

Rui F Silva

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3633074/publications.pdf>

Version: 2024-02-01

225
papers

4,511
citations

126907

33
h-index

182427

51
g-index

227
all docs

227
docs citations

227
times ranked

4148
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in RF Glow Discharge Optical Emission Spectrometry Characterization of Intrinsic and Boron-Doped Diamond Coatings. ACS Applied Materials & Interfaces, 2022, 14, 7405-7416.	8.0	10
2	Impact of atomic layer deposited TiO ₂ on the photocatalytic efficiency of TiO ₂ /w-VA-CNT nanocomposite materials. RSC Advances, 2022, 12, 16419-16430.	3.6	2
3	Molybdenum Oxide Thin Films Grown on Flexible ITO-Coated PET Substrates. Materials, 2021, 14, 821.	2.9	12
4	Is Poly(methyl methacrylate) (PMMA) a Suitable Substrate for ALD?: A Review. Polymers, 2021, 13, 1346.	4.5	21
5	Experimental Studies of Electron Affinity and Work Function from Aluminium on Oxidized Diamond (100) and (111) Surfaces. Physica Status Solidi (B): Basic Research, 2021, 258, 2100027.	1.5	5
6	Multilayer Diamond Coatings Applied to Micro-End-Milling of Cemented Carbide. Materials, 2021, 14, 3333.	2.9	9
7	Influence of 1D and 2D carbon nanostructures in silica-based aerogels. Carbon, 2021, 180, 146-162.	10.3	19
8	Modification of Steel Surfaces with Nanometer Films of Al ₂ O ₃ and TiO ₂ Decreases Interfacial Adhesion to Polymers: Implications for Demolding Shape-Engineered Polymer Products. ACS Applied Nano Materials, 2021, 4, 10018-10028.	5.0	4
9	Boron Doped Diamond for Real-Time Wireless Cutting Temperature Monitoring of Diamond Coated Carbide Tools. Materials, 2021, 14, 7334.	2.9	5
10	Deposition of diamond films on single crystalline silicon carbide substrates. Diamond and Related Materials, 2020, 101, 107625.	3.9	11
11	Atomic layer deposition of high- <i>k</i> layers on polycrystalline diamond for MOS devices: a review. Journal of Materials Chemistry C, 2020, 8, 13127-13153.	5.5	8
12	Facile Preparation of ZnO/CNTs Nanocomposites via ALD for Photocatalysis Applications. European Journal of Inorganic Chemistry, 2020, 2020, 1743-1750.	2.0	19
13	Interfacial integrity enhancement of atomic layer deposited alumina on boron doped diamond by surface plasma functionalization. Surface and Coatings Technology, 2020, 397, 125991.	4.8	4
14	Nd:YAG laser scribed zinc oxide on semi-flexible copper foils. Materials Letters: X, 2020, 5, 100038.	0.7	0
15	Physical Structure and Electrochemical Response of Diamondâ€“Graphite Nanoplatelets: From CVD Synthesis to Label-Free Biosensors. ACS Applied Materials & Interfaces, 2019, 11, 8470-8482.	8.0	16
16	Polysilsesquioxane-based silica aerogel monoliths with embedded CNTs. Microporous and Mesoporous Materials, 2019, 288, 109575.	4.4	26
17	Influence of external loading on the resonant frequency shift of ultrasonic assisted turning: numerical and experimental analysis. International Journal of Advanced Manufacturing Technology, 2019, 101, 2487-2496.	3.0	5
18	A new route for the synthesis of highly-active N-doped TiO ₂ nanoparticles for visible light photocatalysis using urea as nitrogen precursor. Catalysis Today, 2019, 326, 36-45.	4.4	73

#	ARTICLE	IF	CITATIONS
19	Advances in carbon nanostructureâ€“silica aerogel composites: a review. <i>Journal of Materials Chemistry A</i> , 2018, 6, 1340-1369.	10.3	149
20	Mesenchymal Stem Cell Secretome Improves Tendon Cell Viability In Vitro and Tendon-Bone Healing In Vivo When a Tissue Engineering Strategy Is Used in a Rat Model of Chronic Massive Rotator Cuff Tear. <i>American Journal of Sports Medicine</i> , 2018, 46, 449-459.	4.2	68
21	Thin films composed of Au nanoparticles embedded in AlN: Influence of metal concentration and thermal annealing on the LSPR band. <i>Vacuum</i> , 2018, 157, 414-421.	3.5	24
22	Properties of CrN thin films deposited in plasma-activated ABS by reactive magnetron sputtering. <i>Surface and Coatings Technology</i> , 2018, 349, 858-866.	4.8	11
23	Direct Synthesis of Electrowettable Carbon Nanowallâ€“Diamond Hybrid Materials from Sacrificial Ceramic Templates Using HFCVD. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700019.	3.7	16
24	Composite Materials: Direct Synthesis of Electrowettable Carbon Nanowallâ€“Diamond Hybrid Materials from Sacrificial Ceramic Templates Using HFCVD (<i>Adv. Mater. Interfaces</i> 10/2017). <i>Advanced Materials Interfaces</i> , 2017, 4, .	3.7	0
25	Multilayered diamond mechanical seal rings under biodiesel lubrication and the full sealing conditions of pressurized water. <i>Wear</i> , 2017, 384-385, 178-184.	3.1	10
26	Effect of relative humidity and temperature on the tribology of multilayer micro/nanocrystalline CVD diamond coatings. <i>Diamond and Related Materials</i> , 2017, 73, 190-198.	3.9	16
27	Multilayer CVD Diamond Coatings in the Machining of an Al6061-15 Vol % Al ₂ O ₃ Composite. <i>Coatings</i> , 2017, 7, 165.	2.6	16
28	Nanographene Oxide Functionalization with Organic and Hybrid Organicâ€“Inorganic Polymers by Molecular Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24176-24186.	3.1	11
29	Coating of Vertically Aligned Carbon Nanotubes by a Novel Manganese Oxide Atomic Layer Deposition Process for Binderâ€“Free Hybrid Capacitors. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600313.	3.7	9
30	Diamondâ€“SAW devices: a reverse fabrication method. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2016, 13, 53-58.	0.8	3
31	Lowâ€“temperature deposition of nanocrystalline diamond films on silicon nitride substrates using distributed antenna array PECVD system. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 2575-2581.	1.8	14
32	Threeâ€“dimensional printed <sc>PCL</sc>-hydroxyapatite scaffolds filled with <sc>CNT</sc>s for bone cell growth stimulation. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2016, 104, 1210-1219.	3.4	181
33	Nucleation, Growth Mechanism, and Controlled Coating of ZnO ALD onto Vertically Aligned N-Doped CNTs. <i>Langmuir</i> , 2016, 32, 7038-7044.	3.5	18
34	Surface modifications on as-grown boron doped CVD diamond films induced by the B ₂ O ₃ -ethanol-Ar system. <i>Diamond and Related Materials</i> , 2016, 64, 89-96.	3.9	14
35	Simultaneous CVD synthesis of graphene-diamond hybrid films. <i>Carbon</i> , 2016, 98, 99-105.	10.3	19
36	Sintering of alumina ceramics reinforced with a bioactive glass of 3CaO.P₂O₅-SiO₂-MgO system. <i>Ceramica</i> , 2015, 61, 160-167.	0.8	2

#	ARTICLE	IF	CITATIONS
37	All-Diamond Microelectrodes as Solid State Probes for Localized Electrochemical Sensing. <i>Analytical Chemistry</i> , 2015, 87, 6487-6492.	6.5	9
38	Extremely low wear rates in hip joint bearings coated with nanocrystalline diamond. <i>Tribology International</i> , 2015, 89, 72-77.	5.9	20
39	The High performance of nanocrystalline CVD diamond coated hip joints in wear simulator test. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 49, 175-185.	3.1	27
40	Nanocrystalline Diamond Coatings on Silicon Nitride Bioceramic Bearings. , 2015, , 413-430.		0
41	Smart electroconductive bioactive ceramics to promote in situ electrostimulation of bone. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1831-1845.	5.8	20
42	Catalyst-free growth of carbon nanotube arrays directly on Inconel [®] substrates for electrochemical carbon-based electrodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 17804-17810.	10.3	18
43	Vertically aligned N-doped CNTs growth using Taguchi experimental design. <i>Applied Surface Science</i> , 2015, 344, 57-64.	6.1	12
44	Diels-Ålder functionalized carbon nanotubes for bone tissue engineering: in vitro/in vivo biocompatibility and biodegradability. <i>Nanoscale</i> , 2015, 7, 9238-9251.	5.6	26
45	Electrochemical deposition of Fe and Fe/CNTs composites from strongly alkaline hematite suspensions. <i>Journal of Applied Electrochemistry</i> , 2015, 45, 515-522.	2.9	13
46	Heat Dissipation Interfaces Based on Vertically Aligned Diamond/Graphite Nanoplatelets. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 24772-24777.	8.0	14
47	Turning periodic mesoporous organosilicas selective to CO ₂ /CH ₄ separation: deposition of aluminium oxide by atomic layer deposition. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22860-22867.	10.3	17
48	Multi-Scale Evaluation of Wear in UHMWPE-Metal Hip Implants Tested in a hip Joint Simulator. <i>Biotribology</i> , 2015, 4, 1-11.	1.9	29
49	3D scaffolds from vertically aligned carbon nanotubes/poly(methyl methacrylate) composites via atom transfer radical polymerization. <i>Materials Chemistry and Physics</i> , 2015, 149-150, 378-384.	4.0	5
50	Simultaneous CVD Growth of Nanostructured Carbon Hybrids. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2015, , 111-117.	0.5	0
51	Processing strategies for smart electroconductive carbon nanotube-based bioceramic bone grafts. <i>Nanotechnology</i> , 2014, 25, 145602.	2.6	6
52	Novel electrochemical method of fast and reproducible fabrication of metallic nanoelectrodes. <i>Review of Scientific Instruments</i> , 2014, 85, 095109.	1.3	8
53	ZnO micro/nanocrystals grown by laser assisted flow deposition. , 2014, , .		1
54	Mechanical behaviour of zirconia- α -mullite directionally solidified eutectics. <i>Materials & Design</i> , 2014, 61, 211-216.	5.1	25

#	ARTICLE	IF	CITATIONS
55	Ionic conductivity of directionally solidified zirconia-mullite eutectics. <i>Solid State Ionics</i> , 2014, 256, 45-51.	2.7	5
56	Carbon nanotube-based bioceramic grafts for electrotherapy of bone. <i>Materials Science and Engineering C</i> , 2014, 34, 360-368.	7.3	15
57	Novel diamond microelectrode for pH sensing. <i>Electrochemistry Communications</i> , 2014, 40, 31-34.	4.7	18
58	Directional solidification of ZrO ₂ -BaZrO ₃ composites with mixed protonic-oxide ionic conductivity. <i>Solid State Ionics</i> , 2014, 262, 654-658.	2.7	4
59	New fluorinated diamond microelectrodes for localized detection of dissolved oxygen. <i>Sensors and Actuators B: Chemical</i> , 2014, 204, 544-551.	7.8	20
60	The Stribeck curve as a suitable characterization method of the lubricity of biodiesel and diesel blends. <i>Energy</i> , 2014, 69, 673-681.	8.8	35
61	Multifunctional Carbon Nanotube/Bioceramics Modulate the Directional Growth and Activity of Osteoblastic Cells. <i>Journal of Biomedical Nanotechnology</i> , 2014, 10, 725-743.	1.1	18
62	Artifact level produced by different femoral head prostheses in CT imaging: diamond coated silicon nitride as total hip replacement material. <i>Journal of Materials Science: Materials in Medicine</i> , 2013, 24, 231-239.	3.6	11
63	Assessment of boundary lubrication in biodiesels by nanotribological tests. <i>Energy</i> , 2013, 55, 273-277.	8.8	13
64	Directionally solidified eutectic and off-eutectic mullite-zirconia fibres. <i>Journal of the European Ceramic Society</i> , 2013, 33, 953-963.	5.7	17
65	Mechanical performance upgrading of CVD diamond using the multilayer strategy. <i>Surface and Coatings Technology</i> , 2013, 236, 380-387.	4.8	33
66	A multilayer approach for enhancing the erosive wear resistance of CVD diamond coatings. <i>Wear</i> , 2013, 297, 1064-1073.	3.1	46
67	Assessment of the lubricant behaviour of biodiesel fuels using Stribeck curves. <i>Fuel Processing Technology</i> , 2013, 116, 130-134.	7.2	15
68	Enhancing the tribological performance under biodiesel lubrication using CVD diamond coated parts. <i>Wear</i> , 2013, 302, 1370-1377.	3.1	15
69	Self-mated tribological systems based on multilayer micro/nanocrystalline CVD diamond coatings. <i>Wear</i> , 2013, 303, 225-234.	3.1	33
70	Interfaces in Nano-/Microcrystalline Multigrade CVD Diamond Coatings. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11725-11729.	8.0	16
71	Laser Melting Processing of ZrO ₂ -BaZrO ₃ Ceramic Eutectics. <i>Science of Advanced Materials</i> , 2013, 5, 1847-1856.	0.7	3
72	Ionic conductivity of eutectic mullite-zirconia fibres. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
73	Quantification of Microstructural Features in Carbon Nanotube/Nanodiamond Hybrids. <i>Microscopy and Microanalysis</i> , 2012, 18, 85-86.	0.4	0
74	Microstructure of Mullite-zirconia Fibres Grown by Directional Solidification. <i>Microscopy and Microanalysis</i> , 2012, 18, 103-104.	0.4	0
75	ZnO nanostructures grown on vertically aligned carbon nanotubes by laser-assisted flow deposition. <i>Acta Materialia</i> , 2012, 60, 5143-5150.	7.9	24
76	Enhancement of superconductivity in LFZ-grown BSCCO fibres by steeper axial temperature gradients. <i>Applied Surface Science</i> , 2012, 258, 9175-9180.	6.1	16
77	Diamond Based Biosensors: Surface-Fluid Interaction Issues. <i>Procedia Chemistry</i> , 2012, 6, 117-124.	0.7	0
78	Ultra simple catalyst layer preparation for the growth of vertically aligned CNTs and CNT-based nanostructures. <i>CrystEngComm</i> , 2012, 14, 48-52.	2.6	4
79	Upscaling potential of the CVD stacking growth method to produce dimensionally-controlled and catalyst-free multi-walled carbon nanotubes. <i>Carbon</i> , 2012, 50, 3585-3606.	10.3	15
80	Boron doped nanocrystalline diamond microelectrodes for the detection of Zn ²⁺ and dissolved O ₂ . <i>Electrochimica Acta</i> , 2012, 76, 487-494.	5.2	23
81	Diamond/WC bilayer formation mechanism by hot-filament CVD. <i>Surface and Coatings Technology</i> , 2012, 206, 3055-3063.	4.8	7
82	Composition profiles and adhesion evaluation of conductive diamond coatings on dielectric ceramics. <i>Thin Solid Films</i> , 2012, 520, 5260-5266.	1.8	11
83	A DLC/diamond bilayer approach for reducing the initial friction towards a high bearing capacity. <i>Wear</i> , 2012, 290-291, 18-24.	3.1	8
84	Bilayered coatings of BN/diamond grown on Si ₃ N ₄ ceramic substrates. <i>Diamond and Related Materials</i> , 2011, 20, 464-467.	3.9	10
85	Deposition of alpha-WC/a-C nanocomposite thin films by hot-filament CVD. <i>Surface and Coatings Technology</i> , 2011, 206, 103-106.	4.8	11
86	Nanocrystalline CVD diamond coatings for drilling of WC-Co parts. <i>International Journal of Refractory Metals and Hard Materials</i> , 2011, 29, 618-622.	3.8	21
87	High resolution study of the strong diamond/silicon nitride interface. <i>Applied Physics Letters</i> , 2011, 98, 171913.	3.3	13
88	Electrical assisted laser floating zone (EALFZ) growth of 2212-BSCCO superconducting fibres. <i>Applied Surface Science</i> , 2011, 257, 5283-5286.	6.1	13
89	Self-assembled cones of aligned carbon nanofibers grown on wet-etched Cu foils. <i>Carbon</i> , 2011, 49, 2181-2196.	10.3	13
90	HFCVD diamond deposition parameters optimized by a Taguchi Matrix. <i>Vacuum</i> , 2011, 85, 701-704.	3.5	33

#	ARTICLE	IF	CITATIONS
91	Diamond film adhesion onto sub-micrometric WC-Co substrates. <i>Vacuum</i> , 2011, 85, 1135-1139.	3.5	13
92	New titanium and titanium/hydroxyapatite coatings on ultra-high-molecular-weight polyethylene in vitro osteoblastic performance. <i>Biomedical Materials (Bristol)</i> , 2010, 5, 035014.	3.3	9
93	Nanodiamond-based tribosystems. <i>Surface and Coatings Technology</i> , 2010, 204, 1962-1969.	4.8	14
94	Single and polycrystalline mullite fibres grown by laser floating zone technique. <i>Journal of the European Ceramic Society</i> , 2010, 30, 3311-3318.	5.7	20
95	Wet-etched Ni foils as active catalysts towards carbon nanofiber growth. <i>Carbon</i> , 2010, 48, 2839-2854.	10.3	16
96	The role of surface activation prior to seeding on CVD diamond adhesion. <i>Surface and Coatings Technology</i> , 2010, 204, 3585-3591.	4.8	15
97	The Role of Nanodispersed Nitrides in the Sintering of Silicon Nitride Ceramics. <i>Plasma Science and Technology</i> , 2010, 12, 46-48.	1.5	1
98	Fast coating of ultramicroelectrodes with boron-doped nanocrystalline diamond. <i>Diamond and Related Materials</i> , 2010, 19, 1330-1335.	3.9	8
99	Erosive wear resistance of NCD coatings produced by pulsed microwave discharges. <i>Diamond and Related Materials</i> , 2010, 19, 484-488.	3.9	5
100	From Micro to Nanometric Grain Size CVD Diamond Tools. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1243, 1.	0.1	1
101	Pulling rate and current intensity competition in an electrically assisted laser floating zone. <i>Superconductor Science and Technology</i> , 2009, 22, 065016.	3.5	11
102	Cytotoxicity evaluation of nanocrystalline diamond coatings by fibroblast cell cultures. <i>Acta Biomaterialia</i> , 2009, 5, 755-763.	8.3	62
103	Radial inhomogeneities induced by fiber diameter in electrically assisted LFZ growth of Bi-2212. <i>Applied Surface Science</i> , 2009, 255, 5503-5506.	6.1	14
104	Biodiesel compatibility with carbon steel and HDPE parts. <i>Fuel Processing Technology</i> , 2009, 90, 1175-1182.	7.2	68
105	Surface activation pre-treatments for NCD films grown by HFCVD. <i>Vacuum</i> , 2009, 83, 1228-1232.	3.5	13
106	Semi-orthogonal turning of hardmetal with CVD diamond and PCD inserts at different cutting angles. <i>Vacuum</i> , 2009, 83, 1218-1223.	3.5	15
107	Nano carbon hybrids from the simultaneous synthesis of CNT/NCD by MPCVD. <i>Diamond and Related Materials</i> , 2009, 18, 160-163.	3.9	13
108	Influence of substrate temperature on formation of ultrananocrystalline diamond films deposited by HFCVD argon-rich gas mixture. <i>Diamond and Related Materials</i> , 2009, 18, 1283-1288.	3.9	56

#	ARTICLE	IF	CITATIONS
109	HFCVD nanocrystalline diamond coatings for tribo-applications in the presence of water. <i>Diamond and Related Materials</i> , 2009, 18, 271-275.	3.9	42
110	CVD micro/nanocrystalline diamond (MCD/NCD) bilayer coated odontological drill bits. <i>Diamond and Related Materials</i> , 2009, 18, 264-270.	3.9	41
111	Adhesion and Wear Behaviour of NCD Coatings on Si₃N₄ by Micro-Abrasion Tests. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3938-3943.	0.9	12
112	Micro- and nano-crystalline CVD diamond coated tools in the turning of EDM graphite. <i>Surface and Coatings Technology</i> , 2008, 203, 271-276.	4.8	38
113	Nanocrystalline diamond: <i>in vitro</i> biocompatibility assessment by MG63 and human bone marrow cells cultures. <i>Journal of Biomedical Materials Research - Part A</i> , 2008, 87A, 91-99.	4.0	120
114	Electric field-modified segregation in crystal fibers of colossal magnetoresistive La _{0.7} Ca _{0.3} MnO ₃ . <i>Journal of Crystal Growth</i> , 2008, 310, 3568-3572.	1.5	6
115	Dry machining of silicon-aluminium alloys with CVD diamond brazed and directly coated Si ₃ N ₄ ceramic tools. <i>Vacuum</i> , 2008, 82, 1407-1410.	3.5	26
116	Ultra-high performance of DLC-coated Si ₃ N ₄ rings for mechanical seals. <i>Wear</i> , 2008, 265, 940-944.	3.1	37
117	CVD diamond water lubricated tribosystems for high load planar sliding. <i>Wear</i> , 2008, 265, 1023-1028.	3.1	24
118	Enhanced sealing performance with CVD nanocrystalline diamond films in self-mated mechanical seals. <i>Diamond and Related Materials</i> , 2008, 17, 1132-1136.	3.9	32
119	Tribological characterization of NCD in physiological fluids. <i>Diamond and Related Materials</i> , 2008, 17, 848-852.	3.9	31
120	Extrinsic stress induced defects in CVD diamond. <i>Diamond and Related Materials</i> , 2008, 17, 190-193.	3.9	12
121	Nucleation of nanocrystalline diamond on masked/unmasked Si ₃ N ₄ ceramics with different mechanical pretreatments. <i>Diamond and Related Materials</i> , 2008, 17, 440-445.	3.9	8
122	Biocompatibility evaluation of DLC-coated Si ₃ N ₄ substrates for biomedical applications. <i>Diamond and Related Materials</i> , 2008, 17, 878-881.	3.9	73
123	Nanocrystalline Diamond as a Coating for Joint Implants: Cytotoxicity and Biocompatibility Assessment. <i>Journal of Nanomaterials</i> , 2008, 2008, 1-9.	2.7	36
124	MPCVD diamond coating of Si ₃ N ₄ -TiN electroconductive composite substrates. <i>Diamond and Related Materials</i> , 2007, 16, 978-982.	3.9	13
125	Nano- and micro-crystalline diamond growth by MPCVD in extremely poor hydrogen uniform plasmas. <i>Diamond and Related Materials</i> , 2007, 16, 757-761.	3.9	29
126	Biotribological performance of NCD coated Si ₃ N ₄ -bioglass composites. <i>Diamond and Related Materials</i> , 2007, 16, 790-795.	3.9	39

#	ARTICLE	IF	CITATIONS
127	Nano to micrometric HFCVD diamond adhesion strength to Si ₃ N ₄ . <i>Vacuum</i> , 2007, 81, 1443-1447.	3.5	52
128	Deposition of TiB ₂ onto X40 CrMoV 5-1-1 steel substrates by DC magnetron sputtering. <i>Vacuum</i> , 2007, 81, 1519-1523.	3.5	8
129	Room temperature PL characterization of micro and nanocrystalline diamond grown by MPCVD from Ar/H ₂ /CH ₄ mixtures. <i>Vacuum</i> , 2007, 81, 1416-1420.	3.5	5
130	Tribological properties of silicon nitride ceramics coated with DLC and DLC-Si against 316L stainless steel. <i>Vacuum</i> , 2007, 81, 1448-1452.	3.5	19
131	Critical current density improvement in BSCCO superconductors by application of an electric current during laser floating zone growth. <i>Physica C: Superconductivity and Its Applications</i> , 2007, 460-462, 1347-1348.	1.2	11
132	Friction and wear performance of HFCVD nanocrystalline diamond coated silicon nitride ceramics. <i>Diamond and Related Materials</i> , 2006, 15, 739-744.	3.9	68
133	Enhanced performance of HFCVD nanocrystalline diamond self-mated tribosystems by plasma pretreatments on silicon nitride substrates. <i>Diamond and Related Materials</i> , 2006, 15, 2024-2028.	3.9	31
134	Hard a-C/DLC coatings on Si ₃ N ₄ -bioglass composites. <i>Diamond and Related Materials</i> , 2006, 15, 944-947.	3.9	4
135	Growth rate improvements in the hot-filament CVD deposition of nanocrystalline diamond. <i>Diamond and Related Materials</i> , 2006, 15, 1822-1827.	3.9	54
136	Machining behaviour of silicon nitride tools coated with micro-, submicro- and nanometric HFCVD diamond crystallite sizes. <i>Diamond and Related Materials</i> , 2006, 15, 2029-2034.	3.9	29
137	Electroconductive Ceramic Composites for Cutting Tools. <i>Materials Science Forum</i> , 2006, 514-516, 638-642.	0.3	5
138	Annealing time effect on Bi-2223 phase development in LFZ and EALFZ grown superconducting fibres. <i>Applied Surface Science</i> , 2006, 252, 4957-4963.	6.1	5
139	Tribological testing of self-mated nanocrystalline diamond coatings on Si ₃ N ₄ ceramics. <i>Surface and Coatings Technology</i> , 2006, 200, 6235-6239.	4.8	23
140	NCD by HFCVD on a Si ₃ N ₄ -bioglass composite for biomechanical applications. <i>Surface and Coatings Technology</i> , 2006, 200, 6409-6413.	4.8	7
141	Re-sharpenable thick CVD diamond-coated Si ₃ N ₄ tools for hardmetal turning. <i>Surface and Coatings Technology</i> , 2006, 201, 1776-1782.	4.8	14
142	Reciprocating sliding behaviour of self-mated amorphous diamond-like carbon coatings on Si ₃ N ₄ ceramics under tribological stress. <i>Thin Solid Films</i> , 2006, 515, 2192-2196.	1.8	1
143	CVD diamond coated silicon nitride self-mated systems: tribological behaviour under high loads. <i>Tribology Letters</i> , 2006, 21, 141-151.	2.6	43
144	Enhancement of Bi-2223 phase formation by electrical assisted laser floating zone technique. <i>Journal of Physics and Chemistry of Solids</i> , 2006, 67, 416-418.	4.0	3

#	ARTICLE	IF	CITATIONS
145	The effect of current direction on superconducting properties of BSCCO fibres grown by an electrically assisted laser floating zone process. <i>Superconductor Science and Technology</i> , 2006, 19, 15-21.	3.5	6
146	Biâ€“Srâ€“Caâ€“Cuâ€“O superconducting fibres processed by the laser floating zone technique under different electrical current intensities. <i>Superconductor Science and Technology</i> , 2006, 19, 373-380.	3.5	6
147	In-Situ Friction Monitoring of Self-Mated CVD Diamond Coatings Using Acoustic Emission. <i>Materials Science Forum</i> , 2006, 514-516, 749-753.	0.3	0
148	The Effect of Annealing Temperature on the Transport Properties of BSCCO Fibres Grown by LFZ and EALFZ. <i>Materials Science Forum</i> , 2006, 514-516, 338-342.	0.3	1
149	Residual stress minimum in nanocrystalline diamond films. <i>Applied Physics Letters</i> , 2006, 89, 093109.	3.3	22
150	Grain size effect on self-mated CVD diamond dry tribosystems. <i>Wear</i> , 2005, 259, 771-778.	3.1	31
151	Nanocrystalline diamond coating of silicon nitride ceramics by microwave plasma-assisted CVD. <i>Thin Solid Films</i> , 2005, 482, 232-236.	1.8	17
152	Functionality Diagrams for Hybrid Mechanical Seals with Silicon Nitride Rings. <i>Journal of the American Ceramic Society</i> , 2005, 88, 2177-2180.	3.8	9
153	Silicon-incorporated diamond-like coatings for Si ₃ N ₄ mechanical seals. <i>Thin Solid Films</i> , 2005, 482, 221-225.	1.8	17
154	Directly MPCVD diamond-coated Si ₃ N ₄ disks for dental applications. <i>Diamond and Related Materials</i> , 2005, 14, 626-630.	3.9	1
155	Nanodiamond films growth on porous silicon substrates for electrochemical applications. <i>Diamond and Related Materials</i> , 2005, 14, 441-445.	3.9	41
156	Machining hardmetal with CVD diamond direct coated ceramic tools: effect of tool edge geometry. <i>Diamond and Related Materials</i> , 2005, 14, 651-656.	3.9	38
157	High performance sealing with CVD diamond self-mated rings. <i>Diamond and Related Materials</i> , 2005, 14, 617-621.	3.9	27
158	Deposition of nanocrystalline diamond films on silicon nitride ceramic substrates using pulsed microwave discharges in Ar/H ₂ /CH ₄ gas mixture. <i>Diamond and Related Materials</i> , 2005, 14, 432-436.	3.9	13
159	Effect of the bismuth content on the interface reactions between copper substrate and Sn-Zn-Al-Bi lead-free solder. <i>Revista De Metalurgia</i> , 2005, 41, 208-212.	0.5	1
160	Porosity Assessment of Î²-Spodumene/Glass Matrix Composites by Small Angle Neutron Scattering. <i>Materials Science Forum</i> , 2004, 455-456, 230-234.	0.3	0
161	Complete Densification of Si₃N₄ â€“ SiC Ceramic Matrix Composites (CMC's) by a Pressureless Sintering Route. <i>Materials Science Forum</i> , 2004, 455-456, 225-229.	0.3	6
162	Cutting of Free Standing CVD Diamond Films by Optical Fibre Guided Nd:YAG Laser. <i>Materials Science Forum</i> , 2004, 455-456, 614-618.	0.3	0

#	ARTICLE	IF	CITATIONS
163	Turning of CFRC Composites Using Si ₃ N ₄ and Thin CVD Diamond Coated Si ₃ N ₄ Tools. Materials Science Forum, 2004, 455-456, 609-613.	0.3	5
164	Hot-filament chemical vapour deposition of nanodiamond on silicon nitride substrates. Diamond and Related Materials, 2004, 13, 643-647.	3.9	32
165	Cutting forces evolution with tool wear in sintered hardmetal turning with CVD diamond. Diamond and Related Materials, 2004, 13, 843-847.	3.9	29
166	Crystallisation Kinetics of γ -Spodumene in Lithium Aluminosilicate Sol-Gel Glasses. Journal of Sol-Gel Science and Technology, 2004, 32, 317-321.	2.4	2
167	LFZ fibre texture modification induced by electrical polarization. Physica C: Superconductivity and Its Applications, 2004, 408-410, 915-916.	1.2	10
168	Textured Bi ²⁺ Sr ²⁺ Ca ²⁺ Cu ²⁺ O rods processed by laser floating zone from solid state or melted precursors. Physica C: Superconductivity and Its Applications, 2004, 415, 163-171.	1.2	35
169	Mechanical properties evaluation of fluor-doped diamond-like carbon coatings by nanoindentation. Thin Solid Films, 2004, 446, 85-90.	1.8	27
170	Electrical field freezing effect on laser floating zone (LFZ)-grown Bi ₂ Sr ₂ Ca ₂ Cu ₄ O ₁₁ superconducting fibres. Superconductor Science and Technology, 2004, 17, 612-619.	3.5	24
171	Si ₃ N ₄ recubierto con diamante CVD mediante filamento caliente y plasma generado por microondas. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2004, 43, 473-476.	1.9	1
172	Sinterización de nuevos materiales compuestos de sílice aglomerados con fosfatos para la fabricación de muelas abrasivas. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2004, 43, 259-262.	1.9	1
173	Si ₃ N ₄ and Si ₃ N ₄ /SiC composite rings for dynamic sealing of circulating fluids. Wear, 2003, 255, 695-698.	3.1	14
174	Improved wear resistance of Si ₃ N ₄ tool inserts by addition of Al ₂ O ₃ platelets. Tribology International, 2003, 36, 57-60.	5.9	10
175	Acoustical properties of hydrodynamic journal bearings. Tribology International, 2003, 36, 61-66.	5.9	26
176	On the half unit cell intergrowth of Bi ₂ Sr ₂ Ca ₃ Cu ₄ O ₁₂ with other superconducting phases in two-step annealed LFZ fibres. Physica C: Superconductivity and Its Applications, 2003, 398, 31-36.	1.2	7
177	Surface Pretreatments of Silicon Nitride for CVD Diamond Deposition. Journal of the American Ceramic Society, 2003, 86, 749-754.	3.8	20
178	Acoustic emission detection of macro-indentation cracking of diamond coated silicon. Diamond and Related Materials, 2003, 12, 1744-1749.	3.9	2
179	Adhesion behaviour assessment on diamond coated silicon nitride by acoustic emission. Diamond and Related Materials, 2003, 12, 733-737.	3.9	50
180	Wear resistant CVD diamond tools for turning of sintered hardmetals. Diamond and Related Materials, 2003, 12, 738-743.	3.9	39

#	ARTICLE	IF	CITATIONS
181	Low incident angle and classical x-ray diffraction analysis of residual stresses in diamond coated Si ₃ N ₄ . Journal of Applied Physics, 2003, 94, 5633-5638.	2.5	10
182	Friction and Wear Properties of Functionally Graded Aluminum Matrix Composites. Materials Science Forum, 2003, 423-425, 91-96.	0.3	12
183	Tailored Si ₃ N ₄ Ceramic Substrates for CVD Diamond Coating. Surface Engineering, 2003, 19, 410-416.	2.2	20
184	Trapping control of phase development in zone melting of Bi ² Sr ² Ca ² Cu ³ O _x superconducting fibres. Superconductor Science and Technology, 2003, 16, 392-397.	3.5	7
185	Cutting of CVD diamond by optical fibre guided Nd:YAG laser. , 2003, , .		1
186	Tribological Characterization of Si ₃ N ₄ -Bioglass Biocomposites in Self-Mating Experiments and Dissimilar Tests against UHMWPE. Key Engineering Materials, 2002, 230-232, 455-458.	0.4	0
187	Mechanical Characterization of Si ₃ N ₄ -BN(pl) Composites. Key Engineering Materials, 2002, 230-232, 323-326.	0.4	0
188	Abrasive Resistance of CVD Diamond Brazed Thick Films in Machining of WC Pre-Sintered Forms. Key Engineering Materials, 2002, 230-232, 193-198.	0.4	2
189	Thermal conductivity enhancement in cutting tools by chemical vapor deposition diamond coating. Diamond and Related Materials, 2002, 11, 703-707.	3.9	25
190	Effect of Functionally Graded Properties on the Tribological Behaviour of Aluminium-Matrix Composites. Key Engineering Materials, 2002, 230-232, 271-274.	0.4	6
191	The reaction rate at Si ₃ N ₄ /steel interfaces as a function of sintering aids. Journal of the European Ceramic Society, 2002, 22, 2561-2570.	5.7	4
192	Tribological behaviour of Si ₃ N ₄ -BN ceramic materials for dry sliding applications. Wear, 2002, 253, 1070-1076.	3.1	103
193	Densification route and mechanical properties of Si ₃ N ₄ -bioglass biocomposites. Biomaterials, 2002, 23, 857-862.	11.4	91
194	Wettability and surface charge of Si ₃ N ₄ -bioglass composites in contact with simulated physiological liquids. Biomaterials, 2002, 23, 4123-4129.	11.4	47
195	Si ₃ N ₄ -bioglass composites stimulate the proliferation of MC63 osteoblast-like cells and support the osteogenic differentiation of human bone marrow cells. Biomaterials, 2002, 23, 4897-4906.	11.4	67
196	Effect of intergranular phase of Si ₃ N ₄ substrates on MPCVD diamond deposition. Surface and Coatings Technology, 2002, 151-152, 521-525.	4.8	6
197	Wettability studies of reactive brazing alloys on CVD diamond plates. Diamond and Related Materials, 2001, 10, 775-780.	3.9	25
198	MPCVD diamond tool cutting-edge coverage: dependence on the side wedge angle. Diamond and Related Materials, 2001, 10, 803-808.	3.9	20

#	ARTICLE	IF	CITATIONS
199	Sliding speed-temperature wear transition maps for Si ₃ N ₄ /iron alloy couples. <i>Wear</i> , 2001, 250, 293-298.	3.1	27
200	Growth of the Bi-2223 phase after a short nucleation stage at high temperature. <i>Physica B: Condensed Matter</i> , 2001, 294-295, 700-704.	2.7	3
201	The effect of sliding speed and temperature on the tribological behaviour of carbon-carbon composites. <i>Wear</i> , 2001, 249, 240-245.	3.1	69
202	Diffusion phenomena and crystallization path during the growth of LFZ Bi-Sr-Ca-Cu-O superconducting fibres. <i>Superconductor Science and Technology</i> , 2001, 14, 910-920.	3.5	23
203	Microstructural dependence of Young's and shear moduli of P ₂ O ₅ glass reinforced hydroxyapatite for biomedical applications. <i>Biomaterials</i> , 2000, 21, 749-754.	11.4	60
204	Effect of $\lambda \pm \lambda^2$ Si ₃ N ₄ -phase ratio and microstructure on the tribological behaviour up to 700°C. <i>Wear</i> , 2000, 239, 59-68.	3.1	38
205	Thermochemistry of contacts between silicon nitride ceramics and steels. <i>Acta Materialia</i> , 2000, 48, 4659-4665.	7.9	7
206	Influence of SiC particle addition on the nucleation density and adhesion strength of MPCVD diamond coatings on Si ₃ N ₄ substrates. <i>Diamond and Related Materials</i> , 2000, 9, 483-488.	3.9	20
207	Interacción química entre nitruros de silicio y aleaciones de acero. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2000, 39, 711-715.	1.9	3
208	Efecto de la microestructura en el comportamiento tribológico de materiales monocristalinos de Si ₃ N ₄ y de compuestos Si ₃ N ₄ -SiC. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2000, 39, 263-268.	1.9	0
209	Porous silicon capping by CVD diamond. <i>Vacuum</i> , 1999, 52, 215-218.	3.5	6
210	Tribological characteristics of self-mated couples of Si ₃ N ₄ -SiC composites in the range 22-700°C. <i>Wear</i> , 1999, 233-235, 222-228.	3.1	33
211	Pressureless sinterability of slip cast silicon nitride bodies prepared from coprecipitation-coated powders. <i>Journal of the European Ceramic Society</i> , 1999, 19, 433-439.	5.7	30
212	Phase transformation kinetics during thermal annealing of LFZ Bi-Sr-Ca-Cu-O superconducting fibers in the range 800-870°C. <i>Physica C: Superconductivity and Its Applications</i> , 1999, 323, 23-41.	1.2	34
213	Tribooxidational Effects on Friction and Wear Behavior of Silicon Nitride/Tool Steel and Silicon Nitride/Gray Cast Iron Contacts. <i>Journal of the American Ceramic Society</i> , 1999, 82, 953-960.	3.8	26
214	Ultramicrohardness cross-profiling of CVD diamond/steel brazed junctions. <i>Diamond and Related Materials</i> , 1999, 8, 855-858.	3.9	6
215	Modeling of chemical wear in ferrous alloys/ silicon nitride contacts during high speed cutting. <i>Acta Materialia</i> , 1998, 46, 2501-2507.	7.9	18
216	Evaluation of MPCVD diamond film adhesion on hard metal substrates by micro Raman spectroscopy. <i>Diamond and Related Materials</i> , 1997, 6, 769-773.	3.9	13

#	ARTICLE	IF	CITATIONS
217	Influence of epitaxial growth on superconducting properties of LFZ Bi—,Sr—,Ca—,Cu—,O fibres. Part I. Crystal nucleation and growth. Physica C: Superconductivity and Its Applications, 1997, 289, 161-170.	1.2	23
218	Influence of epitaxial growth on superconducting properties of LFZ Bi—,Sr—,Ca—,Cu—,O fibres. Part II. Magnetic susceptibility and transport properties. Physica C: Superconductivity and Its Applications, 1997, 289, 171-176.	1.2	10
219	Phase Transformation During Hot-Pressing of Si3N4-Al2O3 (P) Composite Materials. , 1997, , 229-237.		0
220	Tribological properties of AlN/CeO2/Si3N4 cutting materials in unlubricated sliding against tool steel and cast iron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 209, 277-286.	5.6	11
221	Densification and Microstructural Evolution in a Reactive Silicon Nitride/Alumina Platelet System. Key Engineering Materials, 1996, 127-131, 377-384.	0.4	2
222	Hot hardness of Si3N4-based materials. Journal of Materials Science, 1995, 30, 5531-5536.	3.7	11
223	Friction measurements on hot filament CVD diamond films deposited on etched tungsten carbide surfaces. Diamond and Related Materials, 1995, 4, 730-734.	3.9	13
224	The role of nitrogen in the intergranular glass phase of Si3N4 on high temperature applications and wear. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1993, 168, 55-59.	5.6	6
225	Resistance of Si3N4 ceramic tools to thermal and mechanical loading in cutting of iron alloys. Wear, 1991, 148, 69-89.	3.1	28