

Tahar Laoui

List of Publications by Year in descending order

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125
papers

9,786
citations

81839

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36008

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129
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129
times ranked

11711
citing authors

#	ARTICLE	IF	CITATIONS
1	Tribological Behavior of Aluminum Hybrid Nanocomposites Reinforced with Alumina and Graphene Oxide. <i>Materials</i> , 2022, 15, 865.	1.3	8
2	Review: Brine Solution: Current Status, Future Management and Technology Development. <i>Sustainability</i> , 2022, 14, 6752.	1.6	11
3	Fouling control in reverse osmosis for water desalination & reuse: Current practices & emerging environment-friendly technologies. <i>Science of the Total Environment</i> , 2021, 765, 142721.	3.9	96
4	Mechanical and Thermal Evaluation of Aluminum Hybrid Nanocomposite Reinforced with Alumina and Graphene Oxide. <i>Nanomaterials</i> , 2021, 11, 1225.	1.9	11
5	Synthesis and characterization of alkaline earth and rare earth doped sialon Ceramics by spark plasma sintering. <i>International Journal of Refractory Metals and Hard Materials</i> , 2021, 97, 105500.	1.7	20
6	Enhancing the adsorptive capacity of carbon nanofibers by impregnation with ferric oxide for the removal of cadmium from aqueous solution. <i>Journal of Water Process Engineering</i> , 2021, 42, 102130.	2.6	5
7	Preparation of graphene-coated anodic alumina substrates for selective molecular transport. <i>Carbon Letters</i> , 2020, 30, 23-33.	3.3	2
8	Development of calcium stabilized nitrogen rich α -sialon ceramics along the $\text{Si}_3\text{N}_4:1/2\text{Ca}_3\text{N}_2:3\text{AlN}$ line using spark plasma sintering. <i>Journal of Advanced Ceramics</i> , 2020, 9, 606-616.	8.9	8
9	Monolayer Graphene Transfer onto Hydrophilic Substrates: A New Protocol Using Electrostatic Charging. <i>Membranes</i> , 2020, 10, 358.	1.4	3
10	Graphene Oxide-Based Membranes for Water Purification Applications: Effect of Plasma Treatment on the Adhesion and Stability of the Synthesized Membranes. <i>Membranes</i> , 2020, 10, 292.	1.4	14
11	Porous Al_2O_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
12	Electrical conductivity of spark plasma sintered $\text{Al}_2\text{O}_3/\text{SiC}$ and Al_2O_3 -carbon nanotube nanocomposites. <i>Ceramics International</i> , 2020, 46, 16008-16019.	2.3	25
13	Few-Layers Graphene Film and Copper Surface Morphology for Improved Corrosion Protection of Copper. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 5541-5550.	1.2	10
14	Tribological behaviour of alumina-based nanocomposites reinforced with uncoated and Ni-coated cubic boron nitride. <i>Journal of Materials Research and Technology</i> , 2019, 8, 5066-5079.	2.6	21
15	A Novel PAN-GO-SiO ₂ Hybrid Membrane for Separating Oil and Water from Emulsified Mixture. <i>Materials</i> , 2019, 12, 212.	1.3	46
16	Thermal Behavior of Spark Plasma Sintered Alumina-Based Nanocomposites. <i>Arabian Journal for Science and Engineering</i> , 2019, 44, 6013-6028.	1.7	4
17	Development of graphene oxide-based membrane as a pretreatment for thermal seawater desalination. <i>Desalination</i> , 2019, 465, 13-24.	4.0	26
18	Tribological Characterization of Micron-/Nano-Sized WC-9%Co Cemented Carbides Prepared by Spark Plasma Sintering at Elevated Temperatures. <i>Materials</i> , 2019, 12, 920.	1.3	17

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19	Analytical Approximations for the Closure Time of Freezing Processes in Spheres and Cylindrical Tubes. <i>Journal of Thermal Science and Engineering Applications</i> , 2019, 11, .	0.8	0
20	Effect of nano-size oxy-nitride starting precursors on spark plasma sintering of calcium sialons along the alpha/(alpha+beta) phase boundary. <i>Ceramics International</i> , 2019, 45, 9638-9645.	2.3	17
21	Hydrophobic and optical characteristics of graphene and graphene oxide films transferred onto functionalized silica particles deposited glass surface. <i>Applied Surface Science</i> , 2018, 442, 213-223.	3.1	23
22	Enhancement of anticorrosion property of 304 stainless steel using silane coatings. <i>Applied Surface Science</i> , 2018, 440, 1286-1297.	3.1	69
23	Low-temperature spark plasma sintering of calcium stabilized alpha sialon using nano-size aluminum nitride precursor. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 71, 301-306.	1.7	17
24	Surface modification of carbon nanotubes with copper oxide nanoparticles for heat transfer enhancement of nanofluids. <i>RSC Advances</i> , 2018, 8, 1791-1802.	1.7	57
25	Effect of Ni content and Al ₂ O ₃ particle size on the thermal and mechanical properties of Al ₂ O ₃ /Ni composites prepared by spark plasma sintering. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 76, 25-32.	1.7	25
26	Synthesis and characterization of alumina-CNT membrane for cadmium removal from aqueous solution. <i>Ceramics International</i> , 2018, 44, 17189-17198.	2.3	32
27	Synthesis of hard and tough calcium stabilized α -sialon/SiC ceramic composites using nano-sized precursors and spark plasma sintering. <i>Journal of Alloys and Compounds</i> , 2018, 757, 200-208.	2.8	14
28	Effect of Al metal precursor on the phase formation and mechanical properties of fine-grained SiAlON ceramics prepared by spark plasma sintering. <i>Journal of the European Ceramic Society</i> , 2017, 37, 1975-1983.	2.8	26
29	Effect of PEG functionalized carbon nanotubes on the enhancement of thermal and physical properties of nanofluids. <i>Experimental Thermal and Fluid Science</i> , 2017, 84, 231-241.	1.5	42
30	Investigation of the structural and mechanical properties of micro-/nano-sized Al ₂ O ₃ and cBN composites prepared by spark plasma sintering. <i>Ceramics International</i> , 2017, 43, 10645-10653.	2.3	42
31	Fabrication of polysulfone nanocomposite membranes with silver-doped carbon nanotubes and their antifouling performance. <i>Journal of Applied Polymer Science</i> , 2017, 134, .	1.3	20
32	Water and Solute Transport Governed by Tunable Pore Size Distributions in Nanoporous Graphene Membranes. <i>ACS Nano</i> , 2017, 11, 10042-10052.	7.3	96
33	Effect of precursor size on the structure and mechanical properties of calcium-stabilized sialon/cubic boron nitride nanocomposites. <i>Journal of Alloys and Compounds</i> , 2017, 728, 836-843.	2.8	25
34	Study of the impact of chemical etching on Cu surface morphology, graphene growth and transfer on SiO ₂ /Si substrate. <i>Carbon</i> , 2017, 123, 402-414.	5.4	19
35	Enhanced water transport and salt rejection through hydrophobic zeolite pores. <i>Nanotechnology</i> , 2017, 28, 505703.	1.3	11
36	Experimental and theoretical investigations on water desalination using direct contact membrane distillation. <i>Desalination</i> , 2017, 404, 22-34.	4.0	156

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37	Effect of graphene film on laser textured alumina surface characteristics. <i>Ceramics International</i> , 2017, 43, 2012-2021.	2.3	8
38	Synthesis of Graphene Based Membranes: Effect of Substrate Surface Properties on Monolayer Graphene Transfer. <i>Materials</i> , 2017, 10, 86.	1.3	8
39	Novel Aluminum Oxide-Impregnated Carbon Nanotube Membrane for the Removal of Cadmium from Aqueous Solution. <i>Materials</i> , 2017, 10, 1144.	1.3	27
40	Cadmium Removal from Contaminated Water Using Polyelectrolyte-Coated Industrial Waste Fly Ash. <i>Bioinorganic Chemistry and Applications</i> , 2017, 2017, 1-13.	1.8	33
41	A Comparative Study of Raw and Metal Oxide Impregnated Carbon Nanotubes for the Adsorption of Hexavalent Chromium from Aqueous Solution. <i>Bioinorganic Chemistry and Applications</i> , 2017, 2017, 1-10.	1.8	19
42	Monolayer graphene transfer onto polypropylene and polyvinylidenedifluoride microfiltration membranes for water desalination. <i>Desalination</i> , 2016, 388, 29-37.	4.0	42
43	Development of a single-phase Ca-SiAlON ceramic from nanosized precursors using spark plasma sintering. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 673, 243-249.	2.6	21
44	Adsorption of phenol on aluminum oxide impregnated fly ash. <i>Desalination and Water Treatment</i> , 2016, 57, 6801-6808.	1.0	35
45	Heavy metal removal from aqueous solution by advanced carbon nanotubes: Critical review of adsorption applications. <i>Separation and Purification Technology</i> , 2016, 157, 141-161.	3.9	977
46	Carbon capture by physical adsorption: Materials, experimental investigations and numerical modeling and simulations – A review. <i>Applied Energy</i> , 2016, 161, 225-255.	5.1	498
47	Sorption of phenol from waters on activated carbon impregnated with iron oxide, aluminum oxide and titanium oxide. <i>Journal of Molecular Liquids</i> , 2016, 213, 351-359.	2.3	89
48	Fabrication and antifouling behaviour of a carbon nanotube membrane. <i>Materials and Design</i> , 2016, 89, 549-558.	3.3	77
49	Effect of acid modification on adsorption of hexavalent chromium (Cr(VI)) from aqueous solution by activated carbon and carbon nanotubes. <i>Desalination and Water Treatment</i> , 2016, 57, 7232-7244.	1.0	150
50	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
51	Adsorptive removal of cadmium(II) ions from liquid phase using acid modified carbon-based adsorbents. <i>Journal of Molecular Liquids</i> , 2015, 204, 255-263.	2.3	202
52	Enhanced adsorption of phenols from liquids by aluminum oxide/carbon nanotubes: Comprehensive study from synthesis to surface properties. <i>Journal of Molecular Liquids</i> , 2015, 206, 176-182.	2.3	78
53	Effects of annealing on copper substrate surface morphology and graphene growth by chemical vapor deposition. <i>Carbon</i> , 2015, 94, 369-377.	5.4	67
54	Nanofiltration across Defect-Sealed Nanoporous Monolayer Graphene. <i>Nano Letters</i> , 2015, 15, 3254-3260.	4.5	272

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55	Preparation and properties of nanocomposite polysulfone/multi-walled carbon nanotubes membranes for desalination. <i>Desalination</i> , 2015, 367, 134-144.	4.0	122
56	In-situ aging microwave heating synthesis of LTA zeolite layer on mesoporous TiO ₂ coated porous alumina support. <i>Journal of Crystal Growth</i> , 2015, 432, 123-128.	0.7	5
57	Novel anti-microbial membrane for desalination pretreatment: A silver nanoparticle-doped carbon nanotube membrane. <i>Desalination</i> , 2015, 376, 82-93.	4.0	67
58	Evaluation of micro- and nano-carbon-based adsorbents for the removal of phenol from aqueous solutions. <i>Toxicological and Environmental Chemistry</i> , 2015, 97, 1164-1179.	0.6	25
59	The Synthesis of Nanostructured WC-Based Hardmetals Using Mechanical Alloying and Their Direct Consolidation. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-16.	1.5	30
60	Evolution of Cu Surface Morphology and its Effect on Graphene Synthesized by Chemical Vapor Deposition. <i>Advances in Science and Technology</i> , 2014, 95, 17-22.	0.2	2
61	Selective Ionic Transport through Tunable Subnanometer Pores in Single-Layer Graphene Membranes. <i>Nano Letters</i> , 2014, 14, 1234-1241.	4.5	687
62	Framework water capacity and infiltration pressure of MFI zeolites. <i>Microporous and Mesoporous Materials</i> , 2014, 190, 84-91.	2.2	20
63	Fe-N-C Electrocatalysts for Oxygen Reduction Reaction Synthesized by Using Aniline Salt and Fe ³⁺ /H ₂ O ₂ Catalytic System. <i>Electrochimica Acta</i> , 2014, 146, 809-818.	2.6	26
64	Nanofluidic transport governed by the liquid/vapour interface. <i>Nature Nanotechnology</i> , 2014, 9, 317-323.	15.6	159
65	VC and Cr ₃ C ₂ doped WC-based nano-cermets prepared by MA and SPS. <i>Ceramics International</i> , 2014, 40, 11759-11765.	2.3	24
66	Effect of Hydrophilic Defects on Water Transport in MFI Zeolites. <i>Langmuir</i> , 2014, 30, 6446-6453.	1.6	53
67	Mechanical and Thermal Properties of Styrene Butadiene Rubber - Functionalized Carbon Nanotubes Nanocomposites. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013, 21, 89-101.	1.0	20
68	Synthesis and spark plasma sintering of Al-Mg-Zr alloys. <i>Journal of Central South University</i> , 2013, 20, 7-14.	1.2	10
69	Manufacture of microporous ceramic layer by suspension 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
70	Synthesis, characterisation and mechanical properties of SiC reinforced Al based nanocomposites processed by MA and SPS. <i>Powder Metallurgy</i> , 2013, 56, 149-157.	0.9	31
71	Fast Disinfection of <i>Escherichia coli</i> Bacteria Using Carbon Nanotubes Interaction with Microwave Radiation. <i>Bioinorganic Chemistry and Applications</i> , 2013, 2013, 1-9.	1.8	28
72	Bubble-induced damping in displacement-driven microfluidic flows. <i>Physical Review E</i> , 2012, 86, 026301.	0.8	14

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73	Age Hardening Behavior of Carbon Nanotube Reinforced Aluminum Nanocomposites. Journal of Nano Research, 2012, 21, 29-35.	0.8	11
74	Water Infiltration in ZSM-5 Zeolites: Effect of Pore Volume and Water Structure. , 2012, , .		0
75	Seeding of Porous Alumina Substrate with MFI Zeolite Nanocrystals using Spin-coating Technique. Procedia Engineering, 2012, 44, 1183-1184.	1.2	1
76	Spark Plasma Sintering of Metals and Metal Matrix Nanocomposites: A Review. Journal of Nanomaterials, 2012, 2012, 1-13.	1.5	266
77	Selective Molecular Transport through Intrinsic Defects in a Single Layer of CVD Graphene. ACS Nano, 2012, 6, 10130-10138.	7.3	331
78	Wear Behavior of Spark Plasma Sintered Al2124 Aluminum Alloy Containing Carbon Nanotubes. Science of Advanced Materials, 2012, 4, 1166-1173.	0.1	4
79	Exploring a Manufacturing Route to Produce WC-Based Micro-Cutting Tool With Nanostructured Material. , 2011, , .		0
80	Nanostructured materials for water desalination. Nanotechnology, 2011, 22, 292001.	1.3	543
81	Effect of Consolidation Mechanism on the Properties of Nanostructured WC-6, 9, 12 wt%Co Hardmetals. , 2011, , .		0
82	Synthesis of Zeolite A Crystals in the Presence of Crystal Growth Inhibitors by Microwave-Assisted Hydrothermal Technique. , 2011, , .		0
83	Processing of porous alumina substrate for multilayered ceramic filter. Desalination and Water Treatment, 2011, 35, 33-38.	1.0	21
84	Spark Plasma Sintering of Mixed and Milled WC-Co Micro-/Nano-Powders. Advanced Materials Research, 2011, 284-286, 537-543.	0.3	4
85	Transport Across Sub-Nanometer Zeolite Pores for Water Desalination. , 2010, , .		0
86	Development of an AI-based Rapid Manufacturing Advice System. International Journal of Production Research, 2010, 48, 2261-2278.	4.9	26
87	Rapid prototyping and manufacturing for tissue engineering scaffolds. International Journal of Computer Applications in Technology, 2009, 36, 1.	0.3	60
88	Effect of milling temperature on the synthesis and consolidation of nanocomposite WCâ€“10Co powders. International Journal of Refractory Metals and Hard Materials, 2009, 27, 66-73.	1.7	35
89	An approach to develop a rapid manufacturing knowledge-based environment. , 2009, , .		0
90	A dynamic model of simulating stress distribution in the distal femur after total knee replacement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 903-912.	1.0	15

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91	Rapid manufacturing of metal components by laser forming. International Journal of Machine Tools and Manufacture, 2006, 46, 1459-1468.	6.2	602
92	Properties of Titanium Dental Implant Models Made by Laser Processing. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2006, 220, 857-863.	1.1	36
93	Finite Element Simulation of Multipass Welding: Full Three-Dimensional Versus Generalized Plane Strain or Axisymmetric Models. Journal of Strain Analysis for Engineering Design, 2005, 40, 587-597.	1.0	29
94	Selective laser sintering and cladding of single-component metal powders. Rapid Prototyping Journal, 2004, 10, 88-97.	1.6	14
95	Balling processes during selective laser treatment of powders. Rapid Prototyping Journal, 2004, 10, 78-87.	1.6	233
96	Bone osseointegration tests performed on titanium dental root implants made by laser processing. International Journal of Product Development, 2004, 1, 165.	0.2	1
97	<title>Laser sintering of metal powders as a semisolid metallurgical process</title>. , 2004, , .		0
98	FE Predictions of Temperature Distributions in a Multipass Welded Piping Branch Junction. , 2004, , .		1
99	Characterization of Si(111) crystals implanted with Sb+ ions and annealed by rapid thermal processing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 102, 390-397.	1.7	7
100	Microstructure and interface characteristics of B4C, SiC and Al2O3 reinforced Al matrix composites: a comparative study. Journal of Materials Processing Technology, 2003, 142, 738-743.	3.1	568
101	Contact thermal conductivity of a powder bed in selective laser sintering. International Journal of Heat and Mass Transfer, 2003, 46, 1103-1109.	2.5	164
102	Lasers and materials in selective laser sintering. Assembly Automation, 2003, 23, 357-371.	1.0	618
103	Mechanisms of selective laser sintering and heat transfer in Ti powder. Rapid Prototyping Journal, 2003, 9, 314-326.	1.6	168
104	Selective laser sintering of single- and two-component metal powders. Rapid Prototyping Journal, 2003, 9, 68-78.	1.6	56
105	Microstructure and hardness behaviours of Ti-containing Al-Si alloys. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 803-814.	0.7	16
106	Direct Selective Laser Sintering of Hard Metal Powders: Experimental Study and Simulation. International Journal of Advanced Manufacturing Technology, 2002, 19, 351-357.	1.5	215
107	Dental root implants produced by the combined selective laser sintering/melting of titanium powders. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2002, 216, 267-270.	0.7	3
108	Microstructure and hardness behaviours of Ti-containing Al-Si alloys. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 803-814.	0.7	0

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109	Influence of Ti addition on wear properties of Al-Si eutectic alloys. <i>Wear</i> , 2001, 249, 656-662.	1.5	100
110	Absorptance of powder materials suitable for laser sintering. <i>Rapid Prototyping Journal</i> , 2000, 6, 155-161.	1.6	418
111	GP zones and precipitate morphology in aged Al-Mg alloys. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1996, 73, 1733-1740.	0.7	50
112	The influence of intergranular phases on the tribological performance of sialons. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996, 207, 72-86.	2.6	12
113	Toughening of X-sialon with Al ₂ O ₃ platelets. <i>Journal of the European Ceramic Society</i> , 1995, 15, 297-305.	2.8	23
114	Preparation and properties of X-sialon. <i>Journal of Materials Science</i> , 1995, 30, 4584-4590.	1.7	18
115	Different types of discontinuous precipitation in Cu-15 Wt% in alloy. <i>Scripta Metallurgica Et Materialia</i> , 1995, 32, 1453-1458.	1.0	6
116	Study of Grain Boundary Phase in Silicon Nitride Materials by Raman Spectroscopy. <i>Key Engineering Materials</i> , 1994, 89-91, 495-500.	0.4	2
117	Effect of TiC addition on the microstructure and properties of Ti(C,N)-WC-Co-Ni cermet. <i>Journal of Materials Science Letters</i> , 1994, 13, 1530-1532.	0.5	17
118	Toughening of sol-gel derived mullite matrix by Al ₂ O ₃ platelets. <i>Journal of Materials Science Letters</i> , 1994, 13, 1089-1091.	0.5	13
119	Chemical interaction between a sialon cutting tool and iron-based alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994, 187, 177-182.	2.6	31
120	Effect of secondary phase on sialon-steel chemical interaction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994, 183, L19-L21.	2.6	6
121	Metastable phase equilibria in faceted-nonfaceted systems. <i>Scripta Metallurgica Et Materialia</i> , 1994, 30, 1563-1567.	1.0	1
122	Analytical electron microscopy of the core/rim structure in titanium carbonitride cermets. <i>International Journal of Refractory Metals and Hard Materials</i> , 1992, 11, 207-212.	1.7	40
123	Nonequilibrium behavior in the Al-Ge alloy system: Insights into the metastable phase diagram. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1991, 22, 2141-2152.	1.4	11
124	Development and Processing of SiAlON Nano-Ceramics by Spark Plasma Sintering. <i>Advances in Science and Technology</i> , 0, , .	0.2	9
125	Dispersion of Carbon Nanotubes in Alumina Using a Novel Mixing Technique and Spark Plasma Sintering of the Nanocomposites with Improved Fracture Toughness. <i>Advances in Science and Technology</i> , 0, , .	0.2	3