Kantesh Balani

List of Publications by Year
in descending order

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183 papers	7,300 citations	81743 39 h-index	74018 75 g-index
219 all docs	219 docs citations	219 times ranked	7059 citing authors

#	Article	IF	Citations
1	Progress in material selection for solid oxide fuel cell technology: A review. Progress in Materials Science, 2015, 72, 141-337.	16.0	1,143
2	Plasma-sprayed carbon nanotube reinforced hydroxyapatite coatings and their interaction with human osteoblasts in vitro. Biomaterials, 2007, 28, 618-624.	5.7	432
3	Challenges and advances in nanocomposite processing techniques. Materials Science and Engineering Reports, 2006, 54, 121-285.	14.8	397
4	Carbon nanotube reinforced aluminum composite coating via cold spraying. Surface and Coatings Technology, 2008, 202, 5162-5169.	2.2	195
5	Tribological behavior of plasma-sprayed carbon nanotube-reinforced hydroxyapatite coating in physiological solution. Acta Biomaterialia, 2007, 3, 944-951.	4.1	183
6	Effect of carrier gases on microstructural and electrochemical behavior of cold-sprayed 1100 aluminum coating. Surface and Coatings Technology, 2005, 195, 272-279.	2.2	119
7	Effect of carbonaceous reinforcements on the mechanical and tribological properties of friction stir processed Al6061 alloy. Materials and Design, 2016, 98, 155-166.	3.3	111
8	Functionally graded hydroxyapatite-alumina-zirconia biocomposite: Synergy of toughness and biocompatibility. Materials Science and Engineering C, 2012, 32, 1164-1173.	3.8	108
9	Multiscale wear of plasma-sprayed carbon-nanotube-reinforced aluminum oxide nanocomposite coating. Acta Materialia, 2008, 56, 5984-5994.	3.8	107
10	In situ carbon nanotube reinforcements in a plasma-sprayed aluminum oxide nanocomposite coating. Acta Materialia, 2008, 56, 571-579.	3.8	101
11	Role of Powder Treatment and Carbon Nanotube Dispersion in the Fracture Toughening of Plasma-Sprayed Aluminum Oxideâ€"Carbon Nanotube Nanocomposite. Journal of Nanoscience and Nanotechnology, 2007, 7, 3553-3562.	0.9	93
12	Effect of carbon nanotube on processing, microstructural, mechanical and ablation behavior of ZrB2-20SiC based ultra-high temperature ceramic composites. Carbon, 2017, 111, 269-282.	5.4	92
13	Effect of carbon nanotube and aluminum oxide addition on plasma-sprayed hydroxyapatite coating's mechanical properties and biocompatibility. Materials Science and Engineering C, 2009, 29, 2195-2202.	3.8	87
14	Superhydrophobic self-floating carbon nanofiber coating for efficient gravity-directed oil/water separation. Journal of Materials Chemistry A, 2017, 5, 2936-2946.	5.2	87
15	Transmission electron microscopy of cold sprayed 1100 aluminum coating. Scripta Materialia, 2005, 53, 845-850.	2.6	85
16	Mechanical properties of carbon nanotubeâ€"alumina nanocomposites synthesized by chemical vapor deposition and spark plasma sintering. Composites Part A: Applied Science and Manufacturing, 2009, 40, 86-93.	3.8	79
17	Antioxidant and antibacterial hydroxyapatite-based biocomposite for orthopedic applications. Materials Science and Engineering C, 2018, 88, 13-24.	3.8	72
18	Tribological performance of laser peened Tiâ€"6Alâ€"4V. Wear, 2015, 322-323, 203-217.	1.5	71

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19	Microstructure evolution and texture development in thermomechanically processed Mgâ€“Liâ€“Al based alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 547, 38-50.	2.6	68
20	Investigation of failure behavior of ferriticâ€“austenitic type of dissimilar steel welded joints. Engineering Failure Analysis, 2011, 18, 999-1008.	1.8	67
21	Synthesis, Microstructural Characterization, and Mechanical Property Evaluation of Vacuum Plasma Sprayed Tantalum Carbide. Journal of the American Ceramic Society, 2006, 89, 1419-1425.	1.9	65
22	Oxidation studies on TaC based ultra-high temperature ceramic composites under plasma arc jet exposure. Corrosion Science, 2016, 109, 50-61.	3.0	63
23	Microstructure, mechanical properties, and in vitro biocompatibility of spark plasma sintered hydroxyapatiteâ€“aluminum oxideâ€“carbon nanotube composite. Materials Science and Engineering C, 2010, 30, 1162-1169.	3.8	62
24	Adhesion force of staphylococcus aureus on various biomaterial surfaces. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 872-880.	1.5	60
25	Chromium carbideâ€“CNT nanocomposites with enhanced mechanical properties. Acta Materialia, 2009, 57, 335-344.	3.8	58
26	Multi-scale hierarchy of Chelydra serpentina: Microstructure and mechanical properties of turtle shell. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 1440-1451.	1.5	58
27	Compression Molded Ultra High Molecular Weight Polyethyleneâ€“Hydroxyapatiteâ€“Aluminum Oxideâ€“Carbon Nanotube Hybrid Composites forÂHard Tissue Replacement. Journal of Materials Science and Technology, 2013, 29, 514-522.	5.6	53
28	Process map for plasma sprayed aluminum oxideâ€“carbon nanotube nanocomposite coatings. Surface and Coatings Technology, 2008, 202, 4270-4277.	2.2	52
29	Multifunctional Hydroxyapatite Composites for Orthopedic Applications: A Review. ACS Biomaterials Science and Engineering, 2022, 8, 3162-3186.	2.6	52
30	Dielectric and Pyroelectric Properties of HAp-BaTiO₃Composites. Ferroelectrics, 2011, 423, 63-76.	0.3	51
31	Thermal Conductivity of Plasmaâ€Sprayed Aluminum Oxideâ€”Multiwalled Carbon Nanotube Composites. Journal of the American Ceramic Society, 2008, 91, 942-947.	1.9	50
32	Wetting of carbon nanotubes by aluminum oxide. Nanotechnology, 2008, 19, 165701.	1.3	48
33	Bactericidal effect of silver-reinforced carbon nanotube and hydroxyapatite composites. Journal of Biomaterials Applications, 2013, 27, 967-978.	1.2	48
34	Fretting wear of Mgâ€“Liâ€“Al based alloys. Wear, 2014, 318, 177-187.	1.5	48
35	Phase and Microstructural Correlation of Spark Plasma Sintered HfB2-ZrB2 Based Ultra-High Temperature Ceramic Composites. Coatings, 2017, 7, 110.	1.2	48
36	Doped zirconia and ceria-based electrolytes for solid oxide fuel cells: a review. Nanomaterials and Energy, 2012, 1, 27-45.	0.1	46

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37	Synergistic reinforcement of carbon nanotubes and silicon carbide for toughening tantalum carbide based ultrahigh temperature ceramic. Journal of Materials Research, 2016, 31, 682-692.	1.2	45
38	Site-specific antibacterial efficacy and cyto/hemo-compatibility of zinc substituted hydroxyapatite. Ceramics International, 2019, 45, 12225-12233.	2.3	44
39	Topographical effects of laser surface texturing on various time-dependent wetting regimes in Ti6Al4V. Surface and Coatings Technology, 2018, 349, 816-829.	2.2	43
40	Structural transformations in carbon nanotubes during thermal spray processing. Surface and Coatings Technology, 2009, 203, 2193-2201.	2.2	39
41	Carbon nanotubes stabilize high temperature phase and toughen Al 2 O 3 -based thermal barrier coatings. Composites Part B: Engineering, 2017, 124, 76-87.	5.9	39
42	Effect of ZnO morphology on affecting bactericidal property of ultra high molecular weight polyethylene biocomposite. Materials Science and Engineering C, 2016, 62, 843-851.	3.8	38
43	An environment-friendly phosphate chemical conversion coating on novel Mg-9Li-7Al-1Sn and Mg-9Li-5Al-3Sn-1Zn alloys with remarkable corrosion protection. Applied Surface Science, 2018, 443, 429-440.	3.1	38
44	An experimental and numerical investigation of fracture resistance behaviour of a dissimilar metal welded joint. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2009, 223, 1507-1523.	1.1	37
45	The hydrophobicity of a lotus leaf: a nanomechanical and computational approach. Nanotechnology, 2009, 20, 305707.	1.3	36
46	Processing, microstructure and mechanical properties of HfB2-ZrB2-SiC composites: Effect of B4C and carbon nanotube reinforcements. International Journal of Refractory Metals and Hard Materials, 2019, 81, 111-118.	1.7	36
47	Damping behavior of carbon nanotube reinforced aluminum oxide coatings by nanomechanical dynamic modulus mapping. Journal of Applied Physics, 2008, 104, 063517.	1.1	35
48	The nanomechanical and nanoscratch properties of MWNT-reinforced ultrahigh-molecular-weight polyethylene coatings. Jom, 2007, 59, 50-53.	0.9	34
49	Multifunctional Properties of Multistage Spark Plasma Sintered ‹scp›HA‹/scp›â€“‹scp›‹scp›BaTiO‹/scp›‹/scp›‹sub›3‹/sub›â€Based Piezobiocomposites for Bone Replacement Applications. Journal of the American Ceramic Society, 2013, 96, 3753-3759.	1.9	34
50	Single step laser surface texturing for enhancing contact angle and tribological properties. International Journal of Advanced Manufacturing Technology, 2019, 100, 1253-1267.	1.5	33
51	The nano-scratch behavior of biocompatible hydroxyapatite reinforced with aluminum oxide and carbon nanotubes. Jom, 2009, 61, 63-66.	0.9	32
52	Thermal-fluidic transport characteristics of bi-porous wicks for potential loop heat pipe systems. Experimental Thermal and Fluid Science, 2018, 94, 355-367.	1.5	32
53	Melanocyte pigmentation stiffens murine cardiac tricuspid valve leaflet. Journal of the Royal Society Interface, 2009, 6, 1097-1102.	1.5	31
54	Processing, Characterization and Fretting Wear of Zinc Oxide and Silver Nanoparticles Reinforced Ultra High Molecular Weight Polyethylene Biopolymer Nanocomposite. Jom, 2015, 67, 688-701.	0.9	31

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55	Solid solutioning in ZrB2 with HfB2: Effect on densification and oxidation resistance. International Journal of Refractory Metals and Hard Materials, 2019, 84, 105041.	1.7	31
56	Superhydrophobic, self-cleaning carbon nanofiber CVD coating for corrosion protection of AISI 1020 steel and AZ31 magnesium alloys. Surface and Coatings Technology, 2020, 404, 126421.	2.2	31
57	Oxidation kinetics of ZrB2-and HfB2-powders and their SiC reinforced composites. Corrosion Science, 2020, 177, 109024.	3.0	30
58	Ultra-high temperature ceramics: Aspiration to overcome challenges in thermal protection systems. Ceramics International, 2022, 48, 8852-8881.	2.3	30
59	Multifunctionality of Perovskites BaTiO3 and CaTiO3 in a Composite with Hydroxyapatite as Orthopedic Implant Materials. Integrated Ferroelectrics, 2011, 131, 119-126.	0.3	29
60	Fabrication and evaluation of a pulse laser-induced Caâ€“P coating on a Ti alloy for bioapplication. Biomedical Materials (Bristol), 2009, 4, 015009.	1.7	28
61	Domination of volumetric toughening by silver nanoparticles over interfacial strengthening of carbon nanotubes in bactericidal hydroxyapatite biocomposite. Materials Science and Engineering C, 2014, 34, 455-467.	3.8	28
62	Enhanced hydrogen storage in accumulative roll bonded Mg-based hybrid. International Journal of Hydrogen Energy, 2015, 40, 11498-11505.	3.8	28
63	Cellular response ofEscherichia colito Mg-2Zn-2Gd alloy with different grain structure: mechanism of disruption of colonisation. Materials Technology, 2016, 31, 836-844.	1.5	28
64	Analytical model to evaluate interface characteristics of carbon nanotube reinforced aluminum oxide nanocomposites. Applied Physics Letters, 2008, 92, 011916.	1.5	27
65	Porosity distribution affecting mechanical and biological behaviour of hydroxyapatite bioceramic composites. Ceramics International, 2017, 43, 10442-10449.	2.3	27
66	Crystal Chemistry and Antibacterial Properties of Cupriferous Hydroxyapatite. Materials, 2019, 12, 1814.	1.3	27
67	Synthesis of nanostructured spherical aluminum oxide powders by plasma engineering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 301-309.	1.1	26
68	Modified Eshelby tensor modeling for elastic property prediction of carbon nanotube reinforced ceramic nanocomposites. Applied Physics Letters, 2007, 91, .	1.5	25
69	Spark Plasma Sintered <scp>HA</scp>â€<scp><scp>Fe</scp></scp>₃<scp><scp>O</scp></scp>₄â€Based Multifunctional Magnetic Biocomposites. Journal of the American Ceramic Society, 2013, 96, 2100-2108.	1.9	25
70	Multi-mode hydrogen storage in nanocontainers. International Journal of Hydrogen Energy, 2017, 42, 24256-24262.	3.8	25
71	Multi-functionality of carbon nanotubes reinforced 3 mol% yttria stabilized zirconia structural biocomposites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 329-343.	2.6	25
72	Enhanced Tribological and Bacterial Resistance of Carbon Nanotube with Ceria- and Silver-Incorporated Hydroxyapatite Biocoating. Nanomaterials, 2018, 8, 363.	1.9	25

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73	Structure and thermoelectric properties of calcium doped Sr2TiCoO6 double perovskites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 244, 65-71.	1.7	25
74	Effect of laser melting on plasma-sprayed aluminum oxide coatings reinforced with carbon nanotubes. Applied Physics A: Materials Science and Processing, 2009, 94, 861-870.	1.1	24
75	Grain Growth Behavior of Aluminum Oxide Reinforced with Carbon Nanotube During Plasma Spraying and PostSpray Consolidation. International Journal of Applied Ceramic Technology, 2010, 7, 846-855.	1.1	24
76	Effect of current density and grain refining agents on pulsed electrodeposition of nanocrystalline nickel. Surface Engineering, 2011, 27, 642-648.	1.1	24
77	Serrated yielding during nanoindentation of thermomechanically processed novel Mgâ€“9Liâ€“7Alâ€“1Sn and Mgâ€“9Liâ€“5Alâ€“3Snâ€“1Zn alloys. Journal Physics D: Applied Physics, 2013, 46, 145304.	1.3	24
78	Role of Interfaces on Multiâ€length Scale Wear Mechanics of TaCâ€based Composites. Advanced Engineering Materials, 2017, 19, 1600713.	1.6	24
79	Effect of heat-treatment on microstructure, mechanical and tribological properties of Mg-Li-Al based alloy. Journal of Materials Research and Technology, 2020, 9, 4749-4762.	2.6	24
80	Synergistic effect of static magnetic field and HAâ€Fe₃O₄ magnetic composites on viability of S. aureus and E. coli bacteria. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 524-532.	1.6	23
81	Establishing microstructure-mechanical property correlation in ZrB2-based ultra-high temperature ceramic composites. Ceramics International, 2017, 43, 13483-13492.	2.3	23
82	Mechanical, tribological and anti-corrosive properties of polyaniline/graphene coated Mg-9Li-7Al-1Sn and Mg-9Li-5Al-3Sn-1Zn alloys. Journal of Materials Science and Technology, 2019, 35, 1767-1778.	5.6	23
83	Enhanced thermo-mechanical damage tolerance of functionally graded ZrB2-20SiC ceramic reinforced with carbon nanotubes. Ceramics International, 2019, 45, 6198-6208.	2.3	23
84	Oxidation behaviour of coarse and fine SiC reinforced ZrB2 at re-entry and atmospheric oxygen pressures. Ceramics International, 2020, 46, 11056-11065.	2.3	23
85	Effect of sintering on mechanical properties of ceria reinforced yttria stabilized zirconia. Ceramics International, 2016, 42, 11393-11403.	2.3	22
86	In vitro degradation and biomineralization ability of hydroxyapatite coated Mg-9Li-7Al-1Sn and Mg-9Li-5Al-3Sn-1Zn alloys. Surface and Coatings Technology, 2017, 325, 65-74.	2.2	22
87	Protective trivalent Cr-based electrochemical coatings for gun barrels. Journal of Alloys and Compounds, 2018, 768, 1039-1048.	2.8	22
88	Antibacterial and magnetic response of site-specific cobalt incorporated hydroxyapatite. Ceramics International, 2020, 46, 513-522.	2.3	22
89	Deposition of hydroxyapatite coatings by axial plasma spraying: Influence of feedstock characteristics on coating microstructure, phase content and mechanical properties. Journal of the European Ceramic Society, 2021, 41, 4637-4649.	2.8	22
90	Ionic conductivity of plasma-sprayed nanocrystalline yttria-stabilized zirconia electrolyte for solid oxide fuel cells. Scripta Materialia, 2009, 60, 1023-1026.	2.6	21

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91	Dispersion fraction enhances cellular growth of carbon nanotube and aluminum oxide reinforced ultrahigh molecular weight polyethylene biocomposites. Materials Science and Engineering C, 2015, 46, 504-513.	3.8	21
92	Carbon Nanotube Functionalization Decreases Osteogenic Differentiation in Aluminum Oxide Reinforced Ultrahigh Molecular Weight Polyethylene. ACS Biomaterials Science and Engineering, 2016, 2, 1242-1256.	2.6	21
93	Effect of current density on the pulsed co-electrodeposition of nanocrystalline nickel-copper alloys. Jom, 2010, 62, 88-92.	0.9	20
94	Fractal model for estimating fracture toughness of carbon nanotube reinforced aluminum oxide. Journal of Applied Physics, 2010, 107, .	1.1	20
95	Do thermal residual stresses contribute to the improved fracture toughness of carbon nanotube/alumina nanocomposites?. Scripta Materialia, 2012, 66, 347-350.	2.6	20
96	Multi-length scale tribology of hydroxyapatite reinforced with ceria and silver. Wear, 2018, 404-405, 12-21.	1.5	20
97	Crack Propagation Resistance of Î±-Al2O3 Reinforced Pulsed Laser-Deposited Hydroxyapatite Coating on 316 Stainless Steel. Jom, 2014, 66, 2095-2107.	0.9	19
98	Corrosion Behavior of Novel Mg-9Li-7Al-1Sn and Mg-9Li-5Al-3Sn-1Zn Alloys in NaCl Aqueous Solution. Journal of Materials Engineering and Performance, 2015, 24, 4060-4070.	1.2	19
99	Interfacial Effect of the Oxygen-Ion Distribution on the Conduction Mechanism in Strontium-Added Ce_{0.8}Sm_{0.2}O_{2â^'Î´}/Na₂CO₃ Nanocomposite. Journal of Physical Chemistry C, 2016, 120, 25068-25077.	1.5	19
100	Structural Characteristics and Electrical Conductivity of Spark Plasma Sintered Ytterbia Coâ€doped Scandia Stabilized Zirconia. Journal of the American Ceramic Society, 2017, 100, 204-214.	1.9	19
101	Densification kinetics and mechanical properties of tantalum carbide. International Journal of Refractory Metals and Hard Materials, 2018, 73, 221-230.	1.7	19
102	Phase stability and conductivity in the pseudo ternary system of xYb2O3-(12-x)Sc2O3-88ZrO2 (0â€¯â‰¤â€¯xâ€¯â‰¤â€¯5). Solid State Ionics, 2019, 332, 93-101.	1.3	19
103	Size Effect of Yttria Stabilized Zirconia Addition on Fracture Toughness and Thermal Conductivity of Plasma Sprayed Aluminum Oxide Composite Coatings. Nanoscience and Nanotechnology Letters, 2013, 4, 323-332.	0.4	19
104	Mechanics of ZnO micro-rod and ZnO nanoparticle reinforcement in ultra-high molecular weight polyethylene biocomposite. Journal Physics D: Applied Physics, 2014, 47, 345301.	1.3	18
105	Dual-Layer Oxidation-Protective Plasma-Sprayed SiC-ZrB2/Al2O3-Carbon Nanotube Coating on Graphite. Journal of Thermal Spray Technology, 2017, 26, 417-431.	1.6	18
106	Synergistic role of carbon nanotube and yttria stabilised zirconia reinforcement on wear and corrosion resistance of Cr-based nano-composite coatings. Surface and Coatings Technology, 2020, 385, 125381.	2.2	18
107	Effect of carrier gas on mechanical properties and fracture behaviour of cold sprayed aluminium coatings. Surface Engineering, 2007, 23, 18-22.	1.1	17
108	Wear damage tolerance and high temperature oxidation behavior of HfB2:ZrB2â€“SiC composites. Ceramics International, 2020, 46, 21689-21698.	2.3	17

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109	Effect of Thermal Aging on the Phase Stability of 1Yb₂O₃â€“xSc₂O₃â€“(99 â€“) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T		
110	Progress in Electrochemical and Electrophoretic Deposition of Nickel with Carbonaceous Allotropes: A Review. Advanced Materials Interfaces, 2020, 7, 1901096.	1.9	16
111	Effect of Zn and Co doping on antibacterial efficacy and cytocompatibility of spark plasma sintered hydroxyapatite. Journal of the American Ceramic Society, 2020, 103, 4090-4100.	1.9	16
112	Thermodynamic and microstructural basis for the fast hydrogenation kinetics in Mgâ€“Mg2Ni-carbon hybrids. International Journal of Hydrogen Energy, 2020, 45, 11632-11640.	3.8	16
113	Effects of reinforcements and <scp>gammaâ€irradiation</scp> on wear performance of <scp>ultraâ€high</scp> molecular weight polyethylene as acetabular cup liner in <scp>hipâ€joint</scp> arthroplasty: A review. Journal of Applied Polymer Science, 2021, 138, 51275.	1.3	16
114	Nanomechanical properties of hafnium nitride coating. Scripta Materialia, 2008, 58, 1121-1124.	2.6	15
115	Electrophoretic deposition of nanocrystalline hydroxyapatite on Ti6Al4V/TiO2 substrate. Journal of Coatings Technology Research, 2013, 10, 263-275.	1.2	15
116	Restriction of Phase Transformation in Carbon Nanotube-Reinforced Yttria-Stabilized Zirconia. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2965-2974.	1.1	15
117	Hydrogen storage in Mgâ€“Mg2Niâ€“carbon hybrids. Journal of Alloys and Compounds, 2015, 645, S397-S399.	2.8	15
118	Synergistic role of carbonaceous reinforcements on multi length scale tribology of electrophoretically deposited nickel-boron nitride coatings. Materials Research Bulletin, 2018, 99, 61-72.	2.7	15
119	Effect of B4C reinforcement on microstructure, residual stress, toughening and scratch resistance of (Hf, Zr)B2 ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 796, 140022.	2.6	15
120	Creep behavior of 90 Pbâ€“10 Sn alloy. Physica Status Solidi A, 2003, 198, 387-394.	1.7	14
121	Enhanced reversible hydrogen storage in nickel nano hollow spheres. International Journal of Hydrogen Energy, 2019, 44, 22032-22038.	3.8	14
122	Laser peening enhances tribological resistance of electrodeposited Cr coatings reinforced with yttria stabilized zirconia and carbon nano tubes. Surface and Coatings Technology, 2019, 378, 124919.	2.2	14
123	Process induced alignment of carbon nanotube decreases longitudinal thermal conductivity of Al2O3 based porous composites. Ceramics International, 2019, 45, 18951-18964.	2.3	14
124	Grain Growth Behavior of Al₂O₃ Nanomaterials: A Review. Materials Science Forum, 2010, 653, 87-130.	0.3	13
125	Dependence of Protein Adsorption on Wetting Behavior of UHMWPEâ€“HAâ€“Al2O3â€“CNT Hybrid Biocomposites. Jom, 2012, 64, 506-513.	0.9	13
126	Effect of Alumina Dispersion on Microstructural and Nanomechanical Properties of Pulse Electrodeposited Nickelâ€“Alumina Composite Coatings. Journal of Materials Science and Technology, 2014, 30, 808-813.	5.6	13

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127	The Role of Nanomechanics in Healthcare. Advanced Healthcare Materials, 2018, 7, 1700793.	3.9	13
128	Role of Interfaces in Damage Initiation and Tolerance of Carbon Nanotube-Reinforced HfB2-ZrB2 Ceramics. Jom, 2020, 72, 2207-2218.	0.9	13
129	Radiation-induced effects on micro-scratch of ultra high molecular weight polyethylene biocomposites. Journal of Materials Research and Technology, 2021, 11, 2277-2293.	2.6	13
130	Influence of laser surface texturing on the wettability and antibacterial properties of metallic, ceramic, and polymeric surfaces. Journal of Materials Research, 2021, 36, 3985-3999.	1.2	13
131	Non-monotonic lattice parameter variation in ball-milled ceria. Journal of Materials Science, 2015, 50, 6349-6358.	1.7	12
132	Interfacial mechanics of carbonaceous reinforcements in electrophoretically deposited nickel coatings. Surface and Coatings Technology, 2017, 310, 79-86.	2.2	12
133	Multi-Length Scale Tribology of Electrophoretically Deposited Nickel-Diamond Coatings. Jom, 2017, 69, 227-235.	0.9	12
134	Mechanical and Electrochemical Characterization of Supersolidus Sintered Austenitic Stainless Steel (316â€†L). High Temperature Materials and Processes, 2019, 38, 792-805.	0.6	12
135	Domination of phononic scattering in solid solutioning and interfaces of HfB2â€“ZrB2 â€“ SiC -carbon nanotube based ultra high temperature composites. Scripta Materialia, 2022, 218, 114776.	2.6	12
136	Nanomechanical Properties and Thermal Conductivity Estimation of Plasma-Sprayed, Solid-Oxide Fuel Cell Components: Ceria-Doped, Yttria-Stabilized Zirconia Electrolyte. Jom, 2013, 65, 749-762.	0.9	11
137	Nanomechanical Characterization and Protein Adsorption of Cold-Rolled Zirconium Alloy. Jom, 2015, 67, 726-732.	0.9	11
138	Synergistic effect of carbonaceous reinforcements on microstructural, electrochemical, magnetic and tribological properties of electrophoretically deposited nickel. Journal of Alloys and Compounds, 2017, 711, 424-433.	2.8	11
139	Cross-sectional TEM investigation of Mg-LaNi5-Soot hybrids for hydrogen storage. International Journal of Hydrogen Energy, 2021, 46, 5507-5519.	3.8	11
140	Effect of far-field stresses and residual stresses incorporation in predicting fracture toughness of carbon nanotube reinforced yttria stabilized zirconia. Journal of Applied Physics, 2017, 122, .	1.1	10
141	Microporous Hydroxyapatite Ceramic Composites as Tissue Engineering Scaffolds: An Experimental and Computational Study. Advanced Engineering Materials, 2018, 20, 1701062.	1.6	10
142	Microscratching and fretting of electro-co-deposited Cr-based composite coatings with BN, graphene, and diamond reinforcements. Journal of Materials Science, 2021, 56, 6148-6166.	1.7	10
143	A critical analysis of the X-ray diffraction intensities in concentrated multicomponent alloys. International Journal of Materials Research, 2019, 110, 393-405.	0.1	10
144	Mechanical properties of spark plasma sintered ceria reinforced 8 mol% yttria-stabilized zirconia electrolyte. Nanomaterials and Energy, 2012, 1, 306-315.	0.1	9

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145	Role of silver/zinc oxide in affecting de-adhesion strength of Staphylococcus aureus on polymer biocomposites. Materials Science and Engineering C, 2017, 75, 1106-1114.	3.8	9
146	Molecular modeling of metastable FeB49 phase evolution in laser surface engineered coating. Journal of Applied Physics, 2006, 99, 044904.	1.1	8
147	Effect of Hot Rolling on Microstructure and Texture Evolution of Mg-Li Based Alloy. Materials Science Forum, 2011, 690, 347-350.	0.3	8
148	Mechanics of ZnO morphological dependence on wear resistance of ultra high molecular weigh polyethylene. European Journal of Mechanics, A/Solids, 2017, 65, 149-158.	2.1	8
149	Tribomechanical insight into carbide-laden hybrid suspension-powder plasma-sprayed Tribaloy T400 composite coatings. Surface and Coatings Technology, 2020, 396, 125957.	2.2	8
150	Ab-initio molecular modeling of interfaces in tantalum-carbon system. Journal of Applied Physics, 2012, 111, 063521.	1.1	7
151	Processing and Nano-mechanical Characterization of Mg-Li-Al based Alloys. , 2014, 5, 585-591.		7
152	Poisson effect driven anomalous lattice expansion in metal nanoshells. Applied Physics Letters, 2017, 110, 131603.	1.5	7
153	High-temperature oxidation of graphite. Nanomaterials and Energy, 2018, 7, 37-43.	0.1	7
154	Hybrid hollow structures for hydrogen storage. International Journal of Hydrogen Energy, 2020, 45, 24076-24082.	3.8	7
155	Tuning the magnetism and tribological behaviour of electrodeposited Ni/Cu bi-layer by selective reinforcement of carbon nanotubes. Journal of Alloys and Compounds, 2020, 818, 153287.	2.8	7
156	Fretting wear behaviour and frictional force mapping of Al2O3 based thermal barrier coatings. International Journal of Refractory Metals and Hard Materials, 2021, 98, 105525.	1.7	7
157	Densification mechanism of spark plasma sintered ZrB2 and ZrB2-SiC ceramic composites. Materials Characterization, 2021, 179, 111320.	1.9	7
158	Effect of fictive temperature on tribological properties of Zr44Ti11Cu10Ni10Be25 bulk metallic glasses. Wear, 2021, 486-487, 204075.	1.5	7
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160	Effect of carbonaceous reinforcements on anticorrosive and magnetic properties of Ni-Cu based composite coatings prepared by pulsed electrodeposition. Surface and Coatings Technology, 2022, 441, 128560.	2.2	7
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