Ahmad Amiri

List of Publications by Citations

100 papers	3,718 citations	34 h-index	57 g-index
103 ext. papers	4,303 ext. citations	5.9 avg, IF	5.81 L-index

#	Paper	IF	Citations
100	A comprehensive review of thermo-physical properties and convective heat transfer to nanofluids. *Energy*, **2015**, 89, 1065-1086	7.9	184
99	Investigation of heat transfer and pressure drop of a counter flow corrugated plate heat exchanger using MWCNT based nanofluids. *International Communications in Heat and Mass Transfer*, **2015**, 66, 172-179	5.8	163
98	Promoting Role of MXene Nanosheets in Biomedical Sciences: Therapeutic and Biosensing Innovations. *Advanced Healthcare Materials*, **2019**, 8, e1801137	10.1	141
97	Enhanced antibacterial activity of amino acids-functionalized multi walled carbon nanotubes by a simple method. *Colloids and Surfaces B: Biointerfaces*, **2012**, 92, 196-202	6	135
96	Study of synthesis, stability and thermo-physical properties of graphene nanoplatelet/platinum hybrid nanofluid. *International Communications in Heat and Mass Transfer*, **2016**, 77, 15-21	5.8	125
95	Stability and thermophysical properties of non-covalently functionalized graphene nanoplatelets nanofluids. *Energy Conversion and Management*, **2016**, 116, 101-111	10.6	121
94	One-pot, efficient functionalization of multi-walled carbon nanotubes with diamines by microwave method. *Applied Surface Science*, **2011**, 257, 10261-10266	6.7	114
93	Performance dependence of thermosyphon on the functionalization approaches: An experimental study on thermo-physical properties of graphene nanoplatelet-based water nanofluids. *Energy Conversion and Management*, **2015**, 92, 322-330	10.6	112
92	Highly Dispersed Multiwalled Carbon Nanotubes Decorated with Ag Nanoparticles in Water and Experimental Investigation of the Thermophysical Properties. *Journal of Physical Chemistry C*, **2012**, 116, 3369-3375	3.8	110
91	A review on liquid-phase exfoliation for scalable production of pure graphene, wrinkled, crumpled and functionalized graphene and challenges. *FlatChem*, **2018**, 8, 40-71	5.1	102
90	Pool boiling heat transfer of CNT/water nanofluids. *Applied Thermal Engineering*, **2014**, 71, 450-459	5.8	94
89	Investigation of Heat-Transfer Characterization of EDA-MWCNT/DI-Water Nanofluid in a Two-Phase Closed Thermosyphon. *Industrial & Engineering Chemistry Research*, **2012**, 51, 1423-1428	3.9	77
88	Experimental investigation of thermo-physical properties, convective heat transfer and pressure drop of functionalized graphene nanoplatelets aqueous nanofluid in a square heated pipe. *Energy Conversion and Management*, **2016**, 114, 38-49	10.6	75
87	Stability and thermophysical properties of water-based nanofluids containing triethanolamine-treated graphene nanoplatelets with different specific surface areas. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 500, 17-31	5.1	74
86	Synthesis of ethylene glycol-treated Graphene Nanoplatelets with one-pot, microwave-assisted functionalization for use as a high performance engine coolant. *Energy Conversion and Management* , **2015**, 101, 767-777	10.6	73
85	Toward improved engine performance with crumpled nitrogen-doped graphene based water–ethylene glycol coolant. *Chemical Engineering Journal*, **2016**, 289, 583-595	14.7	71
84	Efficient method for functionalization of carbon nanotubes by lysine and improved antimicrobial activity and water-dispersion. *Materials Letters*, **2012**, 72, 153-156	3.3	68

83	Porous nitrogen-doped MXene-based electrodes for capacitive deionization. *Energy Storage Materials*, **2020**, 25, 731-739	19.4	67
82	The Effect of Multi-Walled Carbon Nanotube/Water Nanofluid on Thermal Performance of a Two-Phase Closed Thermosyphon. *Experimental Heat Transfer*, **2013**, 26, 26-40	2.4	65
81	Nanofluid based on activated hybrid of biomass carbon/graphene oxide: Synthesis, thermo-physical and electrical properties. *International Communications in Heat and Mass Transfer*, **2016**, 72, 10-15	5.8	62
80	Laminar convective heat transfer of hexylamine-treated MWCNTs-based turbine oil nanofluid. *Energy Conversion and Management*, **2015**, 105, 355-367	10.6	60
79	Toward improved mechanical, tribological, corrosion and in-vitro bioactivity properties of mixed oxide nanotubes on Ti-6Al-7Nb implant using multi-objective PSO. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 69, 1-18	4.1	55
78	Mass production of highly-porous graphene for high-performance supercapacitors. *Scientific Reports*, **2016**, 6, 32686	4.9	54
77	Microbial toxicity of ethanolamines--multiwalled carbon nanotubes. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 1774-81	5.4	53
76	Transformer oil based multi-walled carbon nanotube–hexylamine coolant with optimized electrical, thermal and rheological enhancements. *RSC Advances*, **2015**, 5, 107222-107236	3.7	53
75	Microwave-Assisted Synthesis of Highly-Crumpled, Few-Layered Graphene and Nitrogen-Doped Graphene for Use as High-Performance Electrodes in Capacitive Deionization. *Scientific Reports*, **2015**, 5, 17503	4.9	52
74	Calcium carbonate fouling on double-pipe heat exchanger with different heat exchanging surfaces. *Powder Technology*, **2017**, 315, 216-226	5.2	49
73	Improvement in Heat Transfer of a Two-Phased Closed Thermosyphon Using Silver-Decorated MWCNT/Water. *Journal of Dispersion Science and Technology*, **2014**, 35, 1086-1096	1.5	48
72	Experimental Analysis of Thermal Performance in a Two-Phase Closed Thermosiphon Using Graphene/Water Nanofluid. *Industrial & Engineering Chemistry Research*, **2013**, 52, 10015-10021	3.9	47
71	Synthesis of aspartic acid-treated multi-walled carbon nanotubes based water coolant and experimental investigation of thermal and hydrodynamic properties in circular tube. *Energy Conversion and Management*, **2015**, 105, 1366-1376	10.6	45
70	Influence of different amino acid groups on the free radical scavenging capability of multi walled carbon nanotubes. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 2219-28	5.4	44
69	New generation of drug delivery systems based on ginsenoside Rh2-, Lysine- and Arginine-treated highly porous graphene for improving anticancer activity. *Scientific Reports*, **2018**, 8, 586	4.9	43
68	Experimental and numerical investigation of thermophysical properties, heat transfer and pressure drop of covalent and noncovalent functionalized graphene nanoplatelet-based water nanofluids in an annular heat exchanger. *International Communications in Heat and Mass Transfer*, **2015**, 68, 267-275	5.8	42
67	Synthesis of polyethylene glycol-functionalized multi-walled carbon nanotubes with a microwave-assisted approach for improved heat dissipation. *RSC Advances*, **2015**, 5, 35425-35434	3.7	41
66	A novel path towards synthesis of nitrogen-rich porous carbon nanofibers for high performance supercapacitors. *Chemical Engineering Journal*, **2020**, 399, 125788	14.7	33

65	In vitro and in vivo study of hazardous effects of Ag nanoparticles and Arginine-treated multi walled carbon nanotubes on blood cells: application in hemodialysis membranes. *Journal of Biomedical Materials Research - Part A*, **2015**, 103, 2959-65	5.4	33
64	Facile, environmentally friendly, cost effective and scalable production of few-layered graphene. *Chemical Engineering Journal*, **2017**, 326, 1105-1115	14.7	32
63	Synthesis of water-soluble Fe-decorated multi-walled carbon nanotubes: A study on thermo-physical properties of ferromagnetic nanofluid. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 60, 547-554	5.3	31
62	Heat transfer performance of two-phase closed thermosyphon with oxidized CNT/water nanofluids. *Heat and Mass Transfer*, **2016**, 52, 85-93	2.2	30
61	Experimental investigation of thermal properties of cutting fluid using soluble oil-based TiO2 nanofluid. *Powder Technology*, **2017**, 310, 213-220	5.2	30
60	Transformer oils-based graphene quantum dots nanofluid as a new generation of highly conductive and stable coolant. *International Communications in Heat and Mass Transfer*, **2017**, 83, 40-47	5.8	30
59	Thermophysical and rheological properties of water-based graphene quantum dots nanofluids. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 76, 132-140	5.3	28
58	Thermal Performance Prediction of Two-Phase Closed Thermosyphon Using Adaptive Neuro-Fuzzy Inference System. *Heat Transfer Engineering*, **2015**, 36, 315-324	1.7	27
57	Optimization of the Thermal Efficiency of a Two-Phase Closed Thermosyphon using Active Learning on the Human Algorithm Interaction. *Numerical Heat Transfer; Part A: Applications*, **2014**, 66, 947-962	2.3	27
56	Promising Trade-Offs Between Energy Storage and Load Bearing in Carbon Nanofibers as Structural Energy Storage Devices. *Advanced Functional Materials*, **2019**, 29, 1901425	15.6	26
55	Investigation of the thermophysical properties and stability performance of non-covalently functionalized graphene nanoplatelets with Pluronic P-123 in different solvents. *Materials Chemistry and Physics*, **2018**, 206, 94-102	4.4	26
54	Fouling mitigation on heat exchanger surfaces by EDTA-treated MWCNT-based water nanofluids. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 60, 445-452	5.3	25
53	Prediction of temperature performance of a two-phase closed thermosyphon using Artificial Neural Network. *Heat and Mass Transfer*, **2013**, 49, 65-73	2.2	25
52	Functionalization and exfoliation of graphite into mono layer graphene for improved heat dissipation. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 71, 480-493	5.3	24
51	Heat transfer enhancement of water-based highly crumpled few-layer graphene nanofluids. *RSC Advances*, **2016**, 6, 105508-105527	3.7	24
50	Microwave-assisted direct coupling of graphene nanoplatelets with poly ethylene glycol and 4-phenylazophenol molecules for preparing stable-colloidal system. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2015**, 487, 131-141	5.1	23
49	Retardation of heat exchanger surfaces mineral fouling by water-based diethylenetriamine pentaacetate-treated CNT nanofluids. *Applied Thermal Engineering*, **2017**, 110, 495-503	5.8	23
48	Studying of antifungal activity of functionalized multiwalled carbon nanotubes by microwave-assisted technique. *Surface and Interface Analysis*, **2013**, 45, 751-755	1.5	23

47	Experimental investigation of the propylene glycol-treated graphene nanoplatelets for the enhancement of closed conduit turbulent convective heat transfer. *International Communications in Heat and Mass Transfer*, **2016**, 73, 43-53	5.8	22
46	Toward improved heat transfer performance of annular heat exchangers with water/ethylene glycol-based nanofluids containing graphene nanoplatelets. *Journal of Thermal Analysis and Calorimetry*, **2016**, 126, 1427-1436	4.1	22
45	Cadmium ion sorption from aqueous solutions by high surface area ethylenediaminetetraacetic acid- and diethylene triamine pentaacetic acid-treated carbon nanotubes. *RSC Advances*, **2015**, 5, 71144-71152	3.7	21
44	Backward-facing step heat transfer of the turbulent regime for functionalized graphene nanoplatelets based water□ethylene glycol nanofluids. *International Journal of Heat and Mass Transfer*, **2016**, 97, 538-546	4.9	21
43	Sweet-MXene hydrogel with mixed-dimensional components for biomedical applications. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 101, 103440	4.1	20
42	Rapid, one-pot synthesis of highly-soluble carbon nanotubes functionalized by L-arginine. *Russian Journal of Physical Chemistry A*, **2013**, 87, 649-653	0.7	19
41	Experimental investigation on the use of highly charged nanoparticles to improve the stability of weakly charged colloidal system. *Journal of Colloid and Interface Science*, **2015**, 454, 245-55	9.3	18
40	All-solid-state supercapacitors based on yarns of Co3O4-anchored porous carbon nanofibers. *Chemical Engineering Journal*, **2021**, 409, 128124	14.7	18
39	Water-based graphene quantum dots dispersion as a high-performance long-term stable nanofluid for two-phased closed thermosyphons. *International Communications in Heat and Mass Transfer*, **2018**, 95, 147-154	5.8	18
38	Synthesis, stability, and thermophysical properties of aqueous colloidal dispersions of multi-walled carbon nanotubes treated with beta-alanine. *International Communications in Heat and Mass Transfer*, **2017**, 89, 7-17	5.8	16
37	Bioactive and trackable MXene quantum dots for subcellular nanomedicine applications. *Materials and Design*, **2020**, 196, 109091	8.1	16
36	Experimental investigation of thermophysical properties and heat transfer rate of covalently functionalized MWCNT in an annular heat exchanger. *International Communications in Heat and Mass Transfer*, **2016**, 75, 67-77	5.8	16
35	Experimental investigation on rheological, momentum and heat transfer characteristics of flowing fiber crop suspensions. *International Communications in Heat and Mass Transfer*, **2017**, 80, 60-69	5.8	15
34	Simultaneous enhanced antibacterial and osteoblast cytocompatibility performance of Ti6Al7Nb implant by nano-silver/graphene oxide decorated mixed oxide nanotube composite. *Surface and Coatings Technology*, **2019**, 360, 181-195	4.4	15
33	Investigation on the Use of Graphene Oxide as Novel Surfactant for Stabilizing Carbon Based Materials. *Journal of Dispersion Science and Technology*, **2016**, 37, 1395-1407	1.5	14
32	Experimental investigation of heat transfer performance and frictional loss of functionalized GNP-based water coolant in a closed conduit flow. *RSC Advances*, **2016**, 6, 4552-4563	3.7	14
31	Performance evaluation of latent heat energy storage in horizontal shell-and-finned tube for solar application. *Journal of Thermal Analysis and Calorimetry*, **2016**, 123, 1371-1381	4.1	14
30	Development of Fluorine-Free Tantalum Carbide MXene Hybrid Structure as a Biocompatible Material for Supercapacitor Electrodes.. *Advanced Functional Materials*, **2021**, 31, 2100015	15.6	14

29	Comprehensive heat transfer correlation for water/ethylene glycol-based graphene (nitrogen-doped graphene) nanofluids derived by artificial neural network (ANN) and adaptive neuro-fuzzy inference system (ANFIS). *Heat and Mass Transfer*, **2017**, 53, 3073-3083	2.2	13
28	Evaluation on stability and thermophysical performances of covalently functionalized graphene nanoplatelets with xylitol and citric acid. *Materials Chemistry and Physics*, **2018**, 212, 363-371	4.4	13
27	Heat transfer performance of water-based tetrahydrofurfuryl polyethylene glycol-treated graphene nanoplatelet nanofluids. *RSC Advances*, **2016**, 6, 65654-65669	3.7	13
26	The Specific Heat Capacity, Effective Thermal Conductivity, Density, and Viscosity of Coolants Containing Carboxylic Acid Functionalized Multi-Walled Carbon Nanotubes. *Journal of Dispersion Science and Technology*, **2016**, 37, 949-955	1.5	12
25	Effect of magnetic field on thermo-physical and hydrodynamic properties of different metals-decorated multi-walled carbon nanotubes-based water coolants in a closed conduit. *Journal of Thermal Analysis and Calorimetry*, **2018**, 131, 1089-1106	4.1	11
24	Enhancements in the tribological performance of environmentally friendly water-based drilling fluids using additives. *Applied Surface Science*, **2020**, 527, 146822	6.7	8
23	Colloidal stability measurements of graphene nanoplatelets covalently functionalized with tetrahydrofurfuryl polyethylene glycol in different organic solvents. *Current Applied Physics*, **2018**, 18, 209-219	2.6	8
22	Hydrodynamic and thermal performance prediction of functionalized MWNT-based water nanofluids under the laminar flow regime using the adaptive neuro-fuzzy inference system. *Numerical Heat Transfer; Part A: Applications*, **2016**, 70, 103-116	2.3	8
21	Evaluation of toxicity of functionalized graphene oxide with ginsenoside Rh2, lysine and arginine on blood cancer cells (K562), red blood cells, blood coagulation and cardiovascular tissue: In vitro and in vivo studies. *Journal of the Taiwan Institute of Chemical Engineers*, **2018**, 93, 70-78	5.3	8
20	Heat transfer performance of closed conduit turbulent flow: Constant mean velocity and temperature do matter!. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 64, 285-298	5.3	7
19	Antibacterial biocompatible arginine functionalized mono-layer graphene: No more risk of silver toxicity. *Journal of Hazardous Materials*, **2018**, 360, 132-140	12.8	7
18	Not-yet-designed multilayer Nb/HA/MWCNT-Au/Se/AuNPs and NbO2/HA/GO/Se biocomposites coated Ti6Al7Nb implant. *Materials Today Communications*, **2018**, 15, 294-308	2.5	6
17	Recent advances in electrochemically-efficient materials for zinc-ion hybrid supercapacitors. *Renewable and Sustainable Energy Reviews*, **2021**, 148, 111288	16.2	6
16	Microbial toxicity of different functional groups-treated carbon nanotubes **2016**, 33-70		5
15	Determination of the Heat Transfer Coefficient of Metal Oxide Based Water Nanofluids in a Laminar Flow Regime Using an Adaptive Neuro-Fuzzy Inference System. *Journal of Dispersion Science and Technology*, **2016**, 37, 1277-1286	1.5	5
14	Exploration of the environmentally benign and highly effective approach for improving carbon nanotube homogeneity in aqueous system. *Journal of Thermal Analysis and Calorimetry*, **2016**, 124, 815-825	4.1	5
13	High temperature nanomechanical and nanotribological behavior of sub-5 nm nitrogen-doped carbon overcoat films. *Applied Surface Science*, **2021**, 535, 147662	6.7	5
12	Facile hydrothermal method for synthesizing nitrogen-doped graphene nanoplatelets using aqueous ammonia: dispersion, stability in solvents and thermophysical performances. *Materials Research Express*, **2018**, 5, 035042	1.7	4

11	Numerical simulation of heat transfer to separation tio2/water nanofluids flow in an asymmetric abrupt expansion. *EPJ Web of Conferences*, **2015**, 92, 02056	0.3	4
10	Graphene-Based Aqueous Drilling Muds as Efficient, Durable, and Environmentally Friendly Alternatives for Oil-Based Muds. *ACS Applied Nano Materials*, **2021**, 4, 1243-1251	5.6	4
9	Large-scale hybrid silver nanowall-reduced graphene oxide biofilm: A novel morphology by facile electrochemical deposition. *Surface and Coatings Technology*, **2018**, 347, 297-303	4.4	3
8	Anodic pine cone-like WO3/MoO3/TiO2 film with well-defined nanoflakes on Ti6Al7Nb implant. *Journal of the Australian Ceramic Society*, **2018**, 54, 129-137	1.5	3
7	INCREASE IN CONVECTIVE HEAT TRANSFER OVER A BACKWARD-FACING STEP IMMERSED IN A WATER-BASED TiO2 NANOFLUID. *Heat Transfer Research*, **2018**, 49, 1419-1429	3.9	3
6	Effect of Carbon Configuration on Mechanical, Friction and Wear Behavior of Nitrogen-Doped Diamond-Like Carbon Films for Magnetic Storage Applications. *Tribology Letters*, **2021**, 69, 1	2.8	2
5	Conversion of 2D MXene to Multi-Low-Dimensional GerMXene Superlattice Heterostructure.. *Advanced Functional Materials*, **2022**, 32, 2108495	15.6	1
4	Multifunctional quasi-solid-state zinc-ion hybrid supercapacitors beyond state-of-the-art structural energy storage. *Materials Today Physics*, **2022**, 24, 100654	8	1
3	Experimental Investigation of Fatigue Behavior of Carbon Fiber Composites Using Fully Reversed Four Point Bending Test. *Conference Proceedings of the Society for Experimental Mechanics*, **2013**, 131-137	9.3	0
2	Zinc-ion hybrid supercapacitors with ultrahigh areal and gravimetric energy densities and long cycling life. *Journal of Energy Chemistry*, **2022**, 70, 480-491	12	0
1	Biocompatible Electrodes: Development of Fluorine-Free Tantalum Carbide MXene Hybrid Structure as a Biocompatible Material for Supercapacitor Electrodes (Adv. Funct. Mater. 30/2021). *Advanced Functional Materials*, **2021**, 31, 2170219	15.6	