

# Marc Anglada

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

1,487  
citations

218381

26  
h-index

329751

37  
g-index

58  
all docs

58  
docs citations

58  
times ranked

1672  
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase transformation and subsurface damage in 3Y-TZP after sandblasting. <i>Dental Materials</i> , 2013, 29, 566-572.	1.6	122
2	Effect of sandblasting and residual stress on strength of zirconia for restorative dentistry applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 29, 126-137.	1.5	100
3	Strength and fracture toughness of zirconia dental ceramics. <i>Dental Materials</i> , 2018, 34, 365-375.	1.6	78
4	Mechanical characterization of nano-reinforced silica based sol-gel hybrid coatings on AISI 316L stainless steel using nanoindentation techniques. <i>Surface and Coatings Technology</i> , 2009, 203, 3325-3331.	2.2	67
5	Fracture toughness and mechanical strength of Y-TZP/PSZ ceramics. <i>Scripta Materialia</i> , 2001, 45, 213-220.	2.6	57
6	Fracture toughness of zirconia from a shallow notch produced by ultra-short pulsed laser ablation. <i>Journal of the European Ceramic Society</i> , 2014, 34, 3865-3870.	2.8	51
7	Osseointegration improvement by plasma electrolytic oxidation of modified titanium alloys surfaces. <i>Journal of Materials Science: Materials in Medicine</i> , 2015, 26, 72.	1.7	48
8	Enhanced reliability of yttria-stabilized zirconia for dental applications. <i>Acta Biomaterialia</i> , 2015, 17, 36-46.	4.1	48
9	A parametric study of laser interference surface patterning of dental zirconia: Effects of laser parameters on topography and surface quality. <i>Dental Materials</i> , 2017, 33, e28-e38.	1.6	46
10	Size and plasticity effects in zirconia micropillars compression. <i>Acta Materialia</i> , 2016, 103, 882-892.	3.8	44
11	Femtosecond laser multi-patterning of zirconia for screening of cell-surface interactions. <i>Journal of the European Ceramic Society</i> , 2018, 38, 939-948.	2.8	38
12	Nanoindentation and fracture toughness of nanostructured zirconia/multi-walled carbon nanotube composites. <i>Ceramics International</i> , 2015, 41, 2453-2461.	2.3	37
13	Hydrofluoric acid etching of dental zirconia. Part 1: etching mechanism and surface characterization. <i>Journal of the European Ceramic Society</i> , 2016, 36, 121-134.	2.8	37
14	Mechanical properties and thermal shock behaviour of an alumina/zirconia functionally graded material prepared by electrophoretic deposition. <i>Journal of the European Ceramic Society</i> , 2007, 27, 1365-1371.	2.8	36
15	Selective etching of injection molded zirconia-toughened alumina: Towards osseointegrated and antibacterial ceramic implants. <i>Acta Biomaterialia</i> , 2016, 46, 308-322.	4.1	35
16	Effect of calcia co-doping on ceria-stabilized zirconia. <i>Journal of the European Ceramic Society</i> , 2018, 38, 2621-2631.	2.8	33
17	Coefficient of friction and wear resistance of zirconia-MWCNTs composites. <i>Ceramics International</i> , 2015, 41, 459-468.	2.3	32
18	Material removal mechanisms by EDM of zirconia reinforced MWCNT nanocomposites. <i>Ceramics International</i> , 2016, 42, 5792-5801.	2.3	32

#	ARTICLE	IF	CITATIONS
19	Surface Phase Transformation During Grinding of Y-TZP. Journal of the American Ceramic Society, 2007, 90, 2618-2621.	1.9	31
20	Fatigue Behavior of Alumina-Zirconia Multilayered Ceramics. Journal of the American Ceramic Society, 2008, 91, 1618-1625.	1.9	31
21	Impact of sandblasting on the mechanical properties and aging resistance of alumina and zirconia based ceramics. Journal of the European Ceramic Society, 2018, 38, 915-925.	2.8	31
22	Processing and characterization of high-density zirconia-carbon nanotube composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 549, 50-59.	2.6	30
23	Assessment in Si <sub>3</sub> N <sub>4</sub> of a new method for determining the fracture toughness from a surface notch micro-machined by ultra-short pulsed laser ablation. Journal of the European Ceramic Society, 2015, 35, 1737-1741.	2.8	30
24	Stability of Nanocrystalline Spark Plasma Sintered 3Y-TZP. Materials, 2010, 3, 800-814.	1.3	29
25	Small-scale mechanical behavior of zirconia. Acta Materialia, 2014, 80, 239-249.	3.8	28
26	Surface Integrity Effects on the Fracture Resistance of Electrical-Discharge-Machined WC-Co Cemented Carbides. Journal of the American Ceramic Society, 2004, 87, 1687-1693.	1.9	27
27	Fatigue Crack Growth Behavior in Mullite/Alumina Functionally Graded Ceramics. Journal of the American Ceramic Society, 1998, 81, 1502-1508.	1.9	27
28	Hydrofluoric acid etching of dental zirconia. Part 2: effect on flexural strength and ageing behavior. Journal of the European Ceramic Society, 2016, 36, 135-145.	2.8	26
29	Fatigue and Static Crack Propagation in Ytria-Stabilized Tetragonal Zirconia Polycrystals: Crack Growth Micromechanisms and Pre-cracking Effects. Journal of the American Ceramic Society, 1997, 80, 2759-2772.	1.9	25
30	Thermal Shock Behavior of an Al <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> Multilayered Ceramic with Residual Stresses due to Phase Transformations. Key Engineering Materials, 2005, 290, 191-198.	0.4	24
31	The influence of unshielded small cracks in the fracture toughness of yttria and of ceria stabilised zirconia. Journal of the European Ceramic Society, 2016, 36, 147-153.	2.8	21
32	Surface roughened zirconia: towards hydrothermal stability. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 47, 95-106.	1.5	19
33	Tomography of indentation cracks in feldspathic dental porcelain on zirconia. Dental Materials, 2013, 29, 348-356.	1.6	17
34	Roughness gradients on zirconia for rapid screening of cell-surface interactions: Fabrication, characterization and application. Journal of Biomedical Materials Research - Part A, 2016, 104, 2502-2514.	2.1	15
35	Low-temperature degradation increases the cyclic fatigue resistance of 3Y-TZP in bending. Dental Materials, 2020, 36, 1086-1095.	1.6	15
36	Strength and grinding residual stresses of Y-TZP with duplex microstructures. Engineering Failure Analysis, 2009, 16, 2586-2597.	1.8	14

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37	Effect of heat treatment on wear damage mechanisms in 3Y-TZP ceramics. <i>Wear</i> , 2010, 269, 26-30.	1.5	14
38	Human primary osteoblast behaviour on microrough zirconia-toughened alumina and on selectively etched microrough zirconia-toughened alumina. <i>Journal of the European Ceramic Society</i> , 2018, 38, 927-937.	2.8	14
39	Fracture behaviour of thermal barrier coatings after high temperature exposure in air. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 397, 209-214.	2.6	13
40	Evaluation of damage in front of starting notches induced by ultra-short pulsed laser ablation for the determination of fracture toughness in zirconia. <i>Journal of the European Ceramic Society</i> , 2017, 37, 5127-5131.	2.8	13
41	Contact strength of ceramic laminates. <i>Composites Science and Technology</i> , 2008, 68, 209-214.	3.8	10
42	Fracture of Layered Ceramics. <i>Key Engineering Materials</i> , 0, 409, 94-106.	0.4	10
43	Micropillar compression inside zirconia degraded layer. <i>Journal of the European Ceramic Society</i> , 2015, 35, 4051-4058.	2.8	9
44	Surface microstructural changes of spark plasma sintered zirconia after grinding and annealing. <i>Ceramics International</i> , 2016, 42, 15610-15617.	2.3	6
45	Sliding Wear Behavior of a Duplex Stainless Steel. <i>Key Engineering Materials</i> , 0, 423, 125-130.	0.4	5
46	Fatigue of Cemented Carbides. , 2014, , 345-362.		4
47	Processing, nanoindentation and scratch testing of alumina-coated YTZP. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2015, 54, 133-141.	0.9	4
48	Thermal Shock Behavior of an $Al_{2}O_{3}/ZrO_{2}$ Multilayered Ceramic with Residual Stresses due to Phase Transformations. <i>Key Engineering Materials</i> , 0, , 191-198.	0.4	2
49	Effect of Low Temperature Degradation on Scratch Behaviour of 3Y-TZP. <i>Key Engineering Materials</i> , 0, 409, 322-325.	0.4	1
50	Resistance to Contact Deformation and Damage of Hard Ceramics. , 2014, , 367-383.		1
51	Influence of the Martensitic Transformation on the Fatigue Life of Austenitic Stainless Steels. <i>Key Engineering Materials</i> , 0, 423, 99-104.	0.4	0