126.		1
111	Polymerization shrinkage stress, internal adaptation, and dentin bond strength of bulk-fill restorative materials. International Journal of Adhesion and Adhesives, 2021, 111, 102964.	1.4	1
112	Influence of the calcium orthophosphate:glass ratio and calcium orthophosphate functionalization on the degree of conversion and mechanical properties of resinâ€based composites. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2023, 111, 95-102.	1.6	1
113	Development of Polymerization Contraction Stresses in Resin-Based Composites. From Biomaterials Towards Medical Devices, 2018, , 335-369.	0.0	0
114	Mechanical properties and surface roughness of polymer-based materials containing DCPD particles. Brazilian Oral Research, 2020, 34, e095.	0.6	0
115	Antimicrobial activity and physicochemical performance of a modified endodontic sealer. Research, Society and Development, 2020, 9, e069119401.	0.0	0
116	Influence of different concentrations of an iodonium salt on properties of amine-free resins. Dental Materials, 2022, , .	1.6	0