

Miguel A Rodriguez

List of Publications by Year in descending order

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all docs

132
docs citations

132
times ranked

3305
citing authors

#	ARTICLE	IF	CITATIONS
1	Long lasting phosphors: SrAl ₂ O ₄ :Eu, Dy as the most studied material. Renewable and Sustainable Energy Reviews, 2018, 81, 2759-2770.	16.4	181
2	Calcium phosphates for biomedical applications. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2017, 56, 91-112.	1.9	152
3	Physical characterization of hydroxyapatite porous scaffolds for tissue engineering. Materials Science and Engineering C, 2009, 29, 1510-1514.	7.3	109
4	Preparation and characterization of tubular ceramic membranes for treatment of oil emulsions. Journal of the European Ceramic Society, 2005, 25, 1895-1903.	5.7	96
5	Synthesis of CaAl ₂ O ₄ from powders: Particle size effect. Journal of the European Ceramic Society, 2005, 25, 3269-3279.	5.7	92
6	Single crystal β -Si ₃ N ₄ fibers obtained by self-propagating high temperature synthesis. Advanced Materials, 1995, 7, 745-747.	21.0	67
7	Solid-state ²⁷ Al and ²⁹ Si NMR characterization of hydrates formed in calcium aluminate-silica fume mixtures. Journal of Solid State Chemistry, 2008, 181, 1744-1752.	2.9	67
8	Development of a new high porosity ceramic membrane for the treatment of bilge water. Desalination, 2007, 214, 91-101.	8.2	63
9	Al-Ni intermetallics obtained by SHS; A time-resolved X-ray diffraction study. Intermetallics, 2007, 15, 1163-1171.	3.9	61
10	Time-resolved powder neutron diffraction study of the phase transformation sequence of kaolinite to mullite. Journal of the European Ceramic Society, 2014, 34, 1409-1421.	5.7	61
11	Self-propagating high temperature-synthesis of Si ₃ N ₄ : role of ammonium salt addition. Journal of the European Ceramic Society, 2001, 21, 291-295.	5.7	59
12	Original Synthetic Route To Obtain a SrAl ₂ O ₄ Phosphor by the Molten Salt Method: Insights into the Reaction Mechanism and Enhancement of the Persistent Luminescence. Inorganic Chemistry, 2015, 54, 9896-9907.	4.0	59
13	Time-resolved XRD study of Ti-TiB ₂ composites obtained by SHS. Acta Materialia, 2004, 52, 4783-4790.	7.9	54
14	Reaction sintering of zircon-dolomite mixtures. Journal of the European Ceramic Society, 2001, 21, 343-354.	5.7	46
15	Synthesis of β -Silicon nitride by SHS: fiber growth. Scripta Materialia, 2004, 50, 383-386.	5.2	46
16	Development of a low cost micro-porous ceramic membrane from kaolin and Alumina, using the lignite as porogen agent. Ceramics International, 2016, 42, 5089-5093.	4.8	44
17	Influence of fuels and combustion aids on solution combustion synthesis of bi-phasic calcium phosphates (BCP). Materials Science and Engineering C, 2012, 32, 2464-2468.	7.3	42
18	Graphene-encapsulated aluminium oxide nanofibers as a novel type of nanofillers for electroconductive ceramics. Journal of the European Ceramic Society, 2015, 35, 4017-4021.	5.7	41

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19	Synthesis of nanocrystalline yttrium disilicate powder by a sol-gel method. Journal of Non-Crystalline Solids, 2001, 289, 151-154.	3.1	40
20	Preparation and characterization of new ceramic membranes for ultrafiltration. Ceramics International, 2018, 44, 2328-2335.	4.8	40
21	Selective laser sintered bio-inspired silicon-wollastonite scaffolds for bone tissue engineering. Materials Science and Engineering C, 2020, 116, 111223.	7.3	40
22	TiCâ€“NiAl composites obtained by SHS: a time-resolved XRD study. Journal of the European Ceramic Society, 2002, 22, 1039-1044.	5.7	39
23	Processing of hydroxyapatite obtained by combustion synthesis. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2017, 56, 237-242.	1.9	39
24	Effect of Dilution and Porosity on Self-Propagating High-Temperature Synthesis of Silicon Nitride. Journal of the American Ceramic Society, 2002, 85, 2209-2211.	3.8	38
25	New spinel-containing refractory cements. Journal of the European Ceramic Society, 2003, 23, 737-744.	5.7	38
26	The preparation of micro-porous membrane from a Tunisian kaolin. Applied Clay Science, 2014, 101, 574-578.	5.2	37
27	Self-propagating high-temperature synthesis of TiCâ€“WC composite materials. Journal of Alloys and Compounds, 2006, 419, 227-233.	5.5	35
28	Nanostructured metastable cermets of Tiâ€“Al ₂ O ₃ through activated SHS reaction. Journal of Alloys and Compounds, 2008, 454, 352-358.	5.5	35
29	Solution combustion synthesis and sintering behavior of CaAl ₂ O ₄ . Ceramics International, 2012, 38, 395-399.	4.8	35
30	Designing nanostructured strontium aluminate particles with high luminescence properties. Journal of Materials Chemistry C, 2015, 3, 1268-1276.	5.5	35
31	Devitrification studies of wollastoniteâ€“tricalcium phosphate eutectic glass. Acta Biomaterialia, 2009, 5, 3057-3066.	8.3	34
32	Single crystal AlN fibers obtained by self-propagating high-temperature synthesis (SHS). Acta Materialia, 1997, 45, 3089-3094.	7.9	33
33	The impact of the synthesis conditions on SrAl ₂ O ₄ :Eu, Dy formation for a persistent afterglow. Materials and Design, 2016, 108, 354-363.	7.0	33
34	A novel approach to electroconductive ceramics filled by graphene covered nanofibers. Materials and Design, 2016, 90, 291-298.	7.0	33
35	Plasma reforming of methane in a tunable ferroelectric packed-bed dielectric barrier discharge reactor. Journal of Power Sources, 2015, 296, 268-275.	7.8	32
36	Role of the oxidizing agent to complete the synthesis of strontium aluminate based phosphors by the combustion method. RSC Advances, 2015, 5, 3104-3112.	3.6	32

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37	Synthesis of LTA zeolite for bacterial adhesion. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2016, 55, 152-158.	1.9	32
38	Bioceramic scaffolds by additive manufacturing for controlled delivery of the antibiotic vancomycin. Proceedings of the Estonian Academy of Sciences, 2019, 68, 185.	1.5	32
39	Effects of hydrothermal pressure on in situ synthesis of 3D graphene-hydroxyapatite nano structured powders. Ceramics International, 2019, 45, 1761-1769.	4.8	32
40	In situ synthesis of three dimensional graphene-hydroxyapatite nano powders via hydrothermal process. Materials Chemistry and Physics, 2019, 222, 251-255.	4.0	31
41	Synthesis, characterization, bioactivity and biocompatibility of nanostructured materials based on the wollastonite-poly(ethylmethacrylate-co-vinylpyrrolidone) system. Journal of Biomedical Materials Research - Part A, 2009, 88A, 53-64.	4.0	30
42	Microstructural and mechanical evaluation of porous biomorphic silicon carbide for high temperature filtering applications. Journal of the European Ceramic Society, 2011, 31, 1325-1332.	5.7	30
43	Energy efficiency during conventional and novel sintering processes: the case of Ti-Al ₂ O ₃ -TiC composites. Journal of Cleaner Production, 2009, 17, 877-882.	9.3	29
44	The wetting behaviour and reaction kinetics in diamond-silicon carbide systems. Ceramics International, 2009, 35, 2435-2441.	4.8	29
45	Improving the pollutant removal efficiency of packed-bed plasma reactors incorporating ferroelectric components. Chemical Engineering Journal, 2017, 314, 311-319.	12.7	29
46	Novel silicon-wollastonite based scaffolds for bone tissue engineering produced by selective laser melting. Ceramics International, 2019, 45, 24691-24701.	4.8	28
47	Cordierite synthesis. A time-resolved neutron diffraction study. Journal of the European Ceramic Society, 2012, 32, 371-379.	5.7	27
48	Separation of binary gas mixtures by means of sol-gel modified ceramic membranes. Prediction of membrane performance. Journal of Membrane Science, 1999, 155, 123-131.	8.2	23
49	Novel Resorbable and Osteoconductive Calcium Silicophosphate Scaffold Induced Bone Formation. Materials, 2016, 9, 785.	2.9	23
50	Single crystal β -SiAlON fibers obtained by self-propagating high-temperature synthesis. Scripta Materialia, 1997, 37, 405-410.	5.2	22
51	Influence of the pH and ageing time on the acid aluminum phosphate synthesized by precipitation. CrystEngComm, 2013, 15, 3359.	2.6	21
52	An approach to the histomorphological and histochemical variations of the humerus cortical bone through human ontogeny. Journal of Anatomy, 2014, 224, 634-646.	1.5	21
53	Self-Forming 3D Core-Shell Ceramic Nanostructures for Halogen-Free Flame Retardant Materials. ACS Applied Materials & Interfaces, 2016, 8, 9462-9471.	8.0	21
54	Synthesis and in vivo evaluation of a scaffold containing wollastonite/ β -TCP for bone repair in a rabbit tibial defect model. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1107-1116.	3.4	21

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55	Bioactive composites fabricated by freezing-thawing method for bone regeneration applications. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 761-773.	2.1	20
56	Investigating histomorphological variations in human cranial bones through ontogeny. <i>Comptes Rendus - Palevol</i> , 2016, 15, 527-535.	0.2	19
57	Infiltrated glassy carbon membranes in γ -Al ₂ O ₃ supports. <i>Journal of Membrane Science</i> , 2006, 281, 500-507.	8.2	18
58	An in vivo study on bone formation behavior of microporous granular calcium phosphate. <i>Biomaterials Science</i> , 2017, 5, 1315-1325.	5.4	18
59	Electroconductive composite of zirconia and hybrid graphene/alumina nanofibers. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3713-3719.	5.7	17
60	Composite cryogels for dual drug delivery and enhanced mechanical properties. <i>Polymer Composites</i> , 2018, 39, E210.	4.6	17
61	Synchrotron diffraction studies of TiC/FeTi cermets obtained by SHS. <i>Journal of Solid State Chemistry</i> , 2005, 178, 1595-1600.	2.9	16
62	Processing and in vitro bioactivity of a γ -Ca ₃ (PO ₄) ₂ /CaMg(SiO ₃) ₂ ceramic with the eutectic composition. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2016, 55, 1-12.	1.9	16
63	The template-assisted wet-combustion synthesis of copper oxide nanoparticles on mesoporous network of alumina nanofibers. <i>Materials Chemistry and Physics</i> , 2017, 192, 138-146.	4.0	16
64	Incorporation of quartzite waste in mixtures used to prepare sanitary ware. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2148-2156.	5.8	16
65	A β -TCP Scaffold for Biomedical Applications: An Experimental Study Using the Rabbit Tibia Model. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 706.	2.5	15
66	Combustion synthesis of MoSi ₂ based composite and selective laser sintering thereof. <i>Journal of the European Ceramic Society</i> , 2018, 38, 3814-3821.	5.7	15
67	Mixed Matrix Membranes prepared from polysulfone and Linde Type A zeolite. <i>Science and Engineering of Composite Materials</i> , 2020, 27, 236-244.	1.4	15
68	Synthesis of amorphous acid iron phosphate nanoparticles. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	14
69	Functionalization of gamma-alumina nanofibers by alpha-alumina via solution combustion synthesis. <i>Ceramics International</i> , 2014, 40, 12603-12607.	4.8	14
70	Macroporous ceramic supports from natural clays. Improvement by the use of activated clays. <i>Ceramics International</i> , 2017, 43, 1242-1248.	4.8	13
71	Influence of the milling conditions on the thermal decomposition of Bayer gibbsite. <i>Powder Technology</i> , 2020, 362, 188-196.	4.2	13
72	Thermodynamic evaluation of the Al ₂ O ₃ -H ₂ O binary system at pressures up to 30MPa. <i>Ceramics International</i> , 2009, 35, 3081-3090.	4.8	12

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73	Membranas cerámicas. Tipos, métodos de obtención y caracterización. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2004, 43, 829-842.	1.9	12
74	Manufacturing of silicon based Bioactive glass scaffolds by selective laser melting for bone tissue engineering. Ceramics International, 2020, 46, 26936-26944.	4.8	11
75	Novel Osteoinductive and Osteogenic Scaffolds of Monelite, Amorphous Calcium Phosphate, Hydroxyapatite, and Silica Gel: Influence of the Hydroxyapatite/Monelite Ratio on Their <i>In Vivo</i> Behavior and on Their Physical and Chemical Properties. ACS Biomaterials Science and Engineering, 2020, 6, 3440-3453.	5.2	11
76	Wear-resistant ceramic and metal based ceramic ultrafine composites fabricated from combustion synthesised metastable powders. International Journal of Refractory Metals and Hard Materials, 2009, 27, 996-1003.	3.8	10
77	Elaboration biphasic calcium phosphate nanostructured powders. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2015, 54, 37-43.	1.9	10
78	Preparation of multilayer ceramic systems for deposition of mesoporous membranes. Journal of Materials Science, 2005, 40, 6105-6112.	3.7	9
79	Time-resolved neutron diffraction study of Ti based Al ₂ O ₃ composites obtained by SHS. Journal of the European Ceramic Society, 2008, 28, 2975-2982.	5.7	9
80	Synthesis and dispersion of yttria-stabilized zirconia (YSZ) nanoparticles in supercritical water. Materials Chemistry and Physics, 2012, 134, 451-458.	4.0	9
81	Dipole moment-tuned packing of TiO ₂ nanocrystals into monolayer films by electrophoretic deposition. Applied Physics Letters, 2014, 105, .	3.3	9
82	Different in vitro behavior of two Ca ₃ (PO ₄) ₂ based biomaterials, a glass-ceramic and a ceramic, having the same chemical composition. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2015, 54, 181-188.	1.9	9
83	Processing of ZrC-TiC Composites by SPS. Key Engineering Materials, 0, 674, 94-99.	0.4	9
84	External and internal ontogenetic changes in the first rib. American Journal of Physical Anthropology, 2017, 164, 750-762.	2.1	9
85	Nanostructural evolution in mesoporous networks using in situ High-Speed Temperature Scanner. Ceramics International, 2018, 44, 12265-12272.	4.8	9
86	Synthesis of Wollastonite Powders by Combustion Method: Role of Amount of Fuel. International Journal of Chemical Engineering, 2018, 2018, 1-8.	2.4	9
87	New cement based on calcium and strontium aluminates for endodontics. Ceramics International, 2019, 45, 19784-19792.	4.8	9
88	Characterization of surface and porous properties of synthetic hybrid lamellar silica. Journal of Non-Crystalline Solids, 2011, 357, 951-957.	3.1	8
89	Nanopatterning on highly oriented pyrolytic graphite surfaces promoted by cobalt oxides. Carbon, 2015, 85, 89-98.	10.3	8
90	Preparation of macroporous membrane using natural Kaolin and Tunisian lignite as a pore-forming agent. Desalination and Water Treatment, 2016, 57, 13388-13393.	1.0	8

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91	The preparation of meso-porous membranes from Tunisian clay. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2020, 59, 25-30.	1.9	8
92	Structural evolution of lamellar surfactant-silica hybrids upon calcination. Composites Science and Technology, 2003, 63, 1127-1131.	7.8	7
93	Non-isothermal phenomena in Mo/Si diffusion couple: Reaction kinetics and structure formation. International Journal of Self-Propagating High-Temperature Synthesis, 2013, 22, 18-26.	0.5	7
94	Injectable β -TCP/MCPM cement associated with mesoporous silica for bone regeneration: characterization and toxicity evaluation. Biomedical Materials (Bristol), 2018, 13, 025023.	3.3	7
95	Obtaining hydroxyapatite with different precursors for application as a biomaterial. Ceramica, 2019, 65, 99-106.	0.8	7
96	Effect of cationic surfactant HDPy+ on the acidity and hydrophilicity of Tunisian clay. Materials Chemistry and Physics, 2019, 225, 279-283.	4.0	7
97	Development of wollastonite-poly(ethylmethacrylate-co-vinylpyrrolidone) based materials for multifunctional devices. Journal of Biomedical Materials Research - Part A, 2007, 81A, 603-610.	4.0	6
98	Zn_2O_4 and $(0.79)Zn_2O_4 \cdot (0.21)Mg_2O$ Microwave Dielectric Ceramics Prepared by Hot Pressing and Spark Plasma Sintering. Journal of the American Ceramic Society, 2012, 95, 1023-1028.	3.8	6
99	In situ accelerated leaching of cement paste by application of electrical fields monitored by synchrotron X-ray diffraction. Applied Physics A: Materials Science and Processing, 2004, 79, 661-669.	2.3	5
100	Synthesis and Sintering of Si_3N_4 Obtained by the SHS Process. Industrial & Engineering Chemistry Research, 2006, 45, 1277-1280.	3.7	5
101	Fibrous alumina-based Ni-CeO ₂ catalyst: Synthesis, structure and properties in propane pre-reforming. Materials Letters, 2018, 215, 35-37.	2.6	5
102	Low temperature, spark plasma sintering behavior of zirconia added by a novel type of alumina nanofibers. Ceramics International, 2014, 40, 7235-7244.	4.8	4
103	Hybrid Graphene/Alumina Nanofibers for Electroconductive Zirconia. Key Engineering Materials, 2016, 674, 15-20.	0.4	4
104	Development of AlN and TiB ₂ Composites with Nb ₂ O ₅ , Y ₂ O ₃ and ZrO ₂ as Sintering Aids. Materials, 2017, 10, 324.	2.9	4
105	Mesoporous fibrous silicon nitride by catalytic nitridation of silicon. Progress in Natural Science: Materials International, 2019, 29, 190-197.	4.4	4
106	Combustion synthesis and characterization of Sr ₃ Al ₂ O ₆ . International Journal of Applied Ceramic Technology, 2019, 16, 595-601.	2.1	4
107	Microstructural development and mechanical performance of CaSiO ₃ -Ca ₃ (PO ₄) ₂ bioceramics following the addition of CaSiO ₃ -Ca ₃ (PO ₄) ₂ -MgCa(SiO ₃) ₂ eutectic glass. Ceramics International, 2021, 47, 5502-5509.	4.8	4
108	Preparation and Application in Crude Oil-Water Separation of Clay-Based Membranes. Materials Research, 2021, 24, .	1.3	4

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109	Estudio por difracción de rayos X de la hidratación de mezclas de CaAl_2O_4 - Humo de sílice. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2007, 46, 280-288.	1.9	4
110	The thermal explosion synthesis of AlNi monitored by neutron thermodiffraction. Acta Materialia, 2010, 58, 2769-2777.	7.9	3
111	Devitrification study of a novel bioactive glass designed on the CaSiO_3 - $\text{Ca}_3(\text{PO}_4)_2$ - $\text{MgCa}(\text{SiO}_3)_2$ system. Journal of Non-Crystalline Solids, 2020, 528, 119705.	3.1	3
112	Synchrotron X-ray microdiffraction to study dental structures in Cretaceous crocodylomorphs. Cretaceous Research, 2021, 128, 104960.	1.4	3
113	Obtención de Si_3N_4 mediante SHS. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2003, 42, 89-92.	1.9	3
114	Influencia de los parámetros de síntesis en la obtención de hidroxiapatito por el método de combustión. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2007, 46, 299-303.	1.9	3
115	Aportaciones de la paleohistología humana al estudio de biomateriales. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2012, 51, 313-320.	1.9	3
116	Self-reinforced Si_3N_4 ceramics fabricated using Si_3N_4 produced by self-propagating high temperature synthesis. Scripta Materialia, 1996, 35, 991-997.	5.2	2
117	Statistic analysis of electromechanical response in cymbal piezocomposites. Journal of the European Ceramic Society, 2007, 27, 4173-4176.	5.7	2
118	Physicochemical stability under inert and reductive atmospheres of Li_2TiO_3 produced from Li_2CO_3 obtained from Argentinean brines. Fusion Engineering and Design, 2018, 130, 148-154.	1.9	2
119	Photopolymerization for filling porous ceramic matrix: Improvement of mechanical properties and drug delivering behavior. Polymer Composites, 2019, 40, 1654-1662.	4.6	2
120	Bone regeneration using Wollastonite/ β -TCP scaffolds implants in critical bone defect in rat calvaria. Biomedical Physics and Engineering Express, 2021, 7, 055015.	1.2	2
121	Síntesis de zeolita LTA sobre soportes de corindón: Evaluación preliminar para la eliminación de metales pesados de efluentes acuosos. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2012, 51, 249-254.	1.9	2
122	Análisis de la distribución temática en el Boletín de la Sociedad Española de Cerámica y Vidrio. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2005, 44, 427-434.	1.9	2
123	Study of the combining adsorption-microfiltration process for the treatment of coloured waters. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2012, 51, 165-168.	1.9	2
124	Preparation and characterization of new tubular kaolinitic ceramic membrane used for dairy wastewater treatment. International Journal of Applied Ceramic Technology, 2022, 19, 2114-2123.	2.1	2
125	Effect of Y_2O_3 and MgO contaminants introduced by Y-TZP and Mg-PSZ milling balls on the sintering of Al_2O_3 powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1989, 109, 101-104.	5.6	1
126	Ceramic filters for oil emulsion treatments. Desalination and Water Treatment, 2016, 57, 28071-28076.	1.0	1

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127	Calcium Phosphates in Biomedical Engineering. , 2021, , 595-600.		0
128	Time-resolved diffraction studies of the combustion synthesis of NiAl/TiC composite. Acta Crystallographica Section A: Foundations and Advances, 2005, 61, c72-c73.	0.3	0
129	Evoluci3n del impacto del Bolet3n de la Sociedad Espa3ola de Cer3mica y Vidrio. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2006, 45, 408-412.	1.9	0
130	SHS in Spain. , 2017, , 314-316.		0
131	Self-Photopolymerizable Hydrogel3Ceramic Composites with Scavenger Properties. Polymers, 2022, 14, 1261.	4.5	0