Nasser Al-Aqeeli

List of Publications by Year
in descending order

88 papers	2,894 citations	270111 25 h-index	214428 50 g-index
91 all docs	91 docs citations	91 times ranked	3256 citing authors

#	Article	IF	Citations
1	Improvement of in vitro corrosion, wear, and mechanical properties of newly developed Ti alloy by thermal treatment for dental applications. Transactions of Nonferrous Metals Society of China, 2021, 31, 952-966.	1.7	14
2	Porous Al2O3-CNT Nanocomposite Membrane Produced by Spark Plasma Sintering with Tailored Microstructure and Properties for Water Treatment. Nanomaterials, 2020, 10, 845.	1.9	11
3	Mechanical, in-vitro corrosion, and tribological characteristics of TiN coating produced by cathodic arc physical vapor deposition on Ti20Nb13Zr alloy for biomedical applications. Thin Solid Films, 2020, 709, 138183.	0.8	38
4	Extraordinary Strengthening of Magnesium by Solid-State Diffusion of Copper in Mg-0.5Cu Alloy. Jom, 2020, 72, 1597-1606.	0.9	7
5	Optimization of Spark Plasma Sintering Parameters Using the Taguchi Method for Developing Mg-Based Composites. Jom, 2020, 72, 1186-1194.	0.9	9
6	Electrical conductivity of spark plasma sintered Al2O3â€“SiC and Al2O3-carbon nanotube nanocomposites. Ceramics International, 2020, 46, 16008-16019.	2.3	25
7	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
8	Recent Advances in the Processing and Properties of Aluminaâ€“CNT/SiC Nanocomposites. Nanomaterials, 2019, 9, 86.	1.9	25
9	Fabrication of Brushite Coating on AZ91D and AZ31 Alloys by Two-Step Chemical Treatment and Its Surface Protection in Simulated Body Fluid. Journal of Materials Engineering and Performance, 2019, 28, 3803-3815.	1.2	11
10	Environmental Dust Particles Repelling from A Hydrophobic Surface under Electrostatic Influence. Scientific Reports, 2019, 9, 8703.	1.6	16
11	In Vitro Corrosion and Bioactivity Performance of Surface-Treated Ti-20Nb-13Zr Alloys for Orthopedic Applications. Coatings, 2019, 9, 344.	1.2	12
12	Thermal Behavior of Spark Plasma Sintered Alumina-Based Nanocomposites. Arabian Journal for Science and Engineering, 2019, 44, 6013-6028.	1.7	4
13	Magnesium-based composites and alloys for medical applications: A review of mechanical and corrosion properties. Journal of Alloys and Compounds, 2019, 792, 1162-1190.	2.8	184
14	Mg6Zn0.4Ca0.5Cu alloy: Physically blended microalloyed lightweight alloy with significantly high strength and ductility. Journal of Alloys and Compounds, 2019, 787, 1015-1022.	2.8	2
15	Influence of Thermal Treatment on the Microstructure, Mechanical Properties, and Corrosion Resistance of Newly Developed Ti20Nb13Zr Biomedical Alloy in a Simulated Body Environment. Journal of Materials Engineering and Performance, 2019, 28, 1337-1349.	1.2	14
16	PEDOT/FHA nanocomposite coatings on newly developed Ti-Nb-Zr implants: Biocompatibility and surface protection against corrosion and bacterial infections. Materials Science and Engineering C, 2019, 98, 482-495.	3.8	43
17	Sol-gel coating of colloidal particles deposited glass surface pertinent to self-cleaning applications. Progress in Organic Coatings, 2019, 127, 202-210.	1.9	6
18	Effect of Copper Nanoparticle on the High-Temperature Tensile Behavior of a Mgâ€“Y $$_{2}hbox {O}_{3}$$ 2 O 3 Nanocomposite. Arabian Journal for Science and Engineering, 2018, 43, 4803-4810.	1.7	3

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19	Water Droplet Dynamics on a Hydrophobic Surface in Relation to the Self-Cleaning of Environmental Dust. Scientific Reports, 2018, 8, 2984.	1.6	59
20	Reversible exchange of wetting state of a hydrophobic surface <i>via</i> phase change material coating. RSC Advances, 2018, 8, 938-947.	1.7	12
21	Droplet dynamics on a hydrophobic surface coated with N-octadecane phase change material. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 546, 28-39.	2.3	13
22	Development of tensile-compressive asymmetry free magnesium based composite using TiO₂nanoparticles dispersion. Journal of Materials Research, 2018, 33, 130-137.	1.2	10
23	Laser gas assisted texturing and formation of nitride and oxynitride compounds on alumina surface: Surface response to environmental dust. Optics and Lasers in Engineering, 2018, 102, 1-9.	2.0	9
24	Mobility of A Water Droplet on Liquid Phase of N-Octadecane Coated Hydrophobic Surface. Scientific Reports, 2018, 8, 15060.	1.6	3
25	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
26	Synthesis and characterization of alumina-CNT membrane for cadmium removal from aqueous solution. Ceramics International, 2018, 44, 17189-17198.	2.3	32
27	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
28	Influence of Laser Nitriding on the Surface and Corrosion Properties of Ti-20Nb-13Zr Alloy in Artificial Saliva for Dental Applications. Journal of Materials Engineering and Performance, 2018, 27, 4655-4664.	1.2	33
29	Environmental dust effects on aluminum surfaces in humid air ambient. Scientific Reports, 2017, 7, 45999.	1.6	17
30	Silicone oil impregnated nano silica modified glass surface and influence of environmental dust particles on optical transmittance. RSC Advances, 2017, 7, 29762-29771.	1.7	19
31	Laser Nitriding of the Newly Developed Ti-20Nb-13Zr at.% Biomaterial Alloy to Enhance Its Mechanical and Corrosion Properties in Simulated Body Fluid. Journal of Materials Engineering and Performance, 2017, 26, 5553-5562.	1.2	18
32	Internal flow and heat transfer in a droplet located on a superhydrophobic surface. International Journal of Thermal Sciences, 2017, 121, 213-227.	2.6	15
33	Dynamics of a water droplet on a hydrophobic inclined surface: influence of droplet size and surface inclination angle on droplet rolling. RSC Advances, 2017, 7, 48806-48818.	1.7	80
34	Characteristics of oil impregnated hydrophobic glass surfaces in relation to self-cleaning of environmental dust particles. Solar Energy Materials and Solar Cells, 2017, 171, 8-15.	3.0	18
35	Chemo-Mechanical Characteristics of Mud Formed from Environmental Dust Particles in Humid Ambient Air. Scientific Reports, 2016, 6, 30253.	1.6	35
36	Magnesium nanocomposite: increasing copperisation effect on high temperature tensile properties. Powder Metallurgy, 2016, 59, 66-72.	0.9	5

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37	Magnesium nanocomposite: Effect of melt dispersion of different oxides nano particles. Journal of Materials Research, 2016, 31, 100-108.	1.2	10
38	Replication of laserâ€textured alumina surfaces by polydimethylsiloxane: Improvement of surface hydrophobicity. Journal of Applied Polymer Science, 2016, 133, .	1.3	23
39	Laser treatment of aluminum composite and investigation of thermal stress field. International Journal of Advanced Manufacturing Technology, 2016, 86, 3547-3561.	1.5	5
40	Optimization of process parameters for spark plasma sintering of nano-structured ferritic Fe-18Cr-2Si alloy. Powder Technology, 2016, 299, 62-70.	2.1	16
41	Solventâ€induced crystallization of a polycarbonate surface and texture copying by polydimethylsiloxane for improved surface hydrophobicity. Journal of Applied Polymer Science, 2016, 133, .	1.3	17
42	Laser gas assisted nitriding and solâ€“gel coating Of alumina surfaces: Effect Of environmental dust on surfaces. Surface and Coatings Technology, 2016, 289, 11-22.	2.2	14
43	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
44	Influence of mud residues on solvent induced crystalized polycarbonate surface used as PV protective cover. Solar Energy, 2016, 125, 282-293.	2.9	22
45	[INVITED] Laser treatment of Inconel 718 alloy and surface characteristics. Optics and Laser Technology, 2016, 78, 153-158.	2.2	20
46	Fabrication and antifouling behaviour of a carbon nanotube membrane. Materials and Design, 2016, 89, 549-558.	3.3	77
47	Laser gas assisted texturing of alumina surfaces and effects of environmental dry mud solution on surface characteristics. Ceramics International, 2016, 42, 396-404.	2.3	9
48	Characterization of nano-cemented carbides Co-doped with vanadium and chromium carbides. Powder Technology, 2015, 273, 47-53.	2.1	23
49	The Effect of Variable Binder Content and Sintering Temperature on the Mechanical Properties of WCâ€“Coâ€“VC/Cr₃C₂Nanocomposites. Materials and Manufacturing Processes, 2015, 30, 327-334.	2.7	17
50	Laser surface treatment of aluminum based composite mixed with B4C particles. Optics and Laser Technology, 2015, 66, 129-137.	2.2	15
51	Effect of sintering parameters on microstructure, mechanical properties and electrochemical behavior of Nbâ€“Zr alloy for biomedical applications. Materials and Design, 2015, 83, 344-351.	3.3	39
52	Microstructure and Properties of Spark Plasma Sintered Aluminum Containing 1 wt.% SiC Nanoparticles. Metals, 2015, 5, 70-83.	1.0	33
53	Fabrication and Assessment of Crumb-Rubber-Modified Coatings with Anticorrosive Properties. Materials, 2015, 8, 181-192.	1.3	14
54	Fabrication of nano-grained Tiâ€“Nbâ€“Zr biomaterials using spark plasma sintering. Materials and Design, 2015, 87, 693-700.	3.3	97

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55	Effect of hybrid reinforcement on the high temperature tensile behavior of magnesium nanocomposite. International Journal of Materials Research, 2015, 106, 1298-1302.	0.1	4
56	Phase evolution during high energy ball milling of immiscible Nbâ€“Zr alloys. Advanced Powder Technology, 2015, 26, 385-391.	2.0	25
57	The Synthesis of Nanostructured WC-Based Hardmetals Using Mechanical Alloying and Their Direct Consolidation. Journal of Nanomaterials, 2014, 2014, 1-16.	1.5	30
58	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
59	Characterization of Nanoreinforcement Dispersion in Inorganic Nanocomposites: A Review. Materials, 2014, 7, 4148-4181.	1.3	33
60	Matrix Structure Evolution and Nanoreinforcement Distribution in Mechanically Milled and Spark Plasma Sintered Al-SiC Nanocomposites. Materials, 2014, 7, 6748-6767.	1.3	27
61	Mechanical Alloying and Spark Plasma Sintering of Nano-SiC Reinforced Alâ€“12Siâ€“0.3Mg Alloy. Arabian Journal for Science and Engineering, 2014, 39, 3161-3168.	1.1	12
62	Wetting and other physical characteristics of polycarbonate surface textured using laser ablation. Applied Surface Science, 2014, 320, 21-29.	3.1	38
63	VC and Cr3C2 doped WC-based nano-cermets prepared by MA and SPS. Ceramics International, 2014, 40, 11759-11765.	2.3	24
64	Laser texturing of alumina surface for improved hydrophobicity. Applied Surface Science, 2013, 286, 161-170.	3.1	52
65	Mechanically alloyed nanocomposites. Progress in Materials Science, 2013, 58, 383-502.	16.0	622
66	Synthesis and spark plasma sintering of Al-Mg-Zr alloys. Journal of Central South University, 2013, 20, 7-14.	1.2	10
67	Manufacture of microporous ceramic layer by suspensionâ€“sedimentation for filtration applications. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2013, 227, 1032-1038.	1.5	2
68	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
69	Processing of CNTs Reinforced Al-Based Nanocomposites Using Different Consolidation Techniques. Journal of Nanomaterials, 2013, 2013, 1-10.	1.5	21
70	Comparison of Corrosion Behavior of Electrochemically Deposited Nano-Cobalt-Coated Ni Sheet. Journal of Chemistry, 2013, 2013, 1-6.	0.9	2
71	Formation of an amorphous phase and its crystallization in the immiscible Nbâ€“Zr system by mechanical alloying. Journal of Applied Physics, 2013, 114, 153512.	1.1	19
72	Age Hardening Behavior of Carbon Nanotube Reinforced Aluminum Nanocomposites. Journal of Nano Research, 2012, 21, 29-35.	0.8	11

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73	Spark Plasma Sintering of Metals and Metal Matrix Nanocomposites: A Review. Journal of Nanomaterials, 2012, 2012, 1-13.	1.5	266
74	Laser control melting of alumina surfaces with presence of B4C particles. Journal of Alloys and Compounds, 2012, 539, 12-16.	2.8	21
75	Wear and Mechanical Propertiesâ€™ Evaluation of Duplex-Treated Ti-6Al-4V Alloy Using Nanoindentation. Arabian Journal for Science and Engineering, 2012, 37, 735-748.	1.1	3
76	Wear Behavior of Spark Plasma Sintered Al2124 Aluminum Alloy Containing Carbon Nanotubes. Science of Advanced Materials, 2012, 4, 1166-1173.	0.1	4
77	Strengthening behavior due to cyclic elastic loading in Pd-based metallic glass. Journal of Alloys and Compounds, 2011, 509, 7216-7220.	2.8	14
78	The effect of laser pulse frequency on the microstructure and morphology of duplex treated Ti-6Al-4V alloy. Surface and Coatings Technology, 2011, 205, 3073-3079.	2.2	3
79	Effect of Consolidation Mechanism on the Properties of Nanostructured WC-6, 9, 12 wt%Co Hardmetals. , 2011, , .		0
80	Cyclic hardening of metallic glasses under Hertzian contacts: Experiments and STZ dynamics simulations. Philosophical Magazine, 2010, 90, 1373-1390.	0.7	71
81	Analytical investigation into laser pulse heating and thermal stresses. Optics and Laser Technology, 2009, 41, 132-139.	2.2	32
82	Development of new Al-based nanocomposites by mechanical alloying. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 480, 392-396.	2.6	40
83	Thermal Stress Development Due to Laser Step Input Pulse Heating. Journal of Thermal Stresses, 2006, 29, 721-751.	1.1	17
84	Phase evolution of Mgâ€“Alâ€“Zr nanophase alloys prepared by mechanical alloying. Journal of Alloys and Compounds, 2005, 400, 96-99.	2.8	26
85	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
86	Formulation of laser-induced thermal stresses: Stress boundary at the surface. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2003, 217, 423-434.	1.1	14
87	Variation of Mechanical Properties of Epoxy-Clay Nanocomposite with Sonication Time and Clay Loading. Key Engineering Materials, 0, 471-472, 496-501.	0.4	3
88	Effect of Sonication Time and Clay Loading on Nanoclay Dispersion and Thermal Property of Epoxy-Clay Nanocomposite. Key Engineering Materials, 0, 471-472, 490-495.	0.4	7