

Nasser Al-Aqeeli

List of Publications by Year in descending order

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Version: 2024-02-01

88
papers

2,894
citations

236833

25
h-index

189801

50
g-index

91
all docs

91
docs citations

91
times ranked

2935
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanically alloyed nanocomposites. <i>Progress in Materials Science</i> , 2013, 58, 383-502.	16.0	622
2	Spark Plasma Sintering of Metals and Metal Matrix Nanocomposites: A Review. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-13.	1.5	266
3	Magnesium-based composites and alloys for medical applications: A review of mechanical and corrosion properties. <i>Journal of Alloys and Compounds</i> , 2019, 792, 1162-1190.	2.8	184
4	Fabrication of nano-grained Ti-Nb-Zr biomaterials using spark plasma sintering. <i>Materials and Design</i> , 2015, 87, 693-700.	3.3	97
5	Dynamics of a water droplet on a hydrophobic inclined surface: influence of droplet size and surface inclination angle on droplet rolling. <i>RSC Advances</i> , 2017, 7, 48806-48818.	1.7	80
6	Fabrication and antifouling behaviour of a carbon nanotube membrane. <i>Materials and Design</i> , 2016, 89, 549-558.	3.3	77
7	Cyclic hardening of metallic glasses under Hertzian contacts: Experiments and STZ dynamics simulations. <i>Philosophical Magazine</i> , 2010, 90, 1373-1390.	0.7	71
8	Water Droplet Dynamics on a Hydrophobic Surface in Relation to the Self-Cleaning of Environmental Dust. <i>Scientific Reports</i> , 2018, 8, 2984.	1.6	59
9	Laser texturing of alumina surface for improved hydrophobicity. <i>Applied Surface Science</i> , 2013, 286, 161-170.	3.1	52
10	PEDOT/FHA nanocomposite coatings on newly developed Ti-Nb-Zr implants: Biocompatibility and surface protection against corrosion and bacterial infections. <i>Materials Science and Engineering C</i> , 2019, 98, 482-495.	3.8	43
11	Development of new Al-based nanocomposites by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 480, 392-396.	2.6	40
12	Effect of sintering parameters on microstructure, mechanical properties and electrochemical behavior of Nb-Zr alloy for biomedical applications. <i>Materials and Design</i> , 2015, 83, 344-351.	3.3	39
13	Wetting and other physical characteristics of polycarbonate surface textured using laser ablation. <i>Applied Surface Science</i> , 2014, 320, 21-29.	3.1	38
14	Mechanical, in-vitro corrosion, and tribological characteristics of TiN coating produced by cathodic arc physical vapor deposition on Ti20Nb13Zr alloy for biomedical applications. <i>Thin Solid Films</i> , 2020, 709, 138183.	0.8	38
15	Chemo-Mechanical Characteristics of Mud Formed from Environmental Dust Particles in Humid Ambient Air. <i>Scientific Reports</i> , 2016, 6, 30253.	1.6	35
16	Characterization of Nanoreinforcement Dispersion in Inorganic Nanocomposites: A Review. <i>Materials</i> , 2014, 7, 4148-4181.	1.3	33
17	Microstructure and Properties of Spark Plasma Sintered Aluminum Containing 1 wt.% SiC Nanoparticles. <i>Metals</i> , 2015, 5, 70-83.	1.0	33
18	Influence of Laser Nitriding on the Surface and Corrosion Properties of Ti-20Nb-13Zr Alloy in Artificial Saliva for Dental Applications. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 4655-4664.	1.2	33

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19	Analytical investigation into laser pulse heating and thermal stresses. Optics and Laser Technology, 2009, 41, 132-139.	2.2	32
20	Synthesis and characterization of alumina-CNT membrane for cadmium removal from aqueous solution. Ceramics International, 2018, 44, 17189-17198.	2.3	32
21	Synthesis, characterisation and mechanical properties of SiC reinforced Al based nanocomposites processed by MA and SPS. Powder Metallurgy, 2013, 56, 149-157.	0.9	31
22	The Synthesis of Nanostructured WC-Based Hardmetals Using Mechanical Alloying and Their Direct Consolidation. Journal of Nanomaterials, 2014, 2014, 1-16.	1.5	30
23	Electrochemical Corrosion and In Vitro Bioactivity of Nano-Grained Biomedical Ti-20Nb-13Zr Alloy in a Simulated Body Fluid. Materials, 2018, 11, 26.	1.3	30
24	Influence of surface treatment on PEDOT coatings: surface and electrochemical corrosion aspects of newly developed Ti alloy. RSC Advances, 2018, 8, 19181-19195.	1.7	28
25	Matrix Structure Evolution and Nanoreinforcement Distribution in Mechanically Milled and Spark Plasma Sintered Al-SiC Nanocomposites. Materials, 2014, 7, 6748-6767.	1.3	27
26	Phase evolution of Mg-Al-Zr nanophase alloys prepared by mechanical alloying. Journal of Alloys and Compounds, 2005, 400, 96-99.	2.8	26
27	Phase evolution during high energy ball milling of immiscible Nb-Zr alloys. Advanced Powder Technology, 2015, 26, 385-391.	2.0	25
28	Water droplet on inclined dusty hydrophobic surface: influence of droplet volume on environmental dust particles removal. RSC Advances, 2019, 9, 3582-3596.	1.7	25
29	Recent Advances in the Processing and Properties of Alumina-CNT/SiC Nanocomposites. Nanomaterials, 2019, 9, 86.	1.9	25
30	Electrical conductivity of spark plasma sintered Al ₂ O ₃ -SiC and Al ₂ O ₃ -carbon nanotube nanocomposites. Ceramics International, 2020, 46, 16008-16019.	2.3	25
31	Thermal stresses due to time exponentially decaying laser pulse: elasto-plastic wave propagations. International Journal of Mechanical Sciences, 2004, 46, 57-80.	3.6	24
32	VC and Cr ₃ C ₂ doped WC-based nano-cermets prepared by MA and SPS. Ceramics International, 2014, 40, 11759-11765.	2.3	24
33	Laser Texturing of Plasma Electrolytically Oxidized Aluminum 6061 Surfaces for Improved Hydrophobicity. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2014, 136, .	1.3	23
34	Characterization of nano-cemented carbides Co-doped with vanadium and chromium carbides. Powder Technology, 2015, 273, 47-53.	2.1	23
35	Replication of laser-textured alumina surfaces by polydimethylsiloxane: Improvement of surface hydrophobicity. Journal of Applied Polymer Science, 2016, 133, .	1.3	23
36	Influence of thermalcapillary and buoyant forces on flow characteristics in a droplet on hydrophobic surface. International Journal of Thermal Sciences, 2016, 102, 239-253.	2.6	23

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37	Influence of mud residues on solvent induced crystalized polycarbonate surface used as PV protective cover. <i>Solar Energy</i> , 2016, 125, 282-293.	2.9	22
38	Laser control melting of alumina surfaces with presence of B4C particles. <i>Journal of Alloys and Compounds</i> , 2012, 539, 12-16.	2.8	21
39	Processing of CNTs Reinforced Al-Based Nanocomposites Using Different Consolidation Techniques. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-10.	1.5	21
40	[INVITED] Laser treatment of Inconel 718 alloy and surface characteristics. <i>Optics and Laser Technology</i> , 2016, 78, 153-158.	2.2	20
41	Formation of an amorphous phase and its crystallization in the immiscible Nb-Zr system by mechanical alloying. <i>Journal of Applied Physics</i> , 2013, 114, 153512.	1.1	19
42	Silicone oil impregnated nano silica modified glass surface and influence of environmental dust particles on optical transmittance. <i>RSC Advances</i> , 2017, 7, 29762-29771.	1.7	19
43	Laser Nitriding of the Newly Developed Ti-20Nb-13Zr at.% Biomaterial Alloy to Enhance Its Mechanical and Corrosion Properties in Simulated Body Fluid. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 5553-5562.	1.2	18
44	Characteristics of oil impregnated hydrophobic glass surfaces in relation to self-cleaning of environmental dust particles. <i>Solar Energy Materials and Solar Cells</i> , 2017, 171, 8-15.	3.0	18
45	Thermal Stress Development Due to Laser Step Input Pulse Heating. <i>Journal of Thermal Stresses</i> , 2006, 29, 721-751.	1.1	17
46	The Effect of Variable Binder Content and Sintering Temperature on the Mechanical Properties of WC-Co/Cr ₃ C ₂ Nanocomposites. <i>Materials and Manufacturing Processes</i> , 2015, 30, 327-334.	2.7	17
47	Solvent-induced crystallization of a polycarbonate surface and texture copying by polydimethylsiloxane for improved surface hydrophobicity. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	17
48	Environmental dust effects on aluminum surfaces in humid air ambient. <i>Scientific Reports</i> , 2017, 7, 45999.	1.6	17
49	Optimization of process parameters for spark plasma sintering of nano-structured ferritic Fe-18Cr-2Si alloy. <i>Powder Technology</i> , 2016, 299, 62-70.	2.1	16
50	Environmental Dust Particles Repelling from A Hydrophobic Surface under Electrostatic Influence. <i>Scientific Reports</i> , 2019, 9, 8703.	1.6	16
51	Laser surface treatment of aluminum based composite mixed with B4C particles. <i>Optics and Laser Technology</i> , 2015, 66, 129-137.	2.2	15
52	Internal flow and heat transfer in a droplet located on a superhydrophobic surface. <i>International Journal of Thermal Sciences</i> , 2017, 121, 213-227.	2.6	15
53	Formulation of laser-induced thermal stresses: Stress boundary at the surface. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2003, 217, 423-434.	1.1	14
54	Strengthening behavior due to cyclic elastic loading in Pd-based metallic glass. <i>Journal of Alloys and Compounds</i> , 2011, 509, 7216-7220.	2.8	14

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55	Fabrication and Assessment of Crumb-Rubber-Modified Coatings with Anticorrosive Properties. <i>Materials</i> , 2015, 8, 181-192.	1.3	14
56	Laser gas assisted nitriding and sol-gel coating Of alumina surfaces: Effect Of environmental dust on surfaces. <i>Surface and Coatings Technology</i> , 2016, 289, 11-22.	2.2	14
57	Influence of Thermal Treatment on the Microstructure, Mechanical Properties, and Corrosion Resistance of Newly Developed Ti20Nb13Zr Biomedical Alloy in a Simulated Body Environment. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 1337-1349.	1.2	14
58	Improvement of in vitro corrosion, wear, and mechanical properties of newly developed Ti alloy by thermal treatment for dental applications. <i>Transactions of Nonferrous Metals Society of China</i> , 2021, 31, 952-966.	1.7	14
59	Droplet dynamics on a hydrophobic surface coated with N-octadecane phase change material. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 546, 28-39.	2.3	13
60	Mechanical Alloying and Spark Plasma Sintering of Nano-SiC Reinforced Al ₁₂ Si ₁₂ 0.3Mg Alloy. <i>Arabian Journal for Science and Engineering</i> , 2014, 39, 3161-3168.	1.1	12
61	Reversible exchange of wetting state of a hydrophobic surface via phase change material coating. <i>RSC Advances</i> , 2018, 8, 938-947.	1.7	12
62	In Vitro Corrosion and Bioactivity Performance of Surface-Treated Ti-20Nb-13Zr Alloys for Orthopedic Applications. <i>Coatings</i> , 2019, 9, 344.	1.2	12
63	Age Hardening Behavior of Carbon Nanotube Reinforced Aluminum Nanocomposites. <i>Journal of Nano Research</i> , 2012, 21, 29-35.	0.8	11
64	Fabrication of Brushite Coating on AZ91D and AZ31 Alloys by Two-Step Chemical Treatment and Its Surface Protection in Simulated Body Fluid. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 3803-3815.	1.2	11
65	Porous Al ₂ O ₃ -CNT Nanocomposite Membrane Produced by Spark Plasma Sintering with Tailored Microstructure and Properties for Water Treatment. <i>Nanomaterials</i> , 2020, 10, 845.	1.9	11
66	Synthesis and spark plasma sintering of Al-Mg-Zr alloys. <i>Journal of Central South University</i> , 2013, 20, 7-14.	1.2	10
67	Magnesium nanocomposite: Effect of melt dispersion of different oxides nano particles. <i>Journal of Materials Research</i> , 2016, 31, 100-108.	1.2	10
68	Development of tensile-compressive asymmetry free magnesium based composite using TiO ₂ nanoparticles dispersion. <i>Journal of Materials Research</i> , 2018, 33, 130-137.	1.2	10
69	Laser gas assisted texturing of alumina surfaces and effects of environmental dry mud solution on surface characteristics. <i>Ceramics International</i> , 2016, 42, 396-404.	2.3	9
70	Laser gas assisted texturing and formation of nitride and oxynitride compounds on alumina surface: Surface response to environmental dust. <i>Optics and Lasers in Engineering</i> , 2018, 102, 1-9.	2.0	9
71	Optimization of Spark Plasma Sintering Parameters Using the Taguchi Method for Developing Mg-Based Composites. <i>Jom</i> , 2020, 72, 1186-1194.	0.9	9
72	Effect of Sonication Time and Clay Loading on Nanoclay Dispersion and Thermal Property of Epoxy-Clay Nanocomposite. <i>Key Engineering Materials</i> , 0, 471-472, 490-495.	0.4	7

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73	Extraordinary Strengthening of Magnesium by Solid-State Diffusion of Copper in Mg-0.5Cu Alloy. <i>Jom</i> , 2020, 72, 1597-1606.	0.9	7
74	Sol-gel coating of colloidal particles deposited glass surface pertinent to self-cleaning applications. <i>Progress in Organic Coatings</i> , 2019, 127, 202-210.	1.9	6
75	Magnesium nanocomposite: increasing copperisation effect on high temperature tensile properties. <i>Powder Metallurgy</i> , 2016, 59, 66-72.	0.9	5
76	Laser treatment of aluminum composite and investigation of thermal stress field. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 86, 3547-3561.	1.5	5
77	Effect of hybrid reinforcement on the high temperature tensile behavior of magnesium nanocomposite. <i>International Journal of Materials Research</i> , 2015, 106, 1298-1302.	0.1	4
78	Thermal Behavior of Spark Plasma Sintered Alumina-Based Nanocomposites. <i>Arabian Journal for Science and Engineering</i> , 2019, 44, 6013-6028.	1.7	4
79	Wear Behavior of Spark Plasma Sintered Al2124 Aluminum Alloy Containing Carbon Nanotubes. <i>Science of Advanced Materials</i> , 2012, 4, 1166-1173.	0.1	4
80	The effect of laser pulse frequency on the microstructure and morphology of duplex treated Ti-6Al-4V alloy. <i>Surface and Coatings Technology</i> , 2011, 205, 3073-3079.	2.2	3
81	Variation of Mechanical Properties of Epoxy-Clay Nanocomposite with Sonication Time and Clay Loading. <i>Key Engineering Materials</i> , 0, 471-472, 496-501.	0.4	3
82	Wear and Mechanical Propertiesâ€™ Evaluation of Duplex-Treated Ti-6Al-4V Alloy Using Nanoindentation. <i>Arabian Journal for Science and Engineering</i> , 2012, 37, 735-748.	1.1	3
83	Effect of Copper Nanoparticle on the High-Temperature Tensile Behavior of a Mgâ€™ O_3 Nanocomposite. <i>Arabian Journal for Science and Engineering</i> , 2018, 43, 4803-4810.	1.7	3
84	Mobility of A Water Droplet on Liquid Phase of N-Octadecane Coated Hydrophobic Surface. <i>Scientific Reports</i> , 2018, 8, 15060.	1.6	3
85	Manufacture of microporous ceramic layer by suspensionâ€™sedimentation for filtration applications. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 1032-1038.	1.5	2
86	Comparison of Corrosion Behavior of Electrochemically Deposited Nano-Cobalt-Coated Ni Sheet. <i>Journal of Chemistry</i> , 2013, 2013, 1-6.	0.9	2
87	Mg6Zn0.4Ca0.5Cu alloy: Physically blended microalloyed lightweight alloy with significantly high strength and ductility. <i>Journal of Alloys and Compounds</i> , 2019, 787, 1015-1022.	2.8	2
88	Effect of Consolidation Mechanism on the Properties of Nanostructured WC-6, 9, 12 wt%Co Hardmetals. , 2011, , .		0