

# Paulo Francisco Cesar

## List of Publications by Year in descending order

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137  
papers

3,996  
citations

136950

32  
h-index

138484

58  
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140  
all docs

140  
docs citations

140  
times ranked

2867  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct comparison of the bond strength results of the different test methods: A critical literature review. Dental Materials, 2010, 26, e78-e93.	3.5	348
2	Mechanical properties of resin cements with different activation modes. Journal of Oral Rehabilitation, 2002, 29, 257-262.	3.0	187
3	Dental ceramics: a review of new materials and processing methods. Brazilian Oral Research, 2017, 31, e58.	1.4	162
4	Microstructure characterization and SCG of newly engineered dental ceramics. Dental Materials, 2016, 32, 870-878.	3.5	150
5	Slow crack growth and reliability of dental ceramics. Dental Materials, 2011, 27, 394-406.	3.5	135
6	ADM guidance—Ceramics: guidance to the use of fractography in failure analysis of brittle materials. Dental Materials, 2017, 33, 599-620.	3.5	133
7	The potential of novel primers and universal adhesives to bond to zirconia. Journal of Dentistry, 2014, 42, 90-98.	4.1	129
8	Flexural strength and failure modes of layered ceramic structures. Dental Materials, 2011, 27, 1259-1266.	3.5	124
9	Adaptation of all-ceramic fixed partial dentures. Dental Materials, 2011, 27, 1119-1126.	3.5	118
10	ADM guidance-ceramics: Fatigue principles and testing. Dental Materials, 2017, 33, 1192-1204.	3.5	111
11	Correlation between clinical performance and degree of conversion of resin cements: a literature review. Journal of Applied Oral Science, 2015, 23, 358-368.	1.8	97
12	Recent advances in understanding the fatigue and wear behavior of dental composites and ceramics. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 504-533.	3.1	94
13	Effect of the microstructure on the lifetime of dental ceramics. Dental Materials, 2011, 27, 710-721.	3.5	80
14	Correlation between fracture toughness and leucite content in dental porcelains. Journal of Dentistry, 2005, 33, 721-729.	4.1	76
15	ADM guidance—Ceramics: Fracture toughness testing and method selection. Dental Materials, 2017, 33, 575-584.	3.5	76
16	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.	2.8	69
17	Effect of low-temperature aging on the mechanical behavior of ground Y-TZP. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 45, 183-192.	3.1	61
18	Porosity dependence of elastic constants in aluminum nitride ceramics. Materials Research, 2007, 10, 127-133.	1.3	59

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19	Effect of grinding with diamond-disc and -bur on the mechanical behavior of a Y-TZP ceramic. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 37, 133-140.	3.1	55
20	Effect of Temperature on the Degree of Conversion and Working Time of Dual-Cured Resin Cements Exposed to Different Curing Conditions. Operative Dentistry, 2012, 37, 370-379.	1.2	48
21	Influence of pH on slow crack growth of dental porcelains. Dental Materials, 2008, 24, 814-823.	3.5	47
22	Influence of leucite content on slow crack growth of dental porcelains. Dental Materials, 2008, 24, 1114-1122.	3.5	43
23	A critical evaluation of bond strength tests for the assessment of bonding to Y-TZP. Dental Materials, 2015, 31, 648-656.	3.5	43
24	Fatigue behavior of Y-TZP ceramic after surface treatments. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 57, 149-156.	3.1	43
25	Subcritical crack growth in porcelains, glass-ceramics, and glass-infiltrated alumina composite for dental restorations. Journal of Materials Science: Materials in Medicine, 2009, 20, 1017-24.	3.6	42
26	Influence of the Finishing Technique on Surface Roughness of Dental Porcelains with Different Microstructures. Operative Dentistry, 2006, 31, 577-583.	1.2	40
27	Residual stresses in Y-TZP crowns due to changes in the thermal contraction coefficient of veneers. Dental Materials, 2013, 29, 594-601.	3.5	40
28	Evaluation of the adaptation of zirconia-based fixed partial dentures using micro-CT technology. Brazilian Oral Research, 2013, 27, 396-402.	1.4	39
29	Relationship between fracture toughness and flexural strength in dental porcelains. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 78B, 265-273.	3.4	37
30	ADM guidance-Ceramics: all-ceramic multilayer interfaces in dentistry. Dental Materials, 2017, 33, 585-598.	3.5	37
31	Fracture Toughness of Dental Porcelains Evaluated by IF, SCF, and SEPB Methods. Journal of the American Ceramic Society, 2005, 88, 1680-1683.	3.8	36
32	Mechanical properties and porosity of dental glass-ceramics hot-pressed at different temperatures. Materials Research, 2008, 11, 301-306.	1.3	33
33	Effect of ion exchange on strength and slow crack growth of a dental porcelain. Dental Materials, 2009, 25, 736-743.	3.5	33
34	Adhesion behavior of conventional and high- $\alpha$ -translucent zirconia: Effect of surface conditioning methods and aging using an experimental methodology. Journal of Esthetic and Restorative Dentistry, 2019, 31, 388-397.	3.8	33
35	Effect of processing induced particle alignment on the fracture toughness and fracture behavior of multiphase dental ceramics. Dental Materials, 2009, 25, 1293-1301.	3.5	32
36	Microtensile bond strength of composite resin to glass-infiltrated alumina composite conditioned with Er,Cr:YSGG laser. Lasers in Medical Science, 2012, 27, 7-14.	2.1	32

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37	Influence of resin cement shade on the color and translucency of ceramic veneers. Journal of Applied Oral Science, 2016, 24, 391-396.	1.8	32
38	Subcritical crack growth and in vitro lifetime prediction of resin composites with different filler distributions. Dental Materials, 2012, 28, 985-995.	3.5	30
39	Influence of Accelerated Aging on the Color Stability of Dental Zirconia. Journal of Esthetic and Restorative Dentistry, 2016, 28, 304-312.	3.8	30
40	Physico-chemical characterization of zirconia-titania composites coated with an apatite layer for dental implants. Dental Materials, 2013, 29, 954-962.	3.5	29
41	Effect of different times of nonthermal argon plasma treatment on the microtensile bond strength of self-adhesive resin cement to yttria-stabilized tetragonal zirconia polycrystal ceramic. Journal of Prosthetic Dentistry, 2019, 121, 485-491.	2.8	29
42	Effect of ion exchange on hardness and fracture toughness of dental porcelains. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 83B, 538-545.	3.4	28
43	Step-stress analysis for predicting dental ceramic reliability. Dental Materials, 2013, 29, 913-918.	3.5	27
44	Fracture Load and Phase Transformation of Monolithic Zirconia Crowns Submitted to Different Aging Protocols. Operative Dentistry, 2016, 41, E118-E130.	1.2	26
45	Comparison of endocrowns made of lithium disilicate glass-ceramic or polymer-infiltrated ceramic networks and direct composite resin restorations: fatigue performance and stress distribution. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 100, 103401.	3.1	26
46	Relationship between elastic and mechanical properties of dental ceramics and their index of brittleness. Ceramics International, 2012, 38, 4715-4722.	4.8	25
47	Nanomechanical and microstructural characterization of a zirconia-toughened alumina composite after aging. Ceramics International, 2019, 45, 8840-8846.	4.8	25
48	Mechanical and Surface Properties of Monolithic Zirconia. Operative Dentistry, 2018, 43, E119-E128.	1.2	24
49	Residual stress profiles in veneering ceramic on Y-TZP, alumina and ZTA frameworks: Measurement by hole-drilling. Dental Materials, 2014, 30, 105-111.	3.5	22
50	Aging resistant ZTA composite for dental applications: Microstructural, optical and mechanical characterization. Dental Materials, 2020, 36, 1190-1200.	3.5	22
51	Effect of temperature and heating rate on the sintering of leucite-based dental porcelains. Ceramics International, 2011, 37, 1073-1078.	4.8	21
52	Bond strength and Raman analysis of the zirconia-feldspathic porcelain interface. Journal of Prosthetic Dentistry, 2014, 112, 886-894.	2.8	20
53	Stress intensity factor threshold in dental porcelains. Journal of Materials Science: Materials in Medicine, 2008, 19, 1945-1951.	3.6	19
54	Application of Micro-Raman Spectroscopy to the Study of Yttria-Stabilized Tetragonal Zirconia Polycrystal (Y-TZP) Phase Transformation. Applied Spectroscopy, 2015, 69, 810-814.	2.2	19

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55	Ultra-translucent zirconia processing and aging effect on microstructural, optical, and mechanical properties. Dental Materials, 2022, 38, 587-600.	3.5	19
56	Association of different primers and resin cements for adhesive bonding to zirconia ceramics. Journal of Adhesive Dentistry, 2014, 16, 261-5.	0.5	19
57	Aging effect of atmospheric air on lithium disilicate ceramic after nonthermal plasma treatment. Journal of Prosthetic Dentistry, 2016, 115, 780-787.	2.8	18
58	Al <sub>2</sub> O <sub>3</sub> /GdAlO <sub>3</sub> fiber for dental porcelain reinforcement. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 471-477.	3.1	17
59	Evaluation of Tensile Retention of Y-TZP Crowns After Long-term Aging: Effect of the Core Substrate and Crown Surface Conditioning. Operative Dentistry, 2014, 39, 619-626.	1.2	17
60	Ceramic Inlays: Effect of Mechanical Cycling and Ceramic Type on Restoration-dentin Bond Strength. Operative Dentistry, 2016, 41, E102-E117.	1.2	17
61	Influence of Resin Cements on Color Stability of Different Ceramic Systems. Brazilian Dental Journal, 2017, 28, 191-195.	1.1	17
62	Resin cements formulated with thio-urethanes can strengthen porcelain and increase bond strength to ceramics. Journal of Dentistry, 2018, 73, 50-56.	4.1	17
63	Effect of ceramic infrastructure on the failure behavior and stress distribution of fixed partial dentures. Dental Materials, 2015, 31, 413-422.	3.5	16
64	Hydrothermal degradation methods affect the properties and phase transformation depth of translucent zirconia. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 112, 104021.	3.1	16
65	Aging resistance of an experimental zirconia-toughened alumina composite for large span dental prostheses: Optical and mechanical characterization. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103659.	3.1	16
66	Pressable feldspathic inlays in premolars: effect of cementation strategy and mechanical cycling on the adhesive bond between dentin and restoration. Journal of Adhesive Dentistry, 2014, 16, 147-54.	0.5	16
67	Impact of background on color, transmittance, and fluorescence of leucite based ceramics. Dental Materials Journal, 2017, 36, 394-401.	1.8	15
68	Additive Manufacturing in Dentistry: Current Technologies, Clinical Applications, and Limitations. Current Oral Health Reports, 2020, 7, 327-334.	1.6	15
69	Accuracy of different laboratory scanners for scanning of implant-supported full arch fixed prosthesis. Journal of Esthetic and Restorative Dentistry, 2022, 34, 843-848.	3.8	15
70	Chipping of Veneering Ceramics in Zirconium Dioxide Fixed Dental Prosthesis. Current Oral Health Reports, 2015, 2, 169-173.	1.6	14
71	Microstructural, mechanical, and optical characterization of an experimental aging-resistant zirconia-toughened alumina (ZTA) composite. Dental Materials, 2020, 36, e365-e374.	3.5	14
72	Evaluation of Tensile Retention of Y-TZP Crowns Cemented on Resin Composite Cores: Effect of the Cement and Y-TZP Surface Conditioning. Operative Dentistry, 2015, 40, E1-E10.	1.2	13

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73	Effect of titania content and biomimetic coating on the mechanical properties of the Y-TZP/TiO <sub>2</sub> composite. Dental Materials, 2018, 34, 238-245.	3.5	13
74	Effect of repeated firings and staining on the mechanical behavior and composition of lithium disilicate. Dental Materials, 2020, 36, e149-e157.	3.5	13
75	Determination of the slow crack growth susceptibility coefficient of dental ceramics using different methods. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 99B, 247-257.	3.4	12
76	Alumina-toughened zirconia for dental applications: Physicochemical, mechanical, optical, and residual stress characterization after artificial aging. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 1135-1144.	3.4	12
77	Effect of different aging methods on the mechanical behavior of multi-layered ceramic structures. Dental Materials, 2016, 32, 1536-1542.	3.5	11
78	Impact of laboratory treatment with coloring and fluorescent liquids on the optical properties of zirconia before and after accelerated aging. Journal of Prosthetic Dentistry, 2018, 120, 276-281.	2.8	11
79	Structural, chemical and optical characterizations of an experimental SiO <sub>2</sub> -Y-TZP ceramic produced by the uniaxial/isostatic pressing technique. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 106, 103749.	3.1	11
80	Effect of fiber addition on slow crack growth of a dental porcelain. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 44, 85-95.	3.1	10
81	Fractographic principles applied to Y-TZP mechanical behavior analysis. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 57, 215-223.	3.1	10
82	Non-thermal plasma increase bond strength of zirconia to a resin cement. Brazilian Dental Science, 2018, 21, 210-219.	0.4	10
83	Effect of ion exchange on R-curve behavior of a dental porcelain. Journal of Materials Science, 2011, 46, 117-122.	3.7	9
84	Systematic approach to preparing ceramic-glass composites with high translucency for dental restorations. Dental Materials, 2015, 31, 1188-1197.	3.5	9
85	Effect of titania addition and sintering temperature on the microstructure, optical, mechanical and biological properties of the Y-TZP/TiO <sub>2</sub> composite. Dental Materials, 2020, 36, 1418-1429.	3.5	9
86	Evaluation of the Surface Roughness and Accelerated Aging of CAD/CAM Materials. International Journal of Prosthodontics, 2020, 33, 418-428.	1.7	9
87	Influence of Finishing and Polishing Techniques and Abrasion on Transmittance and Roughness of Composite Resins. Operative Dentistry, 2016, 41, 634-641.	1.2	8
88	Chipping of veneering ceramic on a lithium disilicate anterior single crown: Description of repair method and a fractographic failure analysis. Journal of Esthetic and Restorative Dentistry, 2019, 31, 299-303.	3.8	8
89	Effect of ion-exchange temperature on mechanical properties of a dental porcelain. Ceramics International, 2010, 36, 1977-1981.	4.8	7
90	ADM research guidance papers. Dental Materials, 2017, 33, 967.	3.5	7

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91	Effects of Y-TZP blank manufacturing control and addition of TiO <sub>2</sub> nanotubes on structural reliability of dental materials. <i>Ceramics International</i> , 2018, 44, 2959-2967.	4.8	7
92	Microhardness of bovine enamel after different fluoride application protocols. <i>Dental Materials Journal</i> , 2019, 38, 61-67.	1.8	7
93	Effect of silica coating and laser treatment on the flexural strength, surface characteristics, and bond strength of a dental zirconia. <i>European Journal of Oral Sciences</i> , 2021, 129, e12754.	1.5	7
94	Influence of different combinations of CAD-CAM crown and customized abutment materials on the force absorption capacity in implant supported restorations – In vitro study. <i>Dental Materials</i> , 2022, 38, e10-e18.	3.5	7
95	Effect of Test Environment and Microstructure on the Flexural Strength of Dental Porcelains. <i>Journal of Prosthodontics</i> , 2011, 20, 275-279.	3.7	6
96	FEA and microstructure characterization of a one-piece Y-TZP abutment. <i>Dental Materials</i> , 2014, 30, e283-e288.	3.5	6
97	Microstructure and flexural strength of the Y:TZP/BG composite. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 1979-1988.	2.1	6
98	Aging Effect of Atmospheric Air on Zirconia Surfaces Treated by Nonthermal Plasma. <i>Journal of Adhesive Dentistry</i> , 2015, 17, 413-9.	0.5	6
99	Failure modes of Y-TZP abutments with external hex implant-abutment connection determined by fractographic analysis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 60, 187-194.	3.1	5
100	Influence of Ultrapulsed CO <sub>2</sub> Laser, before Application of Different Types of Fluoride, on the Increase of Microhardness of Enamel In Vitro. <i>BioMed Research International</i> , 2018, 2018, 1-7.	1.9	5
101	Effect of an acidic sodium salt on the polymerization behavior of self-adhesive resin cements formulated with different adhesive monomers. <i>Dental Materials</i> , 2018, 34, 1359-1366.	3.5	5
102	Effect of Surface Treatment with CO <sub>2</sub> Laser on Bond Strength in Composite Resin Restorations. <i>Photobiomodulation, Photomedicine, and Laser Surgery</i> , 2019, 37, 428-433.	1.4	5
103	Influence of Er:YAG laser surface treatment on flexural and bond strengths to glass-infiltrated zirconia-reinforced ceramic. <i>Lasers in Medical Science</i> , 2020, 36, 1487-1495.	2.1	5
104	Evaluation of glass viscosity of dental bioceramics by the SciGlass information system. <i>Ceramics International</i> , 2015, 41, 10000-10009.	4.8	4
105	Mono or polycrystalline alumina-modified hybrid ceramics. <i>Dental Materials</i> , 2016, 32, 450-460.	3.5	4
106	Micropatterned Silica Films with Nanohydroxyapatite for Y-TZP Implants. <i>Journal of Dental Research</i> , 2018, 97, 1003-1009.	5.2	4
107	Effect of two erosive protocols using acidic beverages on the shear bond strength of orthodontic brackets to bovine enamel. <i>Dental Press Journal of Orthodontics</i> , 2018, 23, 64-72.	0.9	4
108	Does Acid Challenge Affect the Properties and Bond Stability of Restorative Materials on Primary Teeth?. <i>Journal of Adhesive Dentistry</i> , 2018, 20, 223-231.	0.5	4

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109	Effect of Grinding and Resintering on the Fatigue Limit and Surface Characterization of a Y-TZP Ceramic. Brazilian Dental Journal, 2016, 27, 468-475.	1.1	3
110	Three-dimensional profilometric assessment of Er:YAG laser irradiated unsintered zirconia. Journal of Materials Science, 2016, 51, 7266-7275.	3.7	3
111	Effect of erosive challenge and Nd:YAG laser irradiation on bond strength of adhesive systems to dentin. International Journal of Adhesion and Adhesives, 2016, 64, 60-64.	2.9	3
112	Evaluation of Different Dentifrice Compositions for Increasing the Hardness of Demineralized Enamel: An in Vitro Study. Dentistry Journal, 2019, 7, 14.	2.3	3
113	Optical properties and colorimetric evaluation of resin cements formulated with thioâ€œurethane oligomers. Journal of Esthetic and Restorative Dentistry, 2019, 31, 153-159.	3.8	3
114	Comparative assessment of different recycling methods of orthodontic brackets for clinical use. Minerva Dental and Oral Science, 2017, 66, 107-114.	1.0	3
115	Graphene for Zirconia and Titanium Composites in Dental Implants: Significance and Predictions. Current Oral Health Reports, 2022, 9, 66-74.	1.6	3
116	Surface Characterization of a Glass Fiber Post after Nonthermal Plasma Treatment with Hexamethyldisiloxane. Journal of Adhesive Dentistry, 2017, , 525-533.	0.5	3
117	Physicochemical Properties and Microshear Bond Strength of Experimental Self-adhesive Resin Cements to Dentin or Ytria-stabilized Tetragonal Zirconia Polycrystal. Journal of Adhesive Dentistry, 2019, 21, 133-141.	0.5	3
118	Subcritical Crack Growth Velocities (v-K Curves) of Dental Bioceramics. Materials Science Forum, 0, 727-728, 1211-1216.	0.3	2
119	Porcelain monolayers and porcelain/alumina bilayers reinforced by Al <sub>2</sub> O <sub>3</sub> /GdAlO <sub>3</sub> fibers. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 5, 110-115.	3.1	2
120	In Vitro Behavior of Osteoblasts on Zirconia After Different Intensities of Erbium, Chromium-Doped. Journal of Craniofacial Surgery, 2016, 27, 784-788.	0.7	2
121	Monolithic Zirconia for Prosthetic Reconstructions: Advantages and Limitations. Current Oral Health Reports, 2017, 4, 197-200.	1.6	2
122	Effects of glass chemistry on the optical properties of highly translucent alumina-glass biocomposites for dental restorations. Ceramics International, 2017, 43, 13970-13977.	4.8	2
123	Effect of erosive and abrasive challenges on the glaze layer applied to ceramic materials. Journal of Esthetic and Restorative Dentistry, 2020, 32, 815-822.	3.8	2
124	Can 10% hydrofluoric acid be used for reconditioning of orthodontic brackets?. Indian Journal of Dental Research, 2016, 27, 383.	0.4	2
125	Effect of processing methods on the chipping resistance of veneered zirconia. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 126, 104995.	3.1	2
126	Do tooth-supported zirconia restorations present more technical failures related to fracture or loss of retention? Systematic review and meta-analysis. Clinical Oral Investigations, 2022, 26, 5129-5142.	3.0	2



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127	Variables that Affect the Indentation Fracture Testing (IF) of a Dental Porcelain. Materials Science Forum, 2003, 416-418, 663-668.	0.3	1
128	Development of Y-TZP Pre-Sintered Blocks for CAD-CAM Machining of Dental Prostheses. Materials Science Forum, 2008, 591-593, 712-716.	0.3	1
129	Sintering of Commercial Leucite-Based Dental Porcelains. Materials Science Forum, 0, 591-593, 692-696.	0.3	1
130	Strengthening Dental Porcelains by Ion Exchange Process. , 0, , .		1
131	CO2 Laser Glazing Treatment of a Veneering Porcelain: Effects on Porosity, Translucency, and Mechanical Properties. Operative Dentistry, 2015, 40, 247-254.	1.2	1
132	Effects of bonding area size, surface treatment and specimen configuration on the push out test for assessing bonding and stress distribution to Y-TZP. International Journal of Adhesion and Adhesives, 2018, 85, 315-321.	2.9	1
133	Devitrification in $\text{SiO}_2\text{-B}_2\text{O}_3\text{-Al}_2\text{O}_3\text{-La}_2\text{O}_3\text{-TiO}_2$ Glass during the Infiltration of Ceramic Composite. Materials Science Forum, 2016, 881, 77-82.		
134	Effects of Microstructural Anisotropy on Fracture Behavior of Heat-Pressed Glass-Ceramics and Glass-Infiltrated Alumina Composites for Dental Restorations. Ceramic Engineering and Science Proceedings, 0, , 77-88.	0.1	0
135	Cerâmica dentária: uma revisão de novos materiais e métodos de processamento.. Brazilian Journal of Implantology and Health Sciences, 2020, 2, 50-72.	0.1	0
136	Accuracy of fit and microleakage in ceramic restorations. Practical Procedures & Aesthetic Dentistry: PPAD, 2005, 17, 53-4.	0.0	0
137	Effect of intracanal diode laser irradiation on fracture resistance of roots restored with CAD/CAM posts. Brazilian Journal of Oral Sciences, 0, 21, e223759.	0.1	0