Rui F Silva

List of Publications by Year
in descending order

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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	Threeâ€dimensional printed <scp>PCL</scp>â€hydroxyapatite scaffolds filled with <scp>CNT</scp>s for bone cell growth stimulation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1210-1219.	3.4	181
2	Advances in carbon nanostructureâ€“silica aerogel composites: a review. Journal of Materials Chemistry A, 2018, 6, 1340-1369.	10.3	149
3	Nanocrystalline diamond: In vitro biocompatibility assessment by MG63 and human bone marrow cells cultures. Journal of Biomedical Materials Research - Part A, 2008, 87A, 91-99.	4.0	120
4	Tribological behaviour of Si3N4â€“BN ceramic materials for dry sliding applications. Wear, 2002, 253, 1070-1076.	3.1	103
5	Densification route and mechanical properties of Si3N4â€“bioglass biocomposites. Biomaterials, 2002, 23, 857-862.	11.4	91
6	Biocompatibility evaluation of DLC-coated Si3N4 substrates for biomedical applications. Diamond and Related Materials, 2008, 17, 878-881.	3.9	73
7	A new route for the synthesis of highly-active N-doped TiO2 nanoparticles for visible light photocatalysis using urea as nitrogen precursor. Catalysis Today, 2019, 326, 36-45.	4.4	73
8	The effect of sliding speed and temperature on the tribological behaviour of carbonâ€“carbon composites. Wear, 2001, 249, 240-245.	3.1	69
9	Friction and wear performance of HFCVD nanocrystalline diamond coated silicon nitride ceramics. Diamond and Related Materials, 2006, 15, 739-744.	3.9	68
10	Biodiesel compatibility with carbon steel and HDPE parts. Fuel Processing Technology, 2009, 90, 1175-1182.	7.2	68
11	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. American Journal of Sports Medicine, 2018, 46, 449-459.	4.2	68
12	Si3N4-bioglass composites stimulate the proliferation of MG63 osteoblast-like cells and support the osteogenic differentiation of human bone marrow cells. Biomaterials, 2002, 23, 4897-4906.	11.4	67
13	Cytotoxicity evaluation of nanocrystalline diamond coatings by fibroblast cell cultures. Acta Biomaterialia, 2009, 5, 755-763.	8.3	62
14	Microstructural dependence of Young's and shear moduli of P2O5 glass reinforced hydroxyapatite for biomedical applications. Biomaterials, 2000, 21, 749-754.	11.4	60
15	Influence of substrate temperature on formation of ultrananocrystalline diamond films deposited by HFCVD argon-rich gas mixture. Diamond and Related Materials, 2009, 18, 1283-1288.	3.9	56
16	Growth rate improvements in the hot-filament CVD deposition of nanocrystalline diamond. Diamond and Related Materials, 2006, 15, 1822-1827.	3.9	54
17	Nano to micrometric HFCVD diamond adhesion strength to Si3N4. Vacuum, 2007, 81, 1443-1447.	3.5	52
18	Adhesion behaviour assessment on diamond coated silicon nitride by acoustic emission. Diamond and Related Materials, 2003, 12, 733-737.	3.9	50

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19	Wettability and surface charge of Si3N4â€“bioglass composites in contact with simulated physiological liquids. Biomaterials, 2002, 23, 4123-4129.	11.4	47
20	A multilayer approach for enhancing the erosive wear resistance of CVD diamond coatings. Wear, 2013, 297, 1064-1073.	3.1	46
21	CVD diamond coated silicon nitride self-mated systems: tribological behaviour under high loads. Tribology Letters, 2006, 21, 141-151.	2.6	43
22	HFCVD nanocrystalline diamond coatings for tribo-applications in the presence of water. Diamond and Related Materials, 2009, 18, 271-275.	3.9	42
23	Nanodiamond films growth on porous silicon substrates for electrochemical applications. Diamond and Related Materials, 2005, 14, 441-445.	3.9	41
24	CVD micro/nanocrystalline diamond (MCD/NCD) bilayer coated odontological drill bits. Diamond and Related Materials, 2009, 18, 264-270.	3.9	41
25	Wear resistant CVD diamond tools for turning of sintered hardmetals. Diamond and Related Materials, 2003, 12, 738-743.	3.9	39
26	Biotribological performance of NCD coated Si3N4â€“bioglass composites. Diamond and Related Materials, 2007, 16, 790-795.	3.9	39
27	Effect of Î±-/Î² Si3N4-phase ratio and microstructure on the tribological behaviour up to 700Â°C. Wear, 2000, 239, 59-68.	3.1	38
28	Machining hardmetal with CVD diamond direct coated ceramic tools: effect of tool edge geometry. Diamond and Related Materials, 2005, 14, 651-656.	3.9	38
29	Micro- and nano-crystalline CVD diamond coated tools in the turning of EDM graphite. Surface and Coatings Technology, 2008, 203, 271-276.	4.8	38
30	Ultra-high performance of DLC-coated Si3N4 rings for mechanical seals. Wear, 2008, 265, 940-944.	3.1	37
31	Nanocrystalline Diamond as a Coating for Joint Implants: Cytotoxicity and Biocompatibility Assessment. Journal of Nanomaterials, 2008, 2008, 1-9.	2.7	36
32	Textured Biâ€“Srâ€“Caâ€“Cuâ€“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
33	The Stribeck curve as a suitable characterization method of the lubricity of biodiesel and diesel blends. Energy, 2014, 69, 673-681.	8.8	35
34	Phase transformation kinetics during thermal annealing of LFZ Biâ€“Srâ€“Caâ€“Cuâ€“O superconducting fibers in the range 800â€“870Â°C. Physica C: Superconductivity and Its Applications, 1999, 323, 23-41.	1.2	34
35	Tribological characteristics of self-mated couples of Si3N4â€“SiC composites in the range 22â€“700Â°C. Wear, 1999, 233-235, 222-228.	3.1	33
36	HFCVD diamond deposition parameters optimized by a Taguchi Matrix. Vacuum, 2011, 85, 701-704.	3.5	33

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37	Mechanical performance upgrading of CVD diamond using the multilayer strategy. Surface and Coatings Technology, 2013, 236, 380-387.	4.8	33
38	Self-mated tribological systems based on multilayer micro/nanocrystalline CVD diamond coatings. Wear, 2013, 303, 225-234.	3.1	33
39	Hot-filament chemical vapour deposition of nanodiamond on silicon nitride substrates. Diamond and Related Materials, 2004, 13, 643-647.	3.9	32
40	Enhanced sealing performance with CVD nanocrystalline diamond films in self-mated mechanical seals. Diamond and Related Materials, 2008, 17, 1132-1136.	3.9	32
41	Grain size effect on self-mated CVD diamond dry tribosystems. Wear, 2005, 259, 771-778.	3.1	31
42	Enhanced performance of HFCVD nanocrystalline diamond self-mated tribosystems by plasma pretreatments on silicon nitride substrates. Diamond and Related Materials, 2006, 15, 2024-2028.	3.9	31
43	Tribological characterization of NCD in physiological fluids. Diamond and Related Materials, 2008, 17, 848-852.	3.9	31
44	Pressureless sinterability of slip cast silicon nitride bodies prepared from coprecipitation-coated powders. Journal of the European Ceramic Society, 1999, 19, 433-439.	5.7	30
45	Cutting forces evolution with tool wear in sintered hardmetal turning with CVD diamond. Diamond and Related Materials, 2004, 13, 843-847.	3.9	29
46	Machining behaviour of silicon nitride tools coated with micro-, submicro- and nanometric HFCVD diamond crystallite sizes. Diamond and Related Materials, 2006, 15, 2029-2034.	3.9	29
47	Nano- and micro-crystalline diamond growth by MPCVD in extremely poor hydrogen uniform plasmas. Diamond and Related Materials, 2007, 16, 757-761.	3.9	29
48	Multi-Scale Evaluation of Wear in UHMWPE-Metal Hip Implants Tested in a hip Joint Simulator. Biotribology, 2015, 4, 1-11.	1.9	29
49	Resistance of Si3N4 ceramic tools to thermal and mechanical loading in cutting of iron alloys. Wear, 1991, 148, 69-89.	3.1	28
50	Sliding speed-temperature wear transition maps for Si3N4/iron alloy couples. Wear, 2001, 250, 293-298.	3.1	27
51	Mechanical properties evaluation of fluor-doped diamond-like carbon coatings by nanoindentation. Thin Solid Films, 2004, 446, 85-90.	1.8	27
52	High performance sealing with CVD diamond self-mated rings. Diamond and Related Materials, 2005, 14, 617-621.	3.9	27
53	The High performance of nanocrystalline CVD diamond coated hip joints in wear simulator test. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 49, 175-185.	3.1	27
54	Tribooxidational Effects on Friction and Wear Behavior of Silicon Nitride/Tool Steel and Silicon Nitride/Gray Cast Iron Contacts. Journal of the American Ceramic Society, 1999, 82, 953-960.	3.8	26

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55	Acoustical properties of hydrodynamic journal bearings. Tribology International, 2003, 36, 61-66.	5.9	26
56	Dry machining of siliconâ€“aluminium alloys with CVD diamond brazed and directly coated Si3N4 ceramic tools. Vacuum, 2008, 82, 1407-1410.	3.5	26
57	Dielsâ€“Alder functionalized carbon nanotubes for bone tissue engineering: in vitro/in vivo biocompatibility and biodegradability. Nanoscale, 2015, 7, 9238-9251.	5.6	26
58	Polysilsesquioxane-based silica aerogel monoliths with embedded CNTs. Microporous and Mesoporous Materials, 2019, 288, 109575.	4.4	26
59	Wettability studies of reactive brazing alloys on CVD diamond plates. Diamond and Related Materials, 2001, 10, 775-780.	3.9	25
60	Thermal conductivity enhancement in cutting tools by chemical vapor deposition diamond coating. Diamond and Related Materials, 2002, 11, 703-707.	3.9	25
61	Mechanical behaviour of zirconiaâ€“mullite directionally solidified eutectics. Materials & Design, 2014, 61, 211-216.	5.1	25
62	Electrical field freezing effect on laser floating zone (LFZ)-grown Bi2Sr2Ca2Cu4O11superconducting fibres. Superconductor Science and Technology, 2004, 17, 612-619.	3.5	24
63	CVD diamond water lubricated tribosystems for high load planar sliding. Wear, 2008, 265, 1023-1028.	3.1	24
64	ZnO nanostructures grown on vertically aligned carbon nanotubes by laser-assisted flow deposition. Acta Materialia, 2012, 60, 5143-5150.	7.9	24
65	Thin films composed of Au nanoparticles embedded in AlN: Influence of metal concentration and thermal annealing on the LSPR band. Vacuum, 2018, 157, 414-421.	3.5	24
66	Influence of epitaxial growth on superconducting properties of LFZ Bîî—¸Srî—¸Caî—¸Cuî—¸O fibres. Part I. Crystal nucleation and growth. Physica C: Superconductivity and Its Applications, 1997, 289, 161-170.	1.2	23
67	Diffusion phenomena and crystallization path during the growth of LFZ Bi-Sr-Ca-Cu-O superconducting fibres. Superconductor Science and Technology, 2001, 14, 910-920.	3.5	23
68	Tribological testing of self-mated nanocrystalline diamond coatings on Si3N4 ceramics. Surface and Coatings Technology, 2006, 200, 6235-6239.	4.8	23
69	Boron doped nanocrystalline diamond microelectrodes for the detection of Zn2+ and dissolved O2. Electrochimica Acta, 2012, 76, 487-494.	5.2	23
70	Residual stress minimum in nanocrystalline diamond films. Applied Physics Letters, 2006, 89, 093109.	3.3	22
71	Nanocrystalline CVD diamond coatings for drilling of WC-Co parts. International Journal of Refractory Metals and Hard Materials, 2011, 29, 618-622.	3.8	21
72	Is Poly(methyl methacrylate) (PMMA) a Suitable Substrate for ALD?: A Review. Polymers, 2021, 13, 1346.	4.5	21

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73	Influence of SiC particle addition on the nucleation density and adhesion strength of MPCVD diamond coatings on Si 3 N 4 substrates. Diamond and Related Materials, 2000, 9, 483-488.	3.9	20
74	MPCVD diamond tool cutting-edge coverage: dependence on the side wedge angle. Diamond and Related Materials, 2001, 10, 803-808.	3.9	20
75	Surface Pretreatments of Silicon Nitride for CVD Diamond Deposition. Journal of the American Ceramic Society, 2003, 86, 749-754.	3.8	20
76	Tailored Si3N4Ceramic Substrates for CVD Diamond Coating. Surface Engineering, 2003, 19, 410-416.	2.2	20
77	Single and polycrystalline mullite fibres grown by laser floating zone technique. Journal of the European Ceramic Society, 2010, 30, 3311-3318.	5.7	20
78	New fluorinated diamond microelectrodes for localized detection of dissolved oxygen. Sensors and Actuators B: Chemical, 2014, 204, 544-551.	7.8	20
79	Extremely low wear rates in hip joint bearings coated with nanocrystalline diamond. Tribology International, 2015, 89, 72-77.	5.9	20
80	Smart electroconductive bioactive ceramics to promote in situ electrostimulation of bone. Journal of Materials Chemistry B, 2015, 3, 1831-1845.	5.8	20
81	Tribological properties of silicon nitride ceramics coated with DLC and DLC-Si against 316L stainless steel. Vacuum, 2007, 81, 1448-1452.	3.5	19
82	Simultaneous CVD synthesis of graphene-diamond hybrid films. Carbon, 2016, 98, 99-105.	10.3	19
83	Facile Preparation of ZnO/CNTs Nanocomposites via ALD for Photocatalysis Applications. European Journal of Inorganic Chemistry, 2020, 2020, 1743-1750.	2.0	19
84	Influence of 1D and 2D carbon nanostructures in silica-based aerogels. Carbon, 2021, 180, 146-162.	10.3	19
85	Modeling of chemical wear in ferrous alloys/ silicon nitride contacts during high speed cutting. Acta Materialia, 1998, 46, 2501-2507.	7.9	18
86	Novel diamond microelectrode for pH sensing. Electrochemistry Communications, 2014, 40, 31-34.	4.7	18
87	Multifunctional Carbon Nanotube/Bioceramics Modulate the Directional Growth and Activity of Osteoblastic Cells. Journal of Biomedical Nanotechnology, 2014, 10, 725-743.	1.1	18
88	Catalyst-free growth of carbon nanotube arrays directly on InconelÂ® substrates for electrochemical carbon-based electrodes. Journal of Materials Chemistry A, 2015, 3, 17804-17810.	10.3	18
89	Nucleation, Growth Mechanism, and Controlled Coating of ZnO ALD onto Vertically Aligned N-Doped CNTs. Langmuir, 2016, 32, 7038-7044.	3.5	18
90	Nanocrystalline diamond coating of silicon nitride ceramics by microwave plasma-assisted CVD. Thin Solid Films, 2005, 482, 232-236.	1.8	17

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91	Silicon-incorporated diamond-like coatings for Si3N4 mechanical seals. Thin Solid Films, 2005, 482, 221-225.	1.8	17
92	Directionally solidified eutectic and off-eutectic mulliteâ€“zirconia fibres. Journal of the European Ceramic Society, 2013, 33, 953-963.	5.7	17
93	Turning periodic mesoporous organosilicas selective to CO₂/CH₄separation: deposition of aluminium oxide by atomic layer deposition. Journal of Materials Chemistry A, 2015, 3, 22860-22867.	10.3	17
94	Wet-etched Ni foils as active catalysts towards carbon nanofiber growth. Carbon, 2010, 48, 2839-2854.	10.3	16
95	Enhancement of superconductivity in LFZ-grown BSCCO fibres by steeper axial temperature gradients. Applied Surface Science, 2012, 258, 9175-9180.	6.1	16
96	Interfaces in Nano-/Microcrystalline Multigrade CVD Diamond Coatings. ACS Applied Materials & Interfaces, 2013, 5, 11725-11729.	8.0	16
97	Direct Synthesis of Electrowettable Carbon Nanowallâ€“Diamond Hybrid Materials from Sacrificial Ceramic Templates Using HFCVD. Advanced Materials Interfaces, 2017, 4, 1700019.	3.7	16
98	Effect of relative humidity and temperature on the tribology of multilayer micro/nanocrystalline CVD diamond coatings. Diamond and Related Materials, 2017, 73, 190-198.	3.9	16
99	Multilayer CVD Diamond Coatings in the Machining of an Al6061-15 Vol % Al2O3 Composite. Coatings, 2017, 7, 165.	2.6	16
100	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
101	Semi-orthogonal turning of hardmetal with CVD diamond and PCD inserts at different cutting angles. Vacuum, 2009, 83, 1218-1223.	3.5	15
102	The role of surface activation prior to seeding on CVD diamond adhesion. Surface and Coatings Technology, 2010, 204, 3585-3591.	4.8	15
103	Upscaling potential of the CVD stacking growth method to produce dimensionally-controlled and catalyst-free multi-walled carbon nanotubes. Carbon, 2012, 50, 3585-3606.	10.3	15
104	Assessment of the lubricant behaviour of biodiesel fuels using Stribeck curves. Fuel Processing Technology, 2013, 116, 130-134.	7.2	15
105	Enhancing the tribological performance under biodiesel lubrication using CVD diamond coated parts. Wear, 2013, 302, 1370-1377.	3.1	15
106	Carbon nanotube-based bioceramic grafts for electrotherapy of bone. Materials Science and Engineering C, 2014, 34, 360-368.	7.3	15
107	Si3N4 and Si3N4/SiC composite rings for dynamic sealing of circulating fluids. Wear, 2003, 255, 695-698.	3.1	14
108	Re-sharpenable thick CVD diamond-coated Si3N4 tools for hardmetal turning. Surface and Coatings Technology, 2006, 201, 1776-1782.	4.8	14

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109	Radial inhomogeneities induced by fiber diameter in electrically assisted LFZ growth of Bi-2212. Applied Surface Science, 2009, 255, 5503-5506.	6.1	14
110	Nanodiamond-based tribosystems. Surface and Coatings Technology, 2010, 204, 1962-1969.	4.8	14
111	Heat Dissipation Interfaces Based on Vertically Aligned Diamond/Graphite Nanoplatelets. ACS Applied Materials & Interfaces, 2015, 7, 24772-24777.	8.0	14
112	Lowâ€temperature deposition of nanocrystalline diamond films on silicon nitride substrates using distributed antenna array PECVD system. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2575-2581.	1.8	14
113	Surface modifications on as-grown boron doped CVD diamond films induced by the B2O3â€“ethanolâ€“Ar system. Diamond and Related Materials, 2016, 64, 89-96.	3.9	14
114	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
115	Evaluation of MPCVD diamond film adhesion on hard metal substrates by micro Raman spectroscopy. Diamond and Related Materials, 1997, 6, 769-773.	3.9	13
116	Deposition of nanocrystalline diamond films on silicon nitride ceramic substrates using pulsed microwave discharges in Ar/H2/CH4 gas mixture. Diamond and Related Materials, 2005, 14, 432-436.	3.9	13
117	MPCVD diamond coating of Si3N4â€“TiN electroconductive composite substrates. Diamond and Related Materials, 2007, 16, 978-982.	3.9	13
118	Surface activation pre-treatments for NCD films grown by HFCVD. Vacuum, 2009, 83, 1228-1232.	3.5	13
119	Nano carbon hybrids from the simultaneous synthesis of CNT/NCD by MPCVD. Diamond and Related Materials, 2009, 18, 160-163.	3.9	13
120	High resolution study of the strong diamond/silicon nitride interface. Applied Physics Letters, 2011, 98, 171913.	3.3	13
121	Electrical assisted laser floating zone (EALFZ) growth of 2212-BSCCO superconducting fibres. Applied Surface Science, 2011, 257, 5283-5286.	6.1	13
122	Self-assembled cones of aligned carbon nanofibers grown on wet-etched Cu foils. Carbon, 2011, 49, 2181-2196.	10.3	13
123	Diamond film adhesion onto sub-micrometric WCâ€“Co substrates. Vacuum, 2011, 85, 1135-1139.	3.5	13
124	Assessment of boundary lubrication in biodiesels by nanotribological tests. Energy, 2013, 55, 273-277.	8.8	13
125	Electrochemical deposition of Fe and Fe/CNTs composites from strongly alkaline hematite suspensions. Journal of Applied Electrochemistry, 2015, 45, 515-522.	2.9	13
126	Friction and Wear Properties of Functionally Graded Aluminum Matrix Composites. Materials Science Forum, 2003, 423-425, 91-96.	0.3	12

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127	Extrinsic stress induced defects in CVD diamond. Diamond and Related Materials, 2008, 17, 190-193.	3.9	12
128	Adhesion and Wear Behaviour of NCD Coatings on Si₃N₄ by Micro-Abrasion Tests. Journal of Nanoscience and Nanotechnology, 2009, 9, 3938-3943.	0.9	12
129	Vertically aligned N-doped CNTs growth using Taguchi experimental design. Applied Surface Science, 2015, 344, 57-64.	6.1	12
130	Molybdenum Oxide Thin Films Grown on Flexible ITO-Coated PET Substrates. Materials, 2021, 14, 821.	2.9	12
131	Hot hardness of Si3N4-based materials. Journal of Materials Science, 1995, 30, 5531-5536.	3.7	11
132	Tribological properties of AlNCeO2Si3N4 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
133	Critical current density improvement in BSCCO superconductors by application of an electric current during laser floating zone growth. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1347-1348.	1.2	11
134	Pulling rate and current intensity competition in an electrically assisted laser floating zone. Superconductor Science and Technology, 2009, 22, 065016.	3.5	11
135	Deposition of alpha-WC/a-C nanocomposite thin films by hot-filament CVD. Surface and Coatings Technology, 2011, 206, 103-106.	4.8	11
136	Composition profiles and adhesion evaluation of conductive diamond coatings on dielectric ceramics. Thin Solid Films, 2012, 520, 5260-5266.	1.8	11
137	Artifact level produced by different femoral head prostheses in CT imaging: diamond coated silicon nitride as total hip replacement material. Journal of Materials Science: Materials in Medicine, 2013, 24, 231-239.	3.6	11
138	Nanographene Oxide Functionalization with Organic and Hybrid Organicâ€“Inorganic Polymers by Molecular Layer Deposition. Journal of Physical Chemistry C, 2016, 120, 24176-24186.	3.1	11
139	Properties of CrN thin films deposited in plasma-activated ABS by reactive magnetron sputtering. Surface and Coatings Technology, 2018, 349, 858-866.	4.8	11
140	Deposition of diamond films on single crystalline silicon carbide substrates. Diamond and Related Materials, 2020, 101, 107625.	3.9	11
141	Influence of epitaxial growth on superconducting properties of LFZ Bîî—¸Srî—¸Caî—¸Cuî—¸O fibres. Part II. Magnetic susceptibility and transport properties. Physica C: Superconductivity and Its Applications, 1997, 289, 171-176.	1.2	10
142	Improved wear resistance of Si3N4 tool inserts by addition of Al2O3 platelets. Tribology International, 2003, 36, 57-60.	5.9	10
143	Low incident angle and classical x-ray diffraction analysis of residual stresses in diamond coated Si3N4. Journal of Applied Physics, 2003, 94, 5633-5638.	2.5	10
144	LFZ fibre texture modification induced by electrical polarization. Physica C: Superconductivity and Its Applications, 2004, 408-410, 915-916.	1.2	10

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145	Bilayered coatings of BN/diamond grown on Si3N4 ceramic substrates. Diamond and Related Materials, 2011, 20, 464-467.	3.9	10
146	Multilayered diamond mechanical seal rings under biodiesel lubrication and the full sealing conditions of pressurized water. Wear, 2017, 384-385, 178-184.	3.1	10
147	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
148	Functionality Diagrams for Hybrid Mechanical Seals with Silicon Nitride Rings. Journal of the American Ceramic Society, 2005, 88, 2177-2180.	3.8	9
149	New titanium and titanium/hydroxyapatite coatings on ultra-high-molecular-weight polyethyleneâ€" in vitro osteoblastic performance. Biomedical Materials (Bristol), 2010, 5, 035014.	3.3	9
150	All-Diamond Microelectrodes as Solid State Probes for Localized Electrochemical Sensing. Analytical Chemistry, 2015, 87, 6487-6492.	6.5	9
151	Coating of Vertically Aligned Carbon Nanotubes by a Novel Manganese Oxide Atomic Layer Deposition Process for Binderâ€Free Hybrid Capacitors. Advanced Materials Interfaces, 2016, 3, 1600313.	3.7	9
152	Multilayer Diamond Coatings Applied to Micro-End-Milling of Cemented Carbide. Materials, 2021, 14, 3333.	2.9	9
153	Deposition of TiB2 onto X40 CrMoV 5-1-1 steel substrates by DC magnetron sputtering. Vacuum, 2007, 81, 1519-1523.	3.5	8
154	Nucleation of nanocrystalline diamond on masked/unmasked Si3N4 ceramics with different mechanical pretreatments. Diamond and Related Materials, 2008, 17, 440-445.	3.9	8
155	Fast coating of ultramicroelectrodes with boron-doped nanocrystalline diamond. Diamond and Related Materials, 2010, 19, 1330-1335.	3.9	8
156	A DLC/diamond bilayer approach for reducing the initial friction towards a high bearing capacity. Wear, 2012, 290-291, 18-24.	3.1	8
157	Novel electrochemical method of fast and reproducible fabrication of metallic nanoelectrodes. Review of Scientific Instruments, 2014, 85, 095109.	1.3	8
158	Atomic layer deposition of high-Î² layers on polycrystalline diamond for MOS devices: a review. Journal of Materials Chemistry C, 2020, 8, 13127-13153.	5.5	8
159	Thermochemistry of contacts between silicon nitride ceramics and steels. Acta Materialia, 2000, 48, 4659-4665.	7.9	7
160	On the half unit cell intergrowth of Bi2Sr2Ca3Cu4O12 with other superconducting phases in two-step annealed LFZ fibres. Physica C: Superconductivity and Its Applications, 2003, 398, 31-36.	1.2	7
161	Trapping control of phase development in zone melting of BiÂSrÂCaÂCuÂO superconducting fibres. Superconductor Science and Technology, 2003, 16, 392-397.	3.5	7
162	NCD by HFCVD on a Si3N4-bioglass composite for biomechanical applications. Surface and Coatings Technology, 2006, 200, 6409-6413.	4.8	7

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163	Diamond/WC bilayer formation mechanism by hot-filament CVD. Surface and Coatings Technology, 2012, 206, 3055-3063.	4.8	7
164	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
165	Porous silicon capping by CVD diamond. Vacuum, 1999, 52, 215-218.	3.5	6
166	Ultramicrohardness cross-profiling of CVD diamond/steel brazed junctions. Diamond and Related Materials, 1999, 8, 855-858.	3.9	6
167	Effect of Functionally Graded Properties on the Tribological Behaviour of Aluminium-Matrix Composites. Key Engineering Materials, 2002, 230-232, 271-274.	0.4	6
168	Effect of intergranular phase of Si3N4 substrates on MPCVD diamond deposition. Surface and Coatings Technology, 2002, 151-152, 521-525.	4.8	6
169	Complete Densification of Si₃N₄ â€“ SiC Ceramic Matrix Composites (CMC's) by a Pressureless Sintering Route. Materials Science Forum, 2004, 455-456, 225-229.	0.3	6
170	The effect of current direction on superconducting properties of BSCCO fibres grown by an electrically assisted laser floating zone process. Superconductor Science and Technology, 2006, 19, 15-21.	3.5	6
171	Biâ€“Srâ€“Caâ€“Cuâ€“O superconducting fibres processed by the laser floating zone technique under different electrical current intensities. Superconductor Science and Technology, 2006, 19, 373-380.	3.5	6
172	Electric field-modified segregation in crystal fibers of colossal magnetoresistive La0.7Ca0.3MnO3. Journal of Crystal Growth, 2008, 310, 3568-3572.	1.5	6
173	Processing strategies for smart electroconductive carbon nanotube-based bioceramic bone grafts. Nanotechnology, 2014, 25, 145602.	2.6	6
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