Antonia Pajares

List of Publications by Year
in descending order

69 papers	3,155 citations	136740 32 h-index	155451 55 g-index
70 all docs	70 docs citations	70 times ranked	2340 citing authors

#	Article	IF	Citations
1	Evaluation of direct light processing for the fabrication of bioactive ceramic scaffolds: Effect of pore/strut size on manufacturability and mechanical performance. Journal of the European Ceramic Society, 2021, 41, 892-900.	2.8	26
2	Novel bioinspired composites fabricated by robocasting for dental applications. Ceramics International, 2021, 47, 21343-21343.	2.3	5
3	Using ductile cores for enhancing the mechanical performance of hollow strut Î²-TCP scaffolds fabricated by digital light processing. Ceramics International, 2021, 47, 10163-10173.	2.3	10
4	Co-continuous calcium phosphate/polycaprolactone composite bone scaffolds fabricated by digital light processing and polymer melt suction. Ceramics International, 2021, 47, 17726-17735.	2.3	15
5	Development by robocasting and mechanical characterization of hybrid HA/PCL coaxial scaffolds for biomedical applications. Journal of the European Ceramic Society, 2019, 39, 4375-4383.	2.8	33
6	Novel strategy for toughening robocast bioceramic scaffolds using polymeric cores. Ceramics International, 2019, 45, 19572-19576.	2.3	24
7	Reinforcing 13â€“93 bioglass scaffolds fabricated by robocasting and pressureless spark plasma sintering with graphene oxide.. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 108-116.	1.5	15
8	Bioinspired composite segmented armour: Numerical simulations. Journal of Materials Research and Technology, 2019, 8, 1274-1287.	2.6	30
9	Enhancing the mechanical and in vitro performance of robocast bioglass scaffolds by polymeric coatings: Effect of polymer composition. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 84, 35-45.	1.5	35
10	A simple graphite-based support material for robocasting of ceramic parts. Journal of the European Ceramic Society, 2018, 38, 2247-2250.	2.8	31
11	Robocast 45S5 bioglass scaffolds: in vitro behavior. Journal of Materials Science, 2017, 52, 9179-9191.	1.7	32
12	Effect of the drying process on the compressive strength and cell proliferation of hydroxyapatiteâ€derived scaffolds. International Journal of Applied Ceramic Technology, 2017, 14, 1101-1106.	1.1	7
13	Case study: Reinforcement of 45S5 bioglass robocast scaffolds by HA/PCL nanocomposite coatings. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 114-118.	1.5	13
14	Simulation of enamel wear for reconstruction of diet and feeding behavior in fossil animals: A micromechanics approach. BioEssays, 2016, 38, 89-99.	1.2	25
15	Understanding the role of dip-coating process parameters in the mechanical performance of polymer-coated bioglass robocast scaffolds. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 64, 253-261.	1.5	25
16	Improving mechanical properties of 13â€“93 bioactive glass robocast scaffold by poly (lactic acid) and poly (Îµ-caprolactone) melt infiltration. Journal of Non-Crystalline Solids, 2016, 432, 111-119.	1.5	53
17	Poly-(lactic acid) infiltration of 45S5 BioglassÂ® robocast scaffolds: Chemical interaction and its deleterious effect in mechanical enhancement. Materials Letters, 2016, 163, 196-200.	1.3	29
18	The Compelling Case for Indentation as a Functional Exploratory and Characterization Tool. Journal of the American Ceramic Society, 2015, 98, 2671-2680.	1.9	67

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19	Mechanics of microwear traces in tooth enamel. Acta Biomaterialia, 2015, 14, 146-153.	4.1	48
20	Influence of sintering temperature on the mechanical properties of Ïµ-PCL-impregnated 45S5 bioglass-derived scaffolds fabricated by robocasting. Journal of the European Ceramic Society, 2015, 35, 3985-3993.	2.8	30
21	Effect of milling media on processing and performance of 13-93 bioactive glass scaffolds fabricated by robocasting. Ceramics International, 2015, 41, 1379-1389.	2.3	43
22	Effect of Polymer Infiltration on the Flexural Behavior of Î²-Tricalcium Phosphate Robocast Scaffolds. Materials, 2014, 7, 4001-4018.	1.3	51
23	Robocasting of 45S5 bioactive glass scaffolds for bone tissue engineering. Journal of the European Ceramic Society, 2014, 34, 107-118.	2.8	136
24	A model for predicting wear rates in tooth enamel. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 37, 226-234.	1.5	44
25	Reinforcing bioceramic scaffolds with <i>in situ</i> synthesized Îµâ€polycaprolactone coatings. Journal of Biomedical Materials Research - Part A, 2013, 101, 3551-3559.	2.1	38
26	Impregnation of Î²â€tricalcium phosphate robocast scaffolds by <i>in situ</i> polymerization. Journal of Biomedical Materials Research - Part A, 2013, 101, 3086-3096.	2.1	14
27	Effect of microstructure on the mechanical properties of liquid-phase-sintered silicon carbide at pre-creep temperatures. Journal of the European Ceramic Society, 2011, 31, 1131-1139.	2.8	16
28	Strength of aluminium titanate/mullite composites containing thermal stabilizers. Journal of the European Ceramic Society, 2011, 31, 1695-1701.	2.8	31
29	Improving the compressive strength of bioceramic robocast scaffolds by polymer infiltration. Acta Biomaterialia, 2010, 6, 4361-4368.	4.1	183
30	Clarifying the effect of sintering conditions on the microstructure and mechanical properties of Î²-tricalcium phosphate. Ceramics International, 2010, 36, 1929-1935.	2.3	72
31	Effect of temperature on the pre-creep mechanical properties of silicon nitride. Journal of the European Ceramic Society, 2009, 29, 2635-2641.	2.8	19
32	Mechanical properties of calcium phosphate scaffolds fabricated by robocasting. Journal of Biomedical Materials Research - Part A, 2008, 85A, 218-227.	2.1	246
33	Finite element modeling as a tool for predicting the fracture behavior of robocast scaffolds. Acta Biomaterialia, 2008, 4, 1715-1724.	4.1	72
34	Fracture modes under uniaxial compression in hydroxyapatite scaffolds fabricated by robocasting. Journal of Biomedical Materials Research - Part A, 2007, 83A, 646-655.	2.1	79
35	Hardness degradation in liquid-phase-sintered SiC with prolonged sintering. Journal of the European Ceramic Society, 2007, 27, 3359-3364.	2.8	26
36	Temperature dependence of mechanical properties of alumina up to the onset of creep. Journal of the European Ceramic Society, 2007, 27, 3345-3349.	2.8	37

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37	Application of Hertzian Tests to Measure Stress?Strain Characteristics of Ceramics at Elevated Temperatures. Journal of the American Ceramic Society, 2007, 90, 149-153.	1.9	25
38	Contact Properties of Yttria Partially Stabilized Zirconia Up To 1000Â°C. Journal of the American Ceramic Society, 2007, 90, 3572-3577.	1.9	5
39	Influence of Zirconia Sol-gel Coatings on the Fracture Strength of Brittle Materials. Journal of Materials Research, 2005, 20, 1544-1550.	1.2	12
40	Effect of oxide and nitride films on strength of silicon: A study using controlled small-scale flaws. Journal of Materials Research, 2004, 19, 3569-3575.	1.2	13
41	Strength of silicon containing nanoscale flaws. Journal of Materials Research, 2004, 19, 657-660.	1.2	14
42	Effect of Sol-Gel Thin Coatings on the Fracture Strength of Glass. Journal of Materials Research, 2004, 19, 896-901.	1.2	7
43	Fatigue and damage tolerance of Y-TZP ceramics in layered biomechanical systems. Journal of Biomedical Materials Research Part B, 2004, 71B, 166-171.	3.0	73
44	Materials design in the performance of all-ceramic crowns. Biomaterials, 2004, 25, 2885-2892.	5.7	198
45	Strength of silicon, sapphire and glass in the subthreshold flaw region. Acta Materialia, 2004, 52, 3459-3466.	3.8	30
46	Fracture of ceramic/ceramic/polymer trilayers for biomechanical applications. Journal of Biomedical Materials Research Part B, 2003, 67A, 828-833.	3.0	53
47	Designing damage-resistant brittle-coating structures: I. Bilayers. Acta Materialia, 2003, 51, 4347-4356.	3.8	53
48	Designing damage-resistant brittle-coating structures: II. Trilayers. Acta Materialia, 2003, 51, 4357-4365.	3.8	30
49	Overview: Damage in brittle layer structures from concentrated loads. Journal of Materials Research, 2002, 17, 3019-3036.	1.2	169
50	Rate Effects in Critical Loads for Radial Cracking in Ceramic Coatings. Journal of the American Ceramic Society, 2002, 85, 2019-2024.	1.9	70
51	Role of flaw statistics in contact fracture of brittle coatings. Acta Materialia, 2001, 49, 3719-3726.	3.8	48
52	Contact fracture of brittle bilayer coatings on soft substrates. Journal of Materials Research, 2001, 16, 115-126.	1.2	57
53	Effect of Flaw State on the Strength of Brittle Coatings on Soft Substrates. Journal of the American Ceramic Society, 2001, 84, 2377-2384.	1.9	58
54	Effect of substrate and bond coat on contact damage in zirconia-based plasma-sprayed coatings. Thin Solid Films, 1997, 293, 251-260.	0.8	37

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55	Effect of mechanical damage on thermal conduction of plasma-sprayed coatings. Journal of Materials Research, 1996, 11, 1329-1332.	1.2	10
56	Mechanical characterization of plasma sprayed ceramic coatings on metal substrates by contact testing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 208, 158-165.	2.6	78
57	Analysis of kidney-shaped indentation cracks in 4Y-PSZ. Acta Materialia, 1996, 44, 4387-4394.	3.8	11
58	Contact Damage in Plasma-Sprayed Alumina-Based Coatings. Journal of the American Ceramic Society, 1996, 79, 1907-1914.	1.9	54
59	Stress Analysis of Elasticâ€Plastic Contact Damage in Ceramic Coatings on Metal Substrates. Journal of the American Ceramic Society, 1996, 79, 2619-2625.	1.9	60
60	Hertzian Contact Damage in Magnesia-Partially-Stabilized Zirconia. Journal of the American Ceramic Society, 1995, 78, 1083-1086.	1.9	33
61	Damage accumulation and cyclic fatigue in Mg-PSZ at Hertzian contacts. Journal of Materials Research, 1995, 10, 2613-2625.	1.2	37
62	Residual stresses around Vickers indents. Acta Metallurgica Et Materialia, 1995, 43, 3649-3659.	1.9	24
63	Indentation Studies on Y2O2-Stabilized ZrO2: I, Development of Indentation-Induced Cracks. Journal of the American Ceramic Society, 1994, 77, 1185-1193.	1.9	84
64	Indentation Studies on Y2O3-Stabilized ZrO2: II, Toughness Determination from Stable Growth of Indentation-Induced Cracks. Journal of the American Ceramic Society, 1994, 77, 1194-1201.	1.9	54
65	Measurement of fiber orientation in short-fiber composites. Acta Metallurgica Et Materialia, 1994, 42, 689-694.	1.9	33
66	TEM characterization of indented polycrystalline Y-PSZ. Journal of Materials Science, 1993, 28, 6709-6714.	1.7	8
67	Indentation-Induced Cracks and the Toughness Anisotropy of 9.4-mol%-Yttria-Stabilized Cubic Zirconia Single Crystals. Journal of the American Ceramic Society, 1991, 74, 859-862.	1.9	27
68	Microhardness and Fracture Toughness Anisotropy in Cubic Zirconium Oxide Single Crystals. Journal of the American Ceramic Society, 1988, 71, C-332-C-333.	1.9	29
69	Microhardness anisotropy in cubic Zro2. Revue De Physique AppliquÃ©e, 1988, 23, 719-719.	0.4	0