Khiam Aik Khor

List of Publications by Citations

205 papers	11,744 citations	64 h-index	98 g-index
210 ext. papers	12,618 ext. citations	6.8 avg, IF	6.2 L-index

#	Paper	IF	Citations
205	A complete polarization model of a solid oxide fuel cell and its sensitivity to the change of cell component thickness. *Journal of Power Sources*, **2001**, 93, 130-140	8.9	654
204	Tensile properties, tension-tension fatigue and biological response of polyetheretherketone-hydroxyapatite composites for load-bearing orthopedic implants. *Biomaterials*, **2003**, 24, 2245-50	15.6	297
203	Performance evaluation of anode-supported solid oxide fuel cells with thin film YSZ electrolyte. *International Journal of Hydrogen Energy*, **2004**, 29, 1025-1033	6.7	232
202	Addressing processing problems associated with plasma spraying of hydroxyapatite coatings. *Biomaterials*, **1996**, 17, 537-44	15.6	199
201	Low-temperature SOFC with thin film GDC electrolyte prepared in situ by solid-state reaction. *Solid State Ionics*, **2004**, 170, 9-15	3.3	193
200	In vitro studies of plasma-sprayed hydroxyapatite/Ti-6Al-4V composite coatings in simulated body fluid (SBF). *Biomaterials*, **2003**, 24, 1603-11	15.6	186
199	Temperature driven morphological changes of chemically precipitated hydroxyapatite nanoparticles. *Langmuir*, **2004**, 20, 5196-200	4	182
198	Spark plasma sintering of hydroxyapatite powders. *Biomaterials*, **2002**, 23, 37-43	15.6	177
197	Effects of residual stress on the performance of plasma sprayed functionally graded ZrO2/NiCoCrAlY coatings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2000**, 277, 64-76	5.3	175
196	High-performance low-temperature solid oxide fuel cell with novel BSCF cathode. *Journal of Power Sources*, **2006**, 161, 123-128	8.9	168
195	FeB/FeB phase transformation during SPS pack-boriding: Boride layer growth kinetics. *Acta Materialia*, **2005**, 53, 2361-2368	8.4	167
194	Influence of microstructure on the ionic conductivity of yttria-stabilized zirconia electrolyte. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2002**, 335, 246-252	5.3	163
193	Bone-like apatite layer formation on hydroxyapatite prepared by spark plasma sintering (SPS). *Biomaterials*, **2004**, 25, 4127-34	15.6	161
192	Thermal properties of plasma-sprayed functionally graded thermal barrier coatings. *Thin Solid Films* , **2000**, 372, 104-113	2.2	156
191	Titanium dioxide reinforced hydroxyapatite coatings deposited by high velocity oxy-fuel (HVOF) spray. *Biomaterials*, **2002**, 23, 85-91	15.6	153
190	A novel amperometric biosensor based on ZnO:Co nanoclusters for biosensing glucose. *Biosensors and Bioelectronics*, **2007**, 23, 135-9	11.8	146
189	Simulation of a composite cathode in solid oxide fuel cells. *Electrochimica Acta*, **2004**, 49, 1851-1861	6.7	143

188	Mechanical properties of injection molded hydroxyapatite-polyetheretherketone biocomposites. *Composites Science and Technology*, **2003**, 63, 421-425	8.6	136
187	Transparent and flexible glucose biosensor via layer-by-layer assembly of multi-wall carbon nanotubes and glucose oxidase. *Electrochemistry Communications*, **2007**, 9, 1269-1275	5.1	134
186	An Air-Stable Densely Packed Phosphorene□Graphene Composite Toward Advanced Lithium Storage Properties. *Advanced Energy Materials*, **2016**, 6, 1600453	21.8	131
185	Microstructure and mechanical properties of spark plasma sintered zirconia-hydroxyapatite nano-composite powders. *Acta Materialia*, **2005**, 53, 2327-2335	8.4	130
184	Interface driven energy filtering of thermoelectric power in spark plasma sintered Bi(2)Te(2.7)Se(0.3) nanoplatelet composites. *Nano Letters*, **2012**, 12, 4305-10	11.5	127
183	Thermal conductivity and dielectric constant of spark plasma sintered aluminum nitride. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 347, 300-305	5.3	123
182	An in vitro investigation of plasma sprayed hydroxyapatite (HA) coatings produced with flame-spheroidized feedstock. *Biomaterials*, **2002**, 23, 775-85	15.6	119
181	(La0.75Sr0.25)(Cr0.5Mn0.5)O3/YSZ composite anodes for methane oxidation reaction in solid oxide fuel cells. *Solid State Ionics*, **2006**, 177, 149-157	3.3	117
180	Multifunctional 0D□2D Ni2P Nanocrystals□Black Phosphorus Heterostructure. *Advanced Energy Materials*, **2017**, 7, 1601285	21.8	114
179	Plasma-sprayed hydroxyapatite (HA) coatings with flame-spheroidized feedstock: microstructure and mechanical properties. *Biomaterials*, **2000**, 21, 1223-34	15.6	114
178	Surface characteristics and dissolution behavior of plasma-sprayed hydroxyapatite coating. *Journal of Biomedical Materials Research Part B*, **2002**, 62, 228-36		113
177	Plasma spraying of functionally graded hydroxyapatite/Ti□Al□V coatings. *Surface and Coatings Technology*, **2003**, 168, 195-201	4.4	102
176	Laminated and functionally graded hydroxyapatite/yttria stabilized tetragonal zirconia composites fabricated by spark plasma sintering. *Biomaterials*, **2003**, 24, 667-75	15.6	100
175	Effect of spark plasma sintering on the microstructure and in vitro behavior of plasma sprayed HA coatings. *Biomaterials*, **2003**, 24, 2695-705	15.6	99
174	Development of (La,Sr)MnO[sub 3]-Based Cathodes for Intermediate Temperature Solid Oxide Fuel Cells. *Electrochemical and Solid-State Letters*, **2003**, 6, A67		96
173	Microstructure and mechanical properties of plasma sprayed HA/YSZ/Ti-6Al-4V composite coatings. *Biomaterials*, **2004**, 25, 4009-17	15.6	95
172	Protein expression profiles in osteoblasts in response to differentially shaped hydroxyapatite nanoparticles. *Biomaterials*, **2009**, 30, 5385-91	15.6	94
171	Activity of plasma sprayed yttria stabilized zirconia reinforced hydroxyapatite/Ti-6Al-4V composite coatings in simulated body fluid. *Biomaterials*, **2004**, 25, 3177-85	15.6	92

170	Mixing and characterization of feedstock for powder injection molding. *Materials Letters*, **2000**, 46, 109-114	3.4	91
169	Identification of O2 reduction processes at yttria stabilized zirconia|doped lanthanum manganite interface. *Journal of Power Sources*, **2003**, 123, 17-25	8.9	89
168	Production of metal matrix composite part by powder injection molding. *Journal of Materials Processing Technology*, **2001**, 108, 398-407	5.3	89
167	Plasma sprayed functionally graded thermal barrier coatings. *Materials Letters*, **1999**, 38, 437-444	3.3	88
166	Effects of incorporation of HA/ZrO(2) into glass ionomer cement (GIC). *Biomaterials*, **2005**, 26, 713-20	15.6	86
165	Chemical analysis of silica doped hydroxyapatite biomaterials consolidated by a spark plasma sintering method. *Journal of Inorganic Biochemistry*, **2007**, 101, 187-95	4.2	85
164	Preparation and characterization of a novel hydroxyapatite/carbon nanotubes composite and its interaction with osteoblast-like cells. *Materials Science and Engineering C*, **2009**, 29, 44-49	8.3	84
163	3D superhydrophobic reduced graphene oxide for activated NO2 sensing with enhanced immunity to humidity. *Journal of Materials Chemistry A*, **2018**, 6, 478-488	13	84
162	Micro-powder injection molding. *Journal of Materials Processing Technology*, **2002**, 127, 165-168	5.3	83
161	Impact formation and microstructure characterization of thermal sprayed hydroxyapatite/titania composite coatings. *Biomaterials*, **2003**, 24, 949-57	15.6	83
160	Anode-supported solid oxide fuel cell with yttria-stabilized zirconia/gadolinia-doped ceria bilayer electrolyte prepared by wet ceramic co-sintering process. *Journal of Power Sources*, **2006**, 162, 1036-1042	8.9	80
159	HVOF spraying of nanostructured hydroxyapatite for biomedical applications. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 396, 181-187	5.3	80
158	Preparation and characterization of nano-sized hydroxyapatite powders produced in a radio frequency (rf) thermal plasma. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 374, 101-108	5.3	79
157	Densification of plasma sprayed YSZ electrolytes by spark plasma sintering (SPS). *Journal of the European Ceramic Society*, **2003**, 23, 1855-1863	6	79
156	Binder system for micropowder injection molding. *Materials Letters*, **2001**, 48, 31-38	3.3	79
155	Experimental studies on a new bioactive material: HAIonomer cements. *Biomaterials*, **2002**, 23, 955-62	15.6	77
154	Effect of characteristics of Y2O3/ZrO2 powders on fabrication of anode-supported solid oxide fuel cells. *Journal of Power Sources*, **2003**, 117, 26-34	8.9	74
153	Sintering study of 316L stainless steel metal injection molding parts using Taguchi method: final density. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 311, 74-82	5.3	73

152	Ti and Ti-6Al-4V Coatings by Cold Spraying and Microstructure Modification by Heat Treatment. *Advanced Engineering Materials*, **2007**, 9, 418-423	3.5	72
151	Effect of particulate morphology on the tensile behaviour of polymer–hydroxyapatite composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2003**, 345, 47-54	5.3	71
150	Tensile properties and microstructural analysis of spheroidized hydroxyapatite–poly (etheretherketone) biocomposites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 345, 55-63	5.3	71
149	Electrochemical behavior of La(Sr)MnO3 electrode under cathodic and anodic polarization. *Solid State Ionics*, **2004**, 167, 379-387	3.3	69
148	Controlled growth of bismuth antimony telluride Bi Sb2Te3 nanoplatelets and their bulk thermoelectric nanocomposites. *Nano Energy*, **2015**, 15, 688-696	17.1	67
147	Tension–tension fatigue behavior of hydroxyapatite reinforced polyetheretherketone composites. *International Journal of Fatigue*, **2004**, 26, 49-57	5	66
146	Characterisation of a duplex TiO2/CaP coating on Ti6Al4V for hard tissue replacement. *Biomaterials* , **2005**, 26, 1087-95	15.6	66
145	Hydroxyapatite/titania nanocomposites derived by combining high-energy ball milling with spark plasma sintering processes. *Journal of the European Ceramic Society*, **2008**, 28, 3083-3090	6	65
144	Raman spectroscopy determination of phases within thermal sprayed hydroxyapatite splats and subsequent in vitro dissolution examination. *Acta Materialia*, **2004**, 52, 445-453	8.4	65
143	Antibacterial Property of Cold-Sprayed HA-Ag/PEEK Coating. *Journal of Thermal Spray Technology*, **2009**, 18, 10-15	2.5	64
142	Properties of heat-treated calcium phosphate coatings deposited by high-velocity oxy-fuel (HVOF) spray. *Biomaterials*, **2002**, 23, 2105-12	15.6	64
141	Influence of plasma and cold spray deposited Ti Layers on high-cycle fatigue properties of Ti6Al4V substrates. *Surface and Coatings Technology*, **2013**, 217, 23-33	4.4	63
140	Young's modulus and fracture toughness determination of high velocity oxy-fuel-sprayed bioceramic coatings. *Surface and Coatings Technology*, **2002**, 155, 21-32	4.4	63
139	Spark-plasma-sintering (SPS) of nanostructured titanium carbonitride powders. *Journal of the European Ceramic Society*, **2005**, 25, 1919-1927	6	63
138	TEM and STEM analysis on heat-treated and in vitro plasma-sprayed hydroxyapatite/Ti-6Al-4V composite coatings. *Biomaterials*, **2003**, 24, 97-105	15.6	62
137	Mechanical behavior of plasma sprayed functionally graded YSZ/NiCoCrAlY composite coatings. *Surface and Coatings Technology*, **2001**, 139, 200-206	4.4	62
136	Influence of spraying conditions on thermal and velocity properties of plasma sprayed hydroxyapatite. *Materials Science and Engineering C*, **2007**, 27, 340-344	8.3	61
135	Spark-plasma-sintering (SPS) of nanostructured and submicron titanium oxide powders. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 381, 16-19	5.3	56

134	Fretting wear behaviors of thermal sprayed hydroxyapatite (HA) coating under unlubricated conditions. *Wear*, **1998**, 217, 132-139	3.5	54
133	Characterization of powder injection molding feedstock. *Materials Characterization*, **2002**, 49, 313-320	3.9	54
132	Preparation yttria-stabilized zirconia electrolyte by spark-plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 341, 43-48	5.3	54
131	Formation of hard tungsten boride layer by spark plasma sintering boriding. *Thin Solid Films*, **2005**, 478, 232-237	2.2	54
130	Microstructure formation in plasma-sprayed functionally graded NiCoCrAlY/yttria-stabilized zirconia coatings. *Surface and Coatings Technology*, **1999**, 114, 181-186	4.4	54
129	Reliability and accuracy of measured overpotential in a three-electrode fuel cell system. *Journal of Applied Electrochemistry*, **2001**, 31, 1163-1170	2.6	53
128	Significance of melt-fraction in HVOF sprayed hydroxyapatite particles, splats and coatings. *Biomaterials*, **2004**, 25, 1177-86	15.6	51
127	Microstructures and mechanical properties of powder injection molded Ti-6Al-4V/HA powder. *Biomaterials*, **2002**, 23, 2927-38	15.6	50
126	Enhanced thermoelectric performance of solution-derived bismuth telluride based nanocomposites via liquid-phase Sintering. *Nano Energy*, **2016**, 30, 630-638	17.1	49
125	Chitosan-mediated crystallization and assembly of hydroxyapatite nanoparticles into hybrid nanostructured films. *Journal of the Royal Society Interface*, **2008**, 5, 427-39	4.1	49
124	Development of LSM/YSZ composite cathode for anode-supported solid oxide fuel cells. *Journal of Applied Electrochemistry*, **2004**, 34, 409-415	2.6	49
123	Apparent solubility of hydroxyapatite in aqueous medium and its influence on the morphology of nanocrystallites with precipitation temperature. *Langmuir*, **2006**, 22, 11002-8	4	48
122	Effect of solid carbide particle size on deposition behaviour, microstructure and wear performance of HVOF cermet coatings. *Materials Science and Technology*, **2004**, 20, 1087-1096	1.5	48
121	Adhesive and bending failure of thermal sprayed hydroxyapatite coatings: Effect of nanostructures at interface and crack propagation phenomenon during bending. *Engineering Fracture Mechanics*, **2007**, 74, 1894-1903	4.2	47
120	RF plasma processing of ultra-fine hydroxyaptite powders. *Journal of Materials Processing Technology*, **2001**, 113, 456-462	5.3	47
119	Yttria stabilized zirconia reinforced hydroxyapatite coatings. *Surface and Coatings Technology*, **2000** , 127, 66-75	4.4	47
118	Thermal sprayed hydroxyapatite splats: nanostructures, pore formation mechanisms and TEM characterization. *Biomaterials*, **2004**, 25, 3463-71	15.6	46
117	Evaluation of adhesion strength and toughness of fluoridated hydroxyapatite coatings. *Thin Solid Films*, **2008**, 516, 5162-5167	2.2	45

116	High-performance (La,Sr)(Cr,Mn)O3/(Gd,Ce)O2 composite anode for direct oxidation of methane. *Journal of Power Sources*, **2007**, 165, 34-40	8.9	44
115	Osteoblastic cell response on magnesium-incorporated apatite coatings. *Applied Surface Science*, **2008**, 255, 304-307	6.7	44
114	Boriding of mild steel using the spark plasma sintering (SPS) technique. *Surface and Coatings Technology*, **2002**, 157, 226-230	4.4	43
113	Microstructure evolution during sintering of injection molded M2 high speed steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2000**, 293, 46-55	5.3	42
112	Microstructure modifications and phase transformation in plasma-sprayed WC Co coatings following post-spray spark plasma sintering. *Surface and Coatings Technology*, **2005**, 194, 96-102	4.4	41
111	A simple bilayer electrolyte model for solid oxide fuel cells. *Solid State Ionics*, **2003**, 158, 29-43	3.3	40
110	Spark plasma sintering of Sm2O3-doped aluminum nitride. *Journal of the European Ceramic Society*, **2005**, 25, 1057-1065	6	40
109	Sintering of injection molded M2 high-speed steel. *Materials Letters*, **2000**, 45, 32-38	3.3	40
108	Microstructure-property modifications in plasma sprayed 20 wt.% yttria stabilized zirconia electrolyte by spark plasma sintering (SPS) technique. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 366, 120-126	5.3	39
107	Radio frequency (rf) plasma spheroidized HA powders: powder characterization and spark plasma sintering behavior. *Biomaterials*, **2005**, 26, 2197-207	15.6	39
106	Non-destructive evaluation of plasma sprayed functionally graded thermal barrier coatings. *Surface and Coatings Technology*, **2000**, 130, 233-239	4.4	39
105	Pulsed laser treatment of plasma-sprayed hydroxyapatite coatings. *Biomaterials*, **1996**, 17, 1901-4	15.6	39
104	Role of in-flight temperature and velocity of powder particles on plasma sprayed hydroxyapatite coating characteristics. *Surface and Coatings Technology*, **2012**, 206, 2181-2191	4.4	38
103	Texture and structure evolution of tantalum powder samples during spark-plasma-sintering (SPS) and conventional hot-pressing. *International Journal of Refractory Metals and Hard Materials*, **2007**, 25, 280-285	4.1	38
102	High-pressure plasma spraying of hydroxyapatite powders. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2002**, 325, 9-18	5.3	38
101	Mechanical, tribological and biological properties of novel 45S5 Bioglass composites reinforced with in situ reduced graphene oxide. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 65, 77-89	4.1	37
100	Minority Carrier Blocking to Enhance the Thermoelectric Performance of Solution-Processed BiSbTe Nanocomposites via a Liquid-Phase Sintering Process. *ACS Applied Materials & Interfaces*, **2017**, 9, 12501-12510	9.5	36
99	Characterization of hydroxyapatite/nano-zirconia composite coatings deposited by high velocity oxy-fuel (HVOF) spray process. *Surface and Coatings Technology*, **2004**, 182, 227-236	4.4	36

98	Bond strength determination of hydroxyapatite coatings on Ti-6Al-4V substrates using the LAser Shock Adhesion Test (LASAT). *Journal of Biomedical Materials Research - Part A*, **2010**, 95, 1096-104	5.4	35
97	Sulfur Tolerance and Hydrocarbon Stability of La[sub 0.75]Sr[sub 0.25]Cr[sub 0.5]Mn[sub 0.5]O[sub 3]□d[sub 0.2]Ce[sub 0.8]O[sub 1.9] Composite Anode under Anodic Polarization. *Journal of the Electrochemical Society*, **2007**, 154, B1206	3.9	35
96	Effects of debinding parameters on powder injection molded Ti-6Al-4V/HA composite parts. *Advanced Powder Technology*, **2001**, 12, 361-370	4.6	35
95	Effect of the powders□melting state on the properties of HVOF sprayed hydroxyapatite coatings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2000**, 293, 71-80	5.3	35
94	Overcoming the effect of contaminant in solid oxide fuel cell (SOFC) electrolyte: spark plasma sintering (SPS) of 0.5 wt.% silica-doped yttria-stabilized zirconia (YSZ). *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 374, 64-71	5.3	34
93	Characterization of the bone-like apatite precipitated on high velocity oxy-fuel (HVOF) sprayed calcium phosphate deposits. *Biomaterials*, **2003**, 24, 769-75	15.6	34
92	Processing, microstructure and mechanical properties of yttria stabilized zirconia reinforced hydroxyapatite coatings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 316, 46-51	5.3	34
91	Influence of oxide mixtures on mechanical properties of plasma sprayed functionally graded coating. *Thin Solid Films*, **2000**, 368, 86-92	2.2	34
90	Phase composition and heat of crystallisation of amorphous calcium phosphate in ultra-fine radio frequency suspension plasma sprayed hydroxyapatite powders. *Acta Materialia*, **2004**, 52, 1171-1181	8.4	33
89	Effect of spark plasma sintering (SPS) on the microstructure and mechanical properties of randomly packed hollow sphere (RHS) cell wall. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 356, 130-135	5.3	33
88	Spark plasma sintering of sol□gel derived 45S5 Bioglass□ -ceramics: Mechanical properties and biocompatibility evaluation. *Materials Science and Engineering C*, **2012**, 32, 494-502	8.3	32
87	Boride layer growth kinetics during boriding of molybdenum by the Spark Plasma Sintering (SPS) technology. *Surface and Coatings Technology*, **2006**, 201, 2849-2853	4.4	32
86	Spark plasma sintered hydroxyapatite-yttria stabilized zirconia composites. *Ceramics International*, **2004**, 30, 1793-1796	5.1	32
85	In vitro behavior of HVOF sprayed calcium phosphate splats and coatings. *Biomaterials*, **2003**, 24, 723-35	15.6	31
84	Antibacterial Property of Cold Sprayed Chitosan-Cu/Al Coating. *Journal of Thermal Spray Technology*, **2009**, 18, 600-608	2.5	30
83	Restoring WC in plasma sprayed WC□o coatings through spark plasma sintering (SPS). *Surface and Coatings Technology*, **2004**, 182, 308-317	4.4	30
82	Process-microstructure-property relationships in controlled atmosphere plasma spraying of ceramics. *Surface and Coatings Technology*, **2004**, 183, 204-211	4.4	30
81	Effect of thermal exposure on the microstructure and properties of EB-PVD gradient thermal barrier coatings. *Surface and Coatings Technology*, **2003**, 168, 23-29	4.4	30

80	Processing of HA-coated Ti-6Al-4V by a ceramic slurry approach: an in vitro study. *Biomaterials*, **2001**, 22, 1225-32	15.6	30
79	Mechanical alloying of TiC/M2 high speed steel composite powders and sintering investigation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2001**, 311, 13-21	5.3	30
78	Ti-6A1-4V/HA composite feedstock for injection molding. *Materials Letters*, **2002**, 56, 522-532	3.3	30
77	Preparation and characterization of bioactive monolayer and functionally graded coatings. *Journal of Materials Science: Materials in Medicine*, **1999**, 10, 269-73	4.5	30
76	(La0.8Sr0.2)0.9MnO3□d0.2Ce0.8O1.9 composite cathodes prepared from (Gd, Ce)(NO3) x -modified (La0.8Sr0.2)0.9MnO3 for intermediate-temperature solid oxide fuel cells. *Journal of Solid State Electrochemistry*, **2006**, 10, 339-347	2.6	29
75	High temperature in-situ XRD of plasma sprayed HA coatings. *Biomaterials*, **2002**, 23, 381-7	15.6	29
74	Processing-microstructure-property relations in HVOF sprayed calcium phosphate based bioceramic coatings. *Biomaterials*, **2003**, 24, 2233-43	15.6	29
73	Spark plasma reaction sintering of ZrO2□mullite composites from plasma spheroidized zircon/alumina powders. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 339, 286-296	5.3	29
72	Characterization of hydroxyapatite□and bioglass□316L fibre composites prepared by spark plasma sintering. *Materials Letters*, **2004**, 58, 304-307	3.3	29
71	Phase reaction and sintering behavior of a Al2O3□20wt%AlN□wt%Y2O3 system. *Acta Materialia*, **2001**, 49, 3117-3127	8.4	29
70	Comparative proteomics profile of osteoblasts cultured on dissimilar hydroxyapatite biomaterials: an iTRAQ-coupled 2-D LC-MS/MS analysis. *Proteomics*, **2008**, 8, 4249-58	4.8	28
69	Development of zirconia-glass ionomer cement composites. *Journal of Non-Crystalline Solids*, **2005**, 351, 508-514	3.9	28
68	The effects of ZrO2 on the phase compositions of plasma sprayed HA/YSZ composite coatings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2000**, 276, 160-166	5.3	28
67	Multilayer assembly of positively charged polyelectrolyte and negatively charged glucose oxidase on a 3D Nafion network for detecting glucose. *Biosensors and Bioelectronics*, **2007**, 22, 3256-60	11.8	27
66	Initial attachment of osteoblastic cells onto sol-gel derived fluoridated hydroxyapatite coatings. *Journal of Biomedical Materials Research - Part A*, **2008**, 84, 769-76	5.4	27
65	Single-Step Process toward Achieving Superhydrophobic Reduced Graphene Oxide. *ACS Applied Materials & Interfaces*, **2016**, 8, 10985-94	9.5	27
64	Characteristics of the nanostructures in thermal sprayed hydroxyapatite coatings and their influence on coating properties. *Surface and Coatings Technology*, **2006**, 201, 2147-2154	4.4	26
63	Defect Chemistry of La[sub 1□]Sr[sub x]MnO[sub 3□]under Cathodic Polarization. *Electrochemical and Solid-State Letters*, **2004**, 7, A144		26

62	An electrolyte model for ceramic oxygen generator and solid oxide fuel cell. *Journal of Power Sources*, **2002**, 111, 320-328	8.9	26
61	Radio frequency (RF) suspension plasma sprayed ultra-fine hydroxyapatite (HA)/zirconia composite powders. *Biomaterials*, **2003**, 24, 2611-21	15.6	26
60	Fretting wear behavior of thermal sprayed hydroxyapatite coating lubricated with bovine albumin. *Wear*, **1999**, 230, 98-102	3.5	24
59	Biocompatible nanostructured high-velocity oxyfuel sprayed titania coating: Deposition, characterization, and mechanical properties. *Journal of Thermal Spray Technology*, **2006**, 15, 623-627	2.5	23
58	Cyclic voltammetry of (La,Sr)MnO3 electrode on YSZ substrate. *Solid State Ionics*, **2003**, 164, 17-25	3.3	23
57	Characterization of spark plasma sintered Ag nanopowders. *Nanotechnology*, **2010**, 21, 115707	3.4	21
56	An Improved Anode Micro Model of SOFC. *Electrochemical and Solid-State Letters*, **2004**, 7, A63		21
55	Thermally induced crystallization of amorphous calcium phosphate in plasma-spheroidised hydroxyapatite powders. *Materials Letters*, **2000**, 46, 229-233	3.3	21
54	Crystallization behaviors in the plasma-spheroidized alumina/zircon mixtures. *Materials Letters*, **2001**, 48, 57-63	3.3	21
53	Influence of Cold-Sprayed, Warm-Sprayed, and Plasma-Sprayed Layers Deposition on Fatigue Properties of Steel Specimens. *Journal of Thermal Spray Technology*, **2015**, 24, 758-768	2.5	20
52	In vivo evaluation of titanium oxide and hydroxyapatite as an artificial cornea skirt. *Journal of Materials Science: Materials in Medicine*, **2012**, 23, 1063-72	4.5	20
51	Neutron diffraction residual strain measurements in nanostructured hydroxyapatite coatings for orthopaedic implants. *Journal of the Mechanical Behavior of Biomedical Materials*, **2011**, 4, 2043-54	4.1	20
50	Synthesis and Characterization of Neodymium(III) and Gadolinium(III)-Substituted Hydroxyapatite as Biomaterials. *International Journal of Applied Ceramic Technology*, **2009**, 6, 501-512	2	19
49	An interfacial study of sol□gel-derived magnesium apatite coatings on Ti6Al4V substrates. *Thin Solid Films*, **2008**, 516, 5172-5175	2.2	19
48	Spark plasma sintering and in vitro study of ultra-fine HA and ZrO2□HA powders. *Journal of Materials Processing Technology*, **2003**, 140, 420-425	5.3	19
47	Application of Graphene as Candidate Biomaterial for Synthetic Keratoprosthesis Skirt **2015**, 56, 6605-11		18
46	Fabrication and spectroscopic characterization of Ce3+ doped Sr2Y8(SiO4)6O2 translucent ceramics. *Optical Materials*, **2012**, 34, 1155-1160	3.3	18
45	Conductometric study of precursor compound formation during wet-chemical synthesis of nanocrystalline hydroxyapatite. *Journal of Physical Chemistry B*, **2006**, 110, 24457-62	3.4	18

44	Microstructure and composition analysis in plasma sprayed coatings of Al2O3/ZrSiO4 mixtures. *Surface and Coatings Technology*, **2002**, 150, 125-132	4.4	18
43	Physicochemical differences after densifying radio frequency plasma sprayed hydroxyapatite powders using spark plasma and conventional sintering techniques. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 457, 24-32	5.3	17
42	The adhesion strength and residual stress of colloidal-sol gel derived Tricalcium-Phosphate/Fluoridated-Hydroxyapatite biphasic coatings. *Thin Solid Films*, **2008**, 516, 3251-3255	2.2	17
41	Mechanical properties of the plasma-sprayed Al2O3/ZrSiO4 coatings. *Surface and Coatings Technology*, **2002**, 150, 143-150	4.4	17
40	Synthesis and characterization on atomphospheric plasma sprayed amorphous silica doped hydrxoyapatite coatings. *Surface and Coatings Technology*, **2012**, 206, 4659-4665	4.4	16
39	Modification of Plasma-sprayed TiO2 Coatings Characteristics via Controlling the In-flight Temperature and Velocity of the Powder Particles. *Journal of Thermal Spray Technology*, **2014**, 23, 1339-1349	2.5	15
38	Effect of steam treatment during plasma spraying on the microstructure of hydroxyapatite splats and coatings. *Journal of Thermal Spray Technology*, **2006**, 15, 610-616	2.5	15
37	Injection molding of 316L stainless steel microstructures. *Microsystem Technologies*, **2003**, 9, 507-510	1.7	15
36	In-Flight Temperature and Velocity of Powder Particles of Plasma-Sprayed TiO2. *Journal of Thermal Spray Technology*, **2013**, 22, 1320-1327	2.5	14
35	The evaluation of powder processing on microstructure and mechanical properties of hydroxyapatite (HA)/yttria stabilized zirconia (YSZ) composite coatings. *Surface and Coatings Technology*, **2001**, 140, 263-268	4.4	14
34	Pressureless spark plasma sintering of alumina micro-channel part produced by micro powder injection molding. *Scripta Materialia*, **2011**, 64, 237-240	5.6	13
33	Residual stress of ruthenium powder samples compacted by spark-plasma-sintering (SPS) determined by X-ray diffraction. *International Journal of Refractory Metals and Hard Materials*, **2009**, 27, 105-110	4.1	13
32	Residual stress in spark-plasma-sintered and hot-pressed tantalum samples determined by X-ray diffraction methods. *International Journal of Refractory Metals and Hard Materials*, **2008**, 26, 312-317	4.1	13
31	In vitro effect of magnesium inclusion in sol-gel derived apatite. *Thin Solid Films*, **2008**, 516, 5176-5180	2.2	13
30	Production of micro components by micro powder injection molding. *Journal of Materials Science Letters*, **2001**, 20, 307-309		13
29	Optical and biological properties of transparent nanocrystalline hydroxyapatite obtained through spark plasma sintering. *Materials Science and Engineering C*, **2016**, 69, 956-66	8.3	13
28	Aluminium nitride by plasma spraying of an Al2O3-Sm2O3 system. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 300, 203-210	5.3	11
27	Multifunctional bioceramic-based composites reinforced with silica-coated carbon nanotube core-shell structures. *Ceramics International*, **2017**, 43, 16084-16093	5.1	10

26	Neutron Diffraction Residual Strain Measurements in Plasma Sprayed Nanostructured Hydroxyapatite Coatings for Orthopaedic Implants. *Materials Science Forum*, **2010**, 652, 309-314	0.4	10
25	In vitro effect of a corrosive hostile ocular surface on candidate biomaterials for keratoprosthesis skirt. *British Journal of Ophthalmology*, **2012**, 96, 1252-8	5.5	10
24	Viscoelastic properties of plasma sprayed NiCoCrAlY coatings. *Thin Solid Films*, **2002**, 405, 146-152	2.2	10
23	High temperature damping behavior of plasma sprayed NiCoCrAlY coatings. *Journal of Thermal Spray Technology*, **2002**, 11, 359-364	2.5	10
22	AI-Li/SiCp composites and Ti-AI alloy powders and coatings prepared by a plasma spray atomization (PSA) technique. *Journal of Thermal Spray Technology*, **1994**, 3, 162-168	2.5	10
21	The effect of boron-pack refreshment on the boriding of mild steel by the spark plasma sintering (SPS) process. *Surface and Coatings Technology*, **2008**, 202, 2830-2836	4.4	8
20	A study of processing parameters in thermal-sprayed alumina and zircon mixtures. *Journal of Thermal Spray Technology*, **2002**, 11, 186-194	2.5	8
19	Analysis of phase changes in plasma-sprayed Ti6Al4V/hydroxyapatite composite coatings by DSC. *Materials Letters*, **2001**, 51, 88-93	3.3	8
18	Graphene oxide-functionalized nanocomposites promote osteogenesis of human mesenchymal stem cells via enhancement of BMP-SMAD1/5 signaling pathway. *Biomaterials*, **2021**, 277, 121082	15.6	8
17	Multifunctional Alumina Composites with Toughening and Crack-Healing Features Via Incorporation of NiAl Particles. *Journal of the American Ceramic Society*, **2015**, 98, 1618-1625	3.8	7
16	Transparent Hydroxyapatite Obtained through Spark Plasma Sintering: Optical and Mechanical Properties. *Key Engineering Materials*, **2014**, 631, 51-56	0.4	7
15	Preparation and Properties of Coatings and Thin Films on Metal Implants **2019**, 203-212		7
14	Influence of Input Parameters on Splat Formation and Coating Thermal Diffusivity in Plasma Spraying. *Advanced Engineering Materials*, **2006**, 8, 645-650	3.5	6
13	On the kinetics of apatite growth on substrates under physiological conditions. *Langmuir*, **2006**, 22, 269-276	4	6
12	Dynamic mechanical properties of ZrO2/NiCoCrAlY composite coatings. *Thin Solid Films*, **2000**, 358, 139-145	2.2	6
11	Optimization of spark plasma sintered titania for potential application as a keratoprosthesis skirt. *Journal of Biomedical Materials Research - Part A*, **2017**, 105, 3502-3513	5.4	5
10	Development of Translucent Oxyapatite Ceramics by Spark Plasma Sintering. *Journal of the American Ceramic Society*, **2010**, 93, 3060-3063	3.8	5
9	Incorporating silica-coated graphene in bioceramic nanocomposites to simultaneously enhance mechanical and biological performance. *Journal of Biomedical Materials Research - Part A*, **2020**, 108, 1016-1027	5.4	5

8	A sintered graphene/titania material as a synthetic keratoprosthesis skirt for end-stage corneal disorders. *Acta Biomaterialia*, **2019**, 94, 585-596	10.8	4
7	Determination of the residual stress depth profile of uniaxial compacted ruthenium powder samples by X-ray diffraction. *International Journal of Refractory Metals and Hard Materials*, **2009**, 27, 1004-1008	4.1	4
6	Processing of biocomposite Ti-6Al-4V/HA powder. *Journal of Materials Science Letters*, **2003**, 22, 775-778		3
5	Discharge and densification in the spark plasma sintering of quasicrystal particles. *Journal of Materials Science*, **2019**, 54, 8727-8742	4.3	2
4	Hydroxyapatite Bioceramics Reinforced with Silica-Coated Graphene. *Key Engineering Materials*, **2017**, 758, 150-154	0.4	2
3	Effects of Titania Content and Sintering Temperature on Structural, Mechanical and Bioactive Behaviors of Titania Reinforced Hydroxyapatite Nanocomposites. *Advanced Engineering Materials*, **2008**, 10, B53-B59	3.5	2
2	Lithium Storage: An Air-Stable Densely Packed Phosphorene□Graphene Composite Toward Advanced Lithium Storage Properties (Adv. Energy Mater. 12/2016). *Advanced Energy Materials*, **2016**, 6,	21.8	2
1	The emergence of graphene research topics through interactions within and beyond. *Quantitative Science Studies*,1-37	3.8	