

Antonio H De Aza

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3187813/publications.pdf>

Version: 2024-02-01

73
papers

2,841
citations

147801

31
h-index

182427

51
g-index

74
all docs

74
docs citations

74
times ranked

2961
citing authors

#	ARTICLE	IF	CITATIONS
1	Crack growth resistance of alumina, zirconia and zirconia toughened alumina ceramics for joint prostheses. <i>Biomaterials</i> , 2002, 23, 937-945.	11.4	513
2	Calcium phosphates for biomedical applications. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2017, 56, 91-112.	1.9	152
3	Physical characterization of hydroxyapatite porous scaffolds for tissue engineering. <i>Materials Science and Engineering C</i> , 2009, 29, 1510-1514.	7.3	109
4	Slow Crack Growth Behavior of Zirconia Toughened Alumina Ceramics Processed by Different Methods. <i>Journal of the American Ceramic Society</i> , 2003, 86, 115-120.	3.8	96
5	New Approach to the $\beta \rightarrow \alpha$ Polymorphic Transformation in Magnesium-Substituted Tricalcium Phosphate and its Practical Implications. <i>Journal of the American Ceramic Society</i> , 2008, 91, 1281-1286.	3.8	95
6	Synthesis of CaAl_2O_4 from powders: Particle size effect. <i>Journal of the European Ceramic Society</i> , 2005, 25, 3269-3279.	5.7	92
7	Effect of spinel content on slag attack resistance of high alumina refractory castables. <i>Journal of the European Ceramic Society</i> , 2007, 27, 4623-4631.	5.7	82
8	Solid-state ^{27}Al and ^{29}Si NMR characterization of hydrates formed in calcium aluminate-silica fume mixtures. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1744-1752.	2.9	67
9	Class ceramic sealants belonging to $\text{BaO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ ternary system modified with B_2O_3 addition: A different approach to access the SOFC seal issue. <i>Journal of the European Ceramic Society</i> , 2016, 36, 631-644.	5.7	64
10	Bone-like forming ability of apatite-wollastonite glass ceramic. <i>Journal of the European Ceramic Society</i> , 2011, 31, 1549-1561.	5.7	62
11	Time-resolved powder neutron diffraction study of the phase transformation sequence of kaolinite to mullite. <i>Journal of the European Ceramic Society</i> , 2014, 34, 1409-1421.	5.7	61
12	On the Decomposition of Synthetic Gibbsite Studied by Neutron Thermodiffraction. <i>Journal of the American Ceramic Society</i> , 2006, 89, 3728-3733.	3.8	60
13	Ternary System $\text{Al}_2\text{O}_3-\text{MgO}-\text{CaO}$: Part II, Phase Relationships in the Subsystem $\text{Al}_2\text{O}_3-\text{MgAl}_2\text{O}_4-\text{CaAl}_4\text{O}_7$. <i>Journal of the American Ceramic Society</i> , 2000, 83, 919-927.	3.8	54
14	Extending the Lifetime of Ceramic Orthopaedic Implants. <i>Advanced Materials</i> , 2000, 12, 1619-1621.	21.0	52
15	Solid-state ^{27}Al and ^{29}Si NMR investigations on Si-substituted hydrogarnets. <i>Acta Materialia</i> , 2007, 55, 1183-1191.	7.9	52
16	Isotropic micropatterned silica coatings on zirconia induce guided cell growth for dental implants. <i>Dental Materials</i> , 2011, 27, 581-589.	3.5	52
17	Alumina/Zirconia Micro/Nanocomposites: A New Material for Biomedical Applications With Superior Sliding Wear Resistance. <i>Journal of the American Ceramic Society</i> , 2007, 90, 3177-3184.	3.8	49
18	Calcium aluminates hydration in presence of amorphous SiO_2 at temperatures below 90°C . <i>Journal of Solid State Chemistry</i> , 2006, 179, 2988-2997.	2.9	48

#	ARTICLE	IF	CITATIONS
19	Corrosion mechanism of polycrystalline corundum and calcium hexaluminate by calcium silicate slags. <i>Journal of the European Ceramic Society</i> , 2009, 29, 1347-1360.	5.7	47
20	Ternary System $Al_2O_3-MgO-CaO$: I, Primary Phase Field of Crystallization of Spinel in the Subsystem $MgAl_2O_4-CaAl_4O_7-CaO-MgO$. <i>Journal of the American Ceramic Society</i> , 1999, 82, 2193-2203.	3.8	45
21	In Situ Bone-Like Apatite Formation From a Bioeutectic $1/2$ Ceramic in SBF Dynamic Flow. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1200-1207.	3.8	45
22	Neutron diffraction residual stress analysis of zirconia toughened alumina (ZTA) composites. <i>Journal of the European Ceramic Society</i> , 2008, 28, 1809-1814.	5.7	42
23	Dehydration of $Ca_3Al_2(SiO_4)_y(OH)_{4(3-y)}$ ($0 \leq y \leq 0.176$) studied by neutron thermodiffraction. <i>Journal of the European Ceramic Society</i> , 2008, 28, 1737-1748.	5.7	40
24	Alumina-rich refractory concretes with added spinel, periclase and dolomite: A comparative study of their microstructural evolution with temperature. <i>Journal of the European Ceramic Society</i> , 2005, 25, 1499-1506.	5.7	39
25	New spinel-containing refractory cements. <i>Journal of the European Ceramic Society</i> , 2003, 23, 737-744.	5.7	38
26	In vitro study of the proliferation and growth of human bone marrow cells on apatite-wollastonite-2M glass ceramics. <i>Acta Biomaterialia</i> , 2010, 6, 2254-2263.	8.3	38
27	The synthesis mechanism of $Ca_3Al_2O_6$ from soft mechanochemically activated precursors studied by time-resolved neutron diffraction up to $1000^\circ C$. <i>Journal of Solid State Chemistry</i> , 2004, 177, 866-874.	2.9	37
28	The Mechanism of corrosion of $MgO-CaZrO_3$ calcium silicate materials by cement clinker. <i>Journal of the European Ceramic Society</i> , 2007, 27, 79-89.	5.7	35
29	Decomposition of Dolomite Monitored by Neutron Thermodiffraction. <i>Journal of the American Ceramic Society</i> , 2002, 85, 881-888.	3.8	34
30	Devitrification studies of wollastonite-tricalcium phosphate eutectic glass. <i>Acta Biomaterialia</i> , 2009, 5, 3057-3066.	8.3	34
31	Effect of Mg and Si co-substitution on microstructure and strength of tricalcium phosphate ceramics. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 30, 1-15.	3.1	32
32	Assessment of natural and synthetic wollastonite as source for bioceramics preparation. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 83A, 484-495.	4.0	31
33	Revisiting the Phase Equilibrium Diagram of the $Ca_3(PO_4)_2-CaMg(SiO_3)_2$ System. <i>Journal of the American Ceramic Society</i> , 2010, 93, 561-569.	3.8	28
34	Cordierite synthesis. A time-resolved neutron diffraction study. <i>Journal of the European Ceramic Society</i> , 2012, 32, 371-379.	5.7	27
35	Micropatterned silica thin films with nanohydroxyapatite micro-aggregates for guided tissue regeneration. <i>Dental Materials</i> , 2012, 28, 1250-1260.	3.5	24
36	Direct mineralogical composition of a MgO-C refractory material obtained by Rietveld methodology. <i>Journal of the European Ceramic Society</i> , 2006, 26, 2587-2592.	5.7	23

#	ARTICLE	IF	CITATIONS
37	β -Tricalcium phosphate cements modified with β -dicalcium silicate and tricalcium aluminate: Physicochemical characterization, <i>in vitro</i> bioactivity and cytotoxicity. , 2015, 103, 72-83.		22
38	Influence of the pH and ageing time on the acid aluminum phosphate synthesized by precipitation. <i>CrystEngComm</i> , 2013, 15, 3359.	2.6	21
39	β -dicalcium silicate-based cement: Synthesis, characterization and <i>in vitro</i> bioactivity and biocompatibility studies. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 3693-3703.	4.0	21
40	Self-Forming 3D Core-Shell Ceramic Nanostructures for Halogen-Free Flame Retardant Materials. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 9462-9471.	8.0	21
41	Rietveld Quantitative Analysis of <i>Buen Retiro</i> Porcelains. <i>Journal of the American Ceramic Society</i> , 2004, 87, 449-454.	3.8	20
42	Build-up formation and corrosion of monolithic refractories in cement kiln preheaters. <i>Journal of the European Ceramic Society</i> , 2010, 30, 1879-1885.	5.7	20
43	Influence of Sterilization Techniques on the <i>In Vitro</i> Bioactivity of Pseudowollastonite. <i>Journal of the American Ceramic Society</i> , 2006, 89, 2619-2624.	3.8	18
44	Structure and properties of bioactive eutectic glasses based on the $\text{Ca}_3(\text{PO}_4)_2$ - CaSiO_3 - $\text{CaMg}(\text{SiO}_3)_2$ system. <i>Acta Biomaterialia</i> , 2012, 8, 820-829.	8.3	18
45	Reactive coating on alumina substrates. Calcium and barium hexa aluminates. <i>Scripta Metallurgica Et Materialia</i> , 1994, 31, 1049-1054.	1.0	16
46	Ultrafast direct laser writing of cladding waveguides in the 0.8CaSiO_3 - $0.2\text{Ca}_3(\text{PO}_4)_2$ eutectic glass doped with Nd^{3+} ions. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	16
47	Processing and <i>in vitro</i> bioactivity of a β - $\text{Ca}_3(\text{PO}_4)_2$ - $\text{CaMg}(\text{SiO}_3)_2$ ceramic with the eutectic composition. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2016, 55, 1-12.	1.9	16
48	Stress-induced buried waveguides in the 0.8CaSiO_3 - $0.2\text{Ca}_3(\text{PO}_4)_2$ eutectic glass doped with Nd^{3+} ions. <i>Applied Surface Science</i> , 2013, 278, 289-294.	6.1	15
49	Multidisciplinary characterization of the long-bone cortex growth patterns through sheep's ontogeny. <i>Journal of Structural Biology</i> , 2015, 191, 1-9.	2.8	15
50	Microstructural development and mechanical performance of mullite-alumina and hibonite-alumina ceramics with controlled addition of a glass phase. <i>Ceramics International</i> , 2018, 44, 2292-2299.	4.8	15
51	Reactive coating of dolomite on alumina substrates. <i>Journal of the European Ceramic Society</i> , 1997, 17, 935-941.	5.7	14
52	Synthesis of amorphous acid iron phosphate nanoparticles. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	14
53	Interactions in Calcium Aluminate Cement (CAC)-Based Castables Containing Magnesia Part II: Hydration-Dehydration Behavior of CAC and their Mixtures with Dead-Burned and Reactive-Grade MgO . <i>Journal of the American Ceramic Society</i> , 2011, 94, 909-917.	3.8	13
54	Interactions in Calcium Aluminate Cement (CAC)-Based Castables Containing Magnesia. Part I: Hydration-Dehydration Behavior of MgO in the Absence of CAC. <i>Journal of the American Ceramic Society</i> , 2011, 94, 902-908.	3.8	13

#	ARTICLE	IF	CITATIONS
55	<i>In vitro</i> study of the proliferation and growth of human fetal osteoblasts on Mg and Si co-substituted tricalcium phosphate ceramics. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 2266-2275.	4.0	13
56	Influence of the milling conditions on the thermal decomposition of Bayer gibbsite. <i>Powder Technology</i> , 2020, 362, 188-196.	4.2	13
57	Experimental Establishment of the CaAl_2O_4 -MgO and CaAl_4O_7 -MgO Isoplethal Sections within the Al_2O_3 -MgO-CaO Ternary System. <i>Journal of the American Ceramic Society</i> , 2008, 91, 535-543.	3.8	12
58	The main role of silica-based cement free binders on the microstructural evolution and mechanical behaviour of high alumina castables. <i>Journal of the European Ceramic Society</i> , 2018, 38, 4137-4148.	5.7	12
59	Manufacturing of silicon Bioactive glass scaffolds by selective laser melting for bone tissue engineering. <i>Ceramics International</i> , 2020, 46, 26936-26944.	4.8	11
60	Study of Zircon-Dolomite Reactions Monitored by Neutron Thermodiffraction. <i>Journal of Solid State Chemistry</i> , 2002, 166, 426-433.	2.9	9
61	Different in vitro behavior of two $\text{Ca}_3(\text{PO}_4)_2$ based biomaterials, a glass-ceramic and a ceramic, having the same chemical composition. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2015, 54, 181-188.	1.9	9
62	Analytical Characterization of a Magnesia-Graphite Refractory. <i>Journal of the American Ceramic Society</i> , 2006, 89, 1704-1708.	3.8	8
63	Micro-/Nano-Structured Ceramic Scaffolds That Mimic Natural Cancellous Bone. <i>Materials</i> , 2021, 14, 1439.	2.9	8
64	Structural evolution of lamellar surfactant-silica hybrids upon calcination. <i>Composites Science and Technology</i> , 2003, 63, 1127-1131.	7.8	7
65	Structural changes during crystallization of apatite and wollastonite in the eutectic glass of $\text{Ca}_3(\text{PO}_4)_2$ - CaSiO_3 system. <i>Journal of the American Ceramic Society</i> , 2017, 100, 4288-4304.	3.8	7
66	Los diagramas de equilibrio de fases como una herramienta para el diseño y comprensión del comportamiento en servicio de los materiales refractarios. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2011, 50, 279-290.	1.9	7
67	Crack Growth Resistance of Zirconia Toughened Alumina Ceramics for Joint Prostheses. <i>Key Engineering Materials</i> , 2002, 206-213, 1535-1538.	0.4	6
68	Microstructural development and mechanical performance of CaSiO_3 - $\text{Ca}_3(\text{PO}_4)_2$ bioceramics following the addition of CaSiO_3 - $\text{Ca}_3(\text{PO}_4)_2$ -MgCa(SiO ₃) ₂ eutectic glass. <i>Ceramics International</i> , 2021, 47, 5502-5509.	4.8	4
69	La porcelana de sepiolita de Bartolomé Sureda (1802-1808). Investigación arqueométrica sobre la Real Fábrica de Buen Retiro. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2011, 50, 311-328.	1.9	4
70	Devitrification study of a novel bioactive glass designed on the CaSiO_3 - $\text{Ca}_3(\text{PO}_4)_2$ -MgCa(SiO ₃) ₂ system. <i>Journal of Non-Crystalline Solids</i> , 2020, 528, 119705.	3.1	3
71	Cementos Biomédicos de Fosfato Tricálcico Reforzados con Silicatos y Aluminatos de Calcio-Preparación, Caracterización y Estudios de biodegradación. <i>IFMBE Proceedings</i> , 2013, , 100-103.	0.3	1
72	In Situ Monitoring Reaction Sintering of Dolomite-Based Systems. <i>Key Engineering Materials</i> , 2002, 206-213, 437-440.	0.4	0

#	ARTICLE	IF	CITATIONS
73	Calcium Phosphates in Biomedical Engineering. , 2021, , 595-600.		0