Mohamed S El-Genk

List of Publications by Year
in descending order

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244	5,616	81900	118850
papers	citations	39 h-index	62 g-index

245	245	245	2651
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of refractory metal alloys and mechanically alloyed-oxide dispersion strengthened steels for space nuclear power systems. Journal of Nuclear Materials, 2005, 340, 93-112.	2.7	314
2	Enhanced nucleate boiling on copper micro-porous surfaces. International Journal of Multiphase Flow, 2010, 36, 780-792.	3.4	163
3	â€œSAIRSâ€•â€” Scalable Amtec Integrated Reactor space power System. Progress in Nuclear Energy, 2004, 45, 25-69.	2.9	134
4	Heat transfer of an impinging jet on a flat surface. International Journal of Heat and Mass Transfer, 1994, 37, 1915-1923.	4.8	115
5	High efficiency segmented thermoelectric unicouple for operation between 973 and 300 K. Energy Conversion and Management, 2003, 44, 1069-1088.	9.2	109
6	Efficient segmented thermoelectric unicouples for space power applications. Energy Conversion and Management, 2003, 44, 1755-1772.	9.2	109
7	Properties of noble gases and binary mixtures for closed Brayton Cycle applications. Energy Conversion and Management, 2008, 49, 469-492.	9.2	109
8	Experimental studies of critical heat flux for low flow of water in vertical annuli at near atmospheric pressure. International Journal of Heat and Mass Transfer, 1988, 31, 2291-2304.	4.8	103
9	Minimum thickness of a flowing down liquid film on a vertical surface. International Journal of Heat and Mass Transfer, 2001, 44, 2809-2825.	4.8	103
10	Noble gas binary mixtures for gas-cooled reactor power plants. Nuclear Engineering and Design, 2008, 238, 1353-1372.	1.7	103
11	Tests results and performance comparisons of coated and un-coated skutterudite based segmented unicouples. Energy Conversion and Management, 2006, 47, 174-200.	9.2	102
12	Saturation boiling of HFE-7100 from a copper surface, simulating a microelectronic chip. International Journal of Heat and Mass Transfer, 2003, 46, 1841-1854.	4.8	101
13	Space nuclear reactor power system concepts with static and dynamic energy conversion. Energy Conversion and Management, 2008, 49, 402-411.	9.2	100
14	Transient boiling from inclined and downward-facing surfaces in a saturated pool. International Journal of Refrigeration, 1993, 16, 414-422.	3.4	83
15	An experimental study of saturated pool boiling from downward facing and inclined surfaces. International Journal of Heat and Mass Transfer, 1992, 35, 2109-2117.	4.8	76
16	Deployment history and design considerations for space reactor power systems. Acta Astronautica, 2009, 64, 833-849.	3.2	75
17	Nucleate boiling of FC-72 and HFE-7100 on porous graphite at different orientations and liquid subcooling. Energy Conversion and Management, 2008, 49, 733-750.	9.2	74
18	Thermal conductivity correlation for uranium nitride fuel between 10 and 1923 K. Journal of Nuclear Materials, 1988, 151, 318-326.	2.7	73

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19	Enhanced boiling of HFE-7100 dielectric liquid on porous graphite. Energy Conversion and Management, 2005, 46, 2455-2481.	9.2	73
20	Enhanced saturation and subcooled boiling of FC-72 dielectric liquid. International Journal of Heat and Mass Transfer, 2005, 48, 3736-3752.	4.8	69
21	On the use of noble gases and binary mixtures as reactor coolants and CBC working fluids. Energy Conversion and Management, 2008, 49, 1882-1891.	9.2	63
22	A vapor flow model for analysis of liquid-metal heat pipe startup from a frozen state. International Journal of Heat and Mass Transfer, 1996, 39, 3767-3780.	4.8	61
23	Immersion cooling nucleate boiling of high power computer chips. Energy Conversion and Management, 2012, 53, 205-218.	9.2	61
24	Determination of operation envelopes for closed, two-phase thermosyphons. International Journal of Heat and Mass Transfer, 1999, 42, 889-903.	4.8	60
25	On the Predictions of Critical Heat Flux in Rod Bundles at Low Flow and Low Pressure Conditions. Heat Transfer Engineering, 1991, 12, 48-57.	1.9	55
26	On colloidal particle sorption onto a stagnant airâ€“water interface. Advances in Colloid and Interface Science, 1998, 78, 237-266.	14.7	54
27	Brayton rotating units for space reactor power systems. Energy Conversion and Management, 2009, 50, 2210-2232.	9.2	54
28	Noble-Gas Binary Mixtures for Closed-Brayton-Cycle Space Reactor Power Systems. Journal of Propulsion and Power, 2007, 23, 863-873.	2.2	51
29	Axial flow, multi-stage turbine and compressor models. Energy Conversion and Management, 2010, 51, 16-29.	9.2	51
30	Development and validation of a model for the chemical kinetics of graphite oxidation. Journal of Nuclear Materials, 2011, 411, 193-207.	2.7	51
31	Comparison of oxidation model predictions with gasification data of IG-110, IG-430 and NBG-25 nuclear graphite. Journal of Nuclear Materials, 2012, 420, 141-158.	2.7	51
32	Startup of a horizontal lithiumâ€“molybdenum heat pipe from a frozen state. International Journal of Heat and Mass Transfer, 2003, 46, 671-685.	4.8	49
33	Tests results of skutterudite based thermoelectric unicouples. Energy Conversion and Management, 2007, 48, 555-567.	9.2	49
34	Heat transfer correlations for small, uniformly heated liquid pools. International Journal of Heat and Mass Transfer, 1998, 41, 261-274.	4.8	47
35	A Review and Correlations for Convection Heat Transfer and Pressure Losses in Toroidal and Helically Coiled Tubes. Heat Transfer Engineering, 2017, 38, 447-474.	1.9	47
36	An experimental investigation of the transient response of a water heat pipe. International Journal of Heat and Mass Transfer, 1993, 36, 3823-3830.	4.8	45

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37	Submersion-Subcritical Safe Space (S4) reactor. Nuclear Engineering and Design, 2006, 236, 1759-1777.	1.7	45
38	Uranium nitride fuel swelling correlation. Journal of Nuclear Materials, 1990, 170, 169-177.	2.7	44
39	Sorption of Hydrophobic, Negatively Charged Microspheres onto a Stagnant Air/Water Interface. Journal of Colloid and Interface Science, 1998, 202, 417-429.	9.4	42
40	Conceptual Design of HP-STMCs Space Reactor Power System for 110 kWe. AIP Conference Proceedings, 2004, , .	0.4	41
41	AMTEC/TE static converters for high energy utilization, small nuclear power plants. Energy Conversion and Management, 2004, 45, 511-535.	9.2	41
42	Experimental studies of forced, combined and natural convection of water in vertical nine-rod bundles with a square lattice. International Journal of Heat and Mass Transfer, 1993, 36, 2359-2374.	4.8	40
43	Performance analysis of cascaded thermoelectric converters for advanced radioisotope power systems. Energy Conversion and Management, 2005, 46, 1083-1105.	9.2	39
44	Submersion criticality safety of fast spectrum space reactors: Potential spectral shift absorbers. Nuclear Engineering and Design, 2006, 236, 238-254.	1.7	38
45	Effects of inclination angle and liquid subcooling on nucleate boiling on dimpled copper surfaces. International Journal of Heat and Mass Transfer, 2016, 95, 650-661.	4.8	38
46	Effect of Surface Orientation on Nucleate Boiling of FC-72 on Porous Graphite. Journal of Heat Transfer, 2006, 128, 1159-1175.	2.1	36
47	CFD analyses and correlation of pressure losses on the shell-side of concentric, helically-coiled tubes heat exchangers. Nuclear Engineering and Design, 2016, 305, 531-546.	1.7	36
48	Effects of metallic coatings on the performance of skutterudite-based segmented unicouples. Energy Conversion and Management, 2007, 48, 1383-1400.	9.2	34
49	Heat transfer experiments for low flow of water in rod bundles. International Journal of Heat and Mass Transfer, 1989, 32, 1321-1336.	4.8	31
50	Flooding limit in closed, two-phase flow thermosyphons. International Journal of Heat and Mass Transfer, 1997, 40, 2147-2164.	4.8	31
51	Enhancement of Saturation Boiling of PF-5060 on Microporous Copper Dendrite Surfaces. Journal of Heat Transfer, 2010, 132, .	2.1	31
52	Nucleate Boiling Enhancements on Porous Graphite and Microporous and Macroâ€“Finned Copper Surfaces. Heat Transfer Engineering, 2012, 33, 175-204.	1.9	31
53	On force fields for molecular dynamics simulations of crystalline silica. Computational Materials Science, 2015, 107, 88-101.	3.0	31
54	A review of cesium thermionic converters with developed emitter surfaces. Energy Conversion and Management, 1997, 38, 533-549.	9.2	30

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55	An Investigation of the Breakup of an Evaporating Liquid Film, Falling Down a Vertical, Uniformly Heated Wall. Journal of Heat Transfer, 2002, 124, 39-50.	2.1	30
56	Dynamic Simulation of a Space Reactor System with Closed Brayton Cycle Loops. Journal of Propulsion and Power, 2010, 26, 394-406.	2.2	30
57	USES OF LIQUID-METAL AND WATER HEAT PIPES IN SPACE REACTOR POWER SYSTEMS. Frontiers in Heat Pipes, 2011, 2, .	0.9	30
58	High-Energy-Utilization, Dual-Mode System Concept for Mars Missions. Journal of Propulsion and Power, 2001, 17, 340-346.	2.2	29
59	Liquid Metal Loop and Heat Pipe Radiator for Space Reactor Power Systems. Journal of Propulsion and Power, 2006, 22, 1117-1134.	2.2	29
60	Spreaders for immersion nucleate boiling cooling of a computer chip with a central hot spot. Energy Conversion and Management, 2012, 53, 259-267.	9.2	29
61	Performance analyses of VHTR plants with direct and indirect closed Brayton cycles and different working fluids. Progress in Nuclear Energy, 2009, 51, 556-572.	2.9	28
62	DynMo-TE: Dynamic simulation model of space reactor power system with thermoelectric converters. Nuclear Engineering and Design, 2006, 236, 2501-2529.	1.7	27
63	Liquid microlayer evaporation during nucleate boiling on the surface of a flat composite wall. International Journal of Heat and Mass Transfer, 1994, 37, 1641-1655.	4.8	26
64	Development and Comparison of a TOPAZ-II System Model with Experimental Data. Nuclear Technology, 1994, 108, 157-170.	1.2	24
65	Properties of Helium, Nitrogen and He-N2 Binary Gas Mixtures. Journal of Thermophysics and Heat Transfer, 2008, 22, 442-456.	1.6	24
66	Effect of inclination on saturation boiling of PF-5060 dielectric liquid on 80- and 137-Î¼m thick copper micro-porous surfaces. International Journal of Thermal Sciences, 2012, 53, 42-48.	4.9	24
67	Saturation Nucleate Boiling and Correlations for PF-5060 Dielectric Liquid on Inclined Rough Copper Surfaces. Journal of Heat Transfer, 2014, 136, .	2.1	24
68	Transient Analysis and Startup Simulation of a Thermionic Space Nuclear Reactor System. Nuclear Technology, 1994, 105, 70-86.	1.2	24
69	Performance analysis of Pluto/Express, multitube AMTEC cells. Energy Conversion and Management, 1999, 40, 139-173.	9.2	23
70	Transient and Load-Following Characteristics of a Fully Integrated Single-Cell Thermionic Fuel Element. Nuclear Technology, 1993, 102, 145-166.	1.2	22
71	Transient pool boiling from downward-facing curved surfaces. International Journal of Heat and Mass Transfer, 1995, 38, 2209-2224.	4.8	22
72	Space reactor power systems with no single point failures. Nuclear Engineering and Design, 2008, 238, 2245-2255.	1.7	22

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73	Friction Numbers and Viscous Dissipation Heating for Laminar Flows of Water in Microtubes. Journal of Heat Transfer, 2008, 130, .	2.1	22
74	Buoyancy induced instability of laminar flows in vertical annuliâ€"I. Flow visualization and heat transfer experiments. International Journal of Heat and Mass Transfer, 1990, 33, 2145-2159.	4.8	21
75	TRANSIENT ANALYSIS OF THE START-UP OF A WATER HEAT PIPE FROM A FROZEN STATE. Numerical Heat Transfer; Part A: Applications, 1995, 28, 461-486.	2.1	21
76	Performance comparison of potassium and sodium vapor anode, multi-tube AMTEC converters. Energy Conversion and Management, 2002, 43, 1931-1951.	9.2	21
77	Thermal-hydraulic and neutronic analyses of the submersion-subcritical, safe space (S4) reactor. Nuclear Engineering and Design, 2009, 239, 2809-2819.	1.7	21
78	Saturation boiling of PF-5060 on rough Cu surfaces: Bubbles transient growth, departure diameter and detachment frequency. International Journal of Heat and Mass Transfer, 2015, 91, 363-373.	4.8	21
79	Evolution of SP-100 System Designs. , 1994, , .		20
80	Thermalâ€"hydraulics analyses for 1/6 prismatic VHTR core and fuel element with and without bypass flow. Energy Conversion and Management, 2013, 67, 325-341.	9.2	20
81	Etching of UO2 in NF3 RF plasma glow discharge. Journal of Nuclear Materials, 2000, 277, 315-324.	2.7	19
82	Sectored Compact Space Reactor (SCoRe) concepts with a supplementary lunar regolith reflector. Progress in Nuclear Energy, 2009, 51, 93-108.	2.9	19
83	Long operation life reactor for lunar surface power. Nuclear Engineering and Design, 2011, 241, 2339-2352.	1.7	19
84	Some improvements to the solution of Stefan-like problems. International Journal of Heat and Mass Transfer, 1979, 22, 167-170.	4.8	18
85	A performance comparison of SiGe and skutterudite based segmented thermoelectric devices. AIP Conference Proceedings, 2002, , .	0.4	18
86	A walk-away safe, Very-Small, Long-LIfe, Modular (VSLLIM) reactor for portable and stationary power. Annals of Nuclear Energy, 2019, 129, 181-198.	1.8	18
87	Design optimization and integration of nickel/Haynes-25 AMTEC cells into radioisotope power systems. Energy Conversion and Management, 2000, 41, 1703-1728.	9.2	17
88	An Integrated Model of the TOPAZ-II Electromagnetic Pump. Nuclear Technology, 1994, 108, 171-180.	1.2	16
89	Review of Refractory Materials for Alkali Metal Thermal-to-Electric Conversion Cells. Journal of Propulsion and Power, 2001, 17, 547-556.	2.2	16
90	Numerical analysis of laminar flow in micro-tubes with a slip boundary. Energy Conversion and Management, 2009, 50, 1481-1490.	9.2	16

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91	Probability-based threshold displacement energies for oxygen and silicon atoms in Î±-quartz silica. Computational Materials Science, 2016, 117, 164-171.	3.0	16
92	Thermally anisotropic composite heat spreaders for enhanced thermal management of high-performance microprocessors. International Journal of Thermal Sciences, 2016, 100, 213-228.	4.9	16
93	Forced and combined convection of water in a vertical seven-rod bundle with P/D = 1.38. International Journal of Heat and Mass Transfer, 1990, 33, 1289-1297.	4.8	15
94	Automated Video Microscopic Imaging and Data Acquisition System for Colloid Deposition Measurements. Journal of Colloid and Interface Science, 2002, 246, 241-258.	9.4	15
95	Performance Analysis of Potassium Heat Pipes Radiator for HP-STMCs Space Reactor Power System. AIP Conference Proceedings, 2004, , .	0.4	15
96	Thermal and performance analyses of efficient radioisotope power systems. Energy Conversion and Management, 2006, 47, 2290-2307.	9.2	15
97	Composite Spreader for Cooling Computer Chip With Non-Uniform Heat Dissipation. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 165-172.	1.3	15
98	Reactivity control options of space nuclear reactors. Progress in Nuclear Energy, 2009, 51, 526-542.	2.9	15
99	Neutronics and thermalâ€“hydraulics analysis of a liquid metal fast reactor for expandable lunar surface power. Annals of Nuclear Energy, 2012, 41, 48-60.	1.8	15
100	Saturation Boiling Critical Heat Flux of PF-5060 Dielectric Liquid on Microporous Copper Surfaces. Journal of Heat Transfer, 2015, 137, .	2.1	15
101	Nusselt number and development length correlations for laminar flows of water and air in microchannels. International Journal of Heat and Mass Transfer, 2019, 133, 277-294.	4.8	15
102	Two-Dimensional Steady-State and Transient Analyses of Single-Cell Thermionic Fuel Elements. Nuclear Technology, 1994, 108, 112-125.	1.2	14
103	Numerical investigation of potential elimination of â€˜hot streakingâ€™ and stratification in the VHTR lower plenum using helicoid inserts. Nuclear Engineering and Design, 2010, 240, 995-1004.	1.7	14
104	Numerical Simulation and Turbulent Convection Heat Transfer Correlation for Coolant Channels in a Very-High-Temperature Reactor. Heat Transfer Engineering, 2013, 34, 1-14.	1.9	14
105	Chemical kinetics parameters and model validation for the gasification of PCEA nuclear graphite. Journal of Nuclear Materials, 2014, 444, 112-128.	2.7	14
106	Bond-order reactive force fields for molecular dynamics simulations of crystalline silica. Computational Materials Science, 2016, 111, 269-276.	3.0	14
107	A review of experimental data and heat transfer correlations for parallel flow of alkali liquid metals and lead-bismuth eutectic in bundles. Nuclear Engineering and Design, 2017, 317, 199-219.	1.7	14
108	Estimates of helium gas release in 238PuO2 fuel particles for radioisotope heat sources and heater units. Journal of Nuclear Materials, 2000, 280, 1-17.	2.7	13

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109	Performance analyses of an Nbâ€“1Zr/C-103 vapor anode multi-tube alkali-metal thermal-to-electric conversion cell. Energy Conversion and Management, 2001, 42, 721-739.	9.2	13
110	An experimental investigation of the performance of a thermionic converter with planar molybdenum electrodes for low temperature applications. Energy Conversion and Management, 2002, 43, 911-936.	9.2	13
111	Validation of gasification model for NBG-18 nuclear graphite. Nuclear Engineering and Design, 2012, 250, 142-155.	1.7	13
112	Convection heat transfer of NaK-78 liquid metal in a circular tube and a tri-lobe channel. International Journal of Heat and Mass Transfer, 2015, 86, 234-243.	4.8	13
113	SLIMM-Scalable LIquid Metal cooled small Modular Reactor: Preliminary design and performance analyses. Progress in Nuclear Energy, 2015, 85, 56-70.	2.9	13
114	Saturation Boiling of HFE-7100 Dielectric Liquid on Copper Surfaces with Corner Pins at Different Inclinations. Journal of Enhanced Heat Transfer, 2009, 16, 103-122.	1.1	13
115	On the thermal stability of a frozen crust in forced flow on an insulated finite wall. International Journal of Heat and Mass Transfer, 1979, 22, 1719-1723.	4.8	12
116	Study of the SP-100 radiator heat pipes response to external thermalexposure. Journal of Propulsion and Power, 1990, 6, 69-77.	2.2	12
117	Hydrogen corrosion considerations of carbide fuels for nuclear thermal propulsion applications. Journal of Propulsion and Power, 1995, 11, 1338-1348.	2.2	12
118	Radiation/conduction model for multitube AMTEC cells. AIP Conference Proceedings, 1998, , .	0.4	12
119	Sodium Vapor Pressure Losses in a Multitube, Alkali-Metal Thermal-to-Electric Converter. Journal of Thermophysics and Heat Transfer, 1999, 13, 117-125.	1.6	12
120	Efficient spreaders for cooling high-power computer chips. Applied Thermal Engineering, 2007, 27, 1072-1088.	6.0	12
121	Point defects production and energy thresholds for displacements in crystalline and amorphous SiC. Computational Materials Science, 2018, 151, 73-83.	3.0	12
122	Thermal conductivity of silicon using reverse non-equilibrium molecular dynamics. Journal of Applied Physics, 2018, 123, .	2.5	12
123	Heat Transfer Experiments and Correlations for Low-Reynolds-Number Flows of Water in Vertical Annuli. Heat Transfer Engineering, 1989, 10, 44-57.	1.9	11
124	Forced and Combined Convection of Water in Rod Bundles. Heat Transfer Engineering, 1990, 11, 32-43.	1.9	11
125	Model Reference Adaptive Control with Selective State Variable Weighting Applied to a Space Nuclear Power System. Nuclear Science and Engineering, 1991, 109, 171-187.	1.1	11
126	Modeling of Remote Condensing AMTEC Cells. , 1994, , .		11

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127	Thermal conductivity measurements of alumina powders and molded Min-K in vacuum. Energy Conversion and Management, 2001, 42, 599-612.	9.2	11
128	High Temperature Water Heat Pipes Radiator for a Brayton Space Reactor Power System. AIP Conference Proceedings, 2006, , .	0.4	11
129	Dose estimates in a lunar shelter with regolith shielding. Acta Astronautica, 2009, 64, 697-713.	3.2	11
130	Bubbles Transient Growth in Saturation Boiling of PF-5060 Dielectric Liquid on Dimpled Cu Surfaces. Journal of Thermal Science and Engineering Applications, 2016, 8, .	1.5	11
131	Directional dependence of the threshold displacement energies in metal oxides. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 085009.	2.0	11
132	Pool Boiling in Saturated and Subcooled FC-72 Dielectric Fluid From a Porous Graphite Surface. , 2004, , .		11
133	Reliability and vulnerability studies of the SP-100 dual-loop thermoelectric-electromagnetic pump. Journal of Propulsion and Power, 1990, 6, 305-314.	2.2	10
134	S-PRIME/TI-SNPS Conceptual Design Summary. , 1994, , .		10
135	Experimental investigation of the ruthenium-uranium and rhenium-uranium binary systems. Journal of Nuclear Materials, 1994, 217, 304-321.	2.7	10
136	Thermal-hydraulic analysis of the pellet bed reactor for nuclear thermal propulsion. Nuclear Engineering and Design, 1994, 149, 387-400.	1.7	10
137	Options for enhanced performance of pellet bed reactor bimodal systems. AIP Conference Proceedings, 1995, , .	0.4	10
138	Test Results of Ya-21u Thermionic Space Power System. Nuclear Technology, 1997, 117, 1-14.	1.2	10
139	AMTEC Performance and Evaluation Analysis Model (APEAM): Comparison with test results of PX-4C, PX-5A, and PX-3A cells. AIP Conference Proceedings, 1998, , .	0.4	10
140	Performance comparison of thermionic converters with smooth and macro-grooved electrodes. Energy Conversion and Management, 1999, 40, 319-334.	9.2	10
141	Analyses of static energy conversion systems for small nuclear power plants. Progress in Nuclear Energy, 2003, 42, 283-310.	2.9	10
142	Temperature and burnup reactivities and operational lifetime for the submersion-subcritical, safe space (Sâˆ§4) reactor. Nuclear Engineering and Design, 2007, 237, 552-564.	1.7	10
143	Effects of working fluid and shaft rotation speed on the performance of HTR plants and the size of CBC turbo-machine. Nuclear Engineering and Design, 2009, 239, 1811-1827.	1.7	10
144	Subcooled Boiling of PF-5060 Dielectric Liquid on Microporous Surfaces. Journal of Heat Transfer, 2011, 133, .	2.1	10

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145	Sherwood number correlation for nuclear graphite gasification at high temperature. Progress in Nuclear Energy, 2013, 62, 26-36.	2.9	10
146	Thermal-hydraulics and safety analyses of the Solid Core-Sectored Compact Reactor (SC-SCoRe) and power system. Progress in Nuclear Energy, 2014, 76, 216-231.	2.9	10
147	Low-enrichment and long-life S calable LI quid M etal cooled small M odular (SLIMM-1.2) reactor. Nuclear Engineering and Design, 2017, 316, 163-185.	1.7	10
148	Thermal analyses of heat source assembly for a dual loop, Turbo-Brayton Radioisotope power system. Thermal Science and Engineering Progress, 2019, 10, 82-91.	2.7	10
149	Experimental investigation of saturation boiling of HFE-7000 dielectric liquid on rough copper surfaces. Thermal Science and Engineering Progress, 2020, 15, 100428.	2.7	10
150	Neutronics and Thermal-Hydraulics Analyses of the Pellet Bed Reactor for Nuclear Thermal Propulsion. Nuclear Technology, 1995, 109, 87-107.	1.2	9
151	Performance and radiological analyses of a space reactor power system deployed into a 1000â€“3000km earth orbit. Progress in Nuclear Energy, 2010, 52, 236-248.	2.9	9
152	A neutronics analysis of long-life, sectored compact reactor concepts for lunar surface power. Progress in Nuclear Energy, 2011, 53, 106-118.	2.9	9
153	Investigations of irradiation effects in crystalline and amorphous SiC. Journal of Applied Physics, 2019, 126, .	2.5	9
154	Molten fuel-coolant interaction phenomena with application to carbide fuel safety. Progress in Nuclear Energy, 1987, 20, 151-198.	2.9	8
155	Buoyancy induced instability of laminar flows in vertical annuliâ€”II. Model development and analysis. International Journal of Heat and Mass Transfer, 1990, 33, 2161-2172.	4.8	8
156	Application of a model-reference adaptive controller to a space nuclear power system. Journal of Propulsion and Power, 1992, 8, 1093-1102.	2.2	8
157	Transient experiments of an inclined copper-water heat pipe. Journal of Thermophysics and Heat Transfer, 1995, 9, 109-116.	1.6	8
158	Sodium vapor flow regimes and pressure losses on cathode side of multitube AMTEC cell. AIP Conference Proceedings, 1998, , .	0.4	8
159	Thermal-Hydraulic Analyses of the Submersion-Subcritical Safe Space (Sâˆ§4) Reactor. AIP Conference Proceedings, 2007, , .	0.4	8
160	On the introduction of nuclear power in Middle East countries: Promise, strategies, vision and challenges. Energy Conversion and Management, 2008, 49, 2618-2628.	9.2	8
161	Saturation and Subcooled Boiling of HFE-7100 on Pinned Surfaces at Different Orientations. Journal of Thermophysics and Heat Transfer, 2009, 23, 381-391.	1.6	8
162	Dielectric liquids natural convection on small rough Cu surfaces at different orientations. International Journal of Heat and Mass Transfer, 2015, 81, 289-296.	4.8	8

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163	Computational Fluid Dynamics and Thermal-Hydraulic Analyses of SLIMM Reactor Passive Decay Heat Removal by Natural Circulation of Ambient Air. Nuclear Technology, 2016, 195, 1-14.	1.2	8
164	Fragmentation of molten debris during a molten fuel-coolant interaction. Journal of Nuclear Materials, 1983, 113, 101-117.	2.7	7
165	Thermal Stress Analyses of the Multilayered Fuel Particles of a Particle-Bed Reactor. Nuclear Technology, 1991, 94, 372-382.	1.2	7
166	Status Report on the Throhput Transient Heat Pipe Modeling Code. , 1994, , .		7
167	Experiments on Pool Boiling of Water from Downward-Facing Hemispheres. Nuclear Technology, 1999, 125, 52-69.	1.2	7
168	On Visualization of Sub-Micron Particles with Dark-Field Light Microscopy. Journal of Colloid and Interface Science, 2002, 246, 410-412.	9.4	7
169	Compressor and Turbine Models of Brayton Units for Space Nuclear Power Systems. AIP Conference Proceedings, 2007, , .	0.4	7
170	High-Power Brayton Rotating Unit for Reactor and Solar Dynamic Power Systems. Journal of Propulsion and Power, 2010, 26, 167-176.	2.2	7
171	Natural circulation thermal-hydraulics model and analyses of â€œSLIMMâ€•â€“ A small modular reactor. Annals of Nuclear Energy, 2017, 101, 516-527.	1.8	7
172	Experiments and correlations of saturation boiling of hfe-7000 dielectric liquid on rough inclined copper surfaces. International Journal of Heat and Mass Transfer, 2021, 164, 120540.	4.8	7
173	Pressurizer dynamic model and emulated programmable logic controllers for nuclear power plants cybersecurity investigations. Annals of Nuclear Energy, 2021, 154, 108121.	1.8	7
174	Pellet bed reactor concepts for nuclear propulsion applications. Journal of Propulsion and Power, 1994, 10, 817-827.	2.2	6
175	Film boiling from a downward-facing curved surface in saturated and subcooled water. International Journal of Heat and Mass Transfer, 1996, 39, 275-288.	4.8	6
176	Performance analysis of coated plutonia particle fuel compact for radioisotope heater units. Nuclear Engineering and Design, 2001, 208, 29-50.	1.7	6
177	Investigations of the performance of grooved electrodes thermionic converters at collector temperatures up to 1023 K. Energy Conversion and Management, 2004, 45, 1153-1173.	9.2	6
178	An analysis of coated particles fuel compact-general purpose heat source (CPFC-GPHS). Progress in Nuclear Energy, 2004, 44, 215-236.	2.9	6
179	Thermal Analyses of Composite Copper/ Porous Graphite Spreaders for Immersion Cooling Applications. , 2005, , 305.		6
180	Estimates of point defect production inÎ±-quartz using molecular dynamics simulations. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 055001.	2.0	6

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181	Reliable and safe thermal coupling of generation-IV VHTR to a hydrogen fuel production complex. Thermal Science and Engineering Progress, 2017, 3, 164-170.	2.7	6
182	Analytical and Numerical Investigations of Friction Number for Laminar Flow in Microchannels. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	1.5	6
183	CFD and thermal-hydraulics analyses of liquid sodium heat transfer in 19-rod hexagonal bundles with scalloped walls. International Journal of Heat and Mass Transfer, 2019, 144, 118637.	4.8	6
184	SATURATION AND SUBCOOLED CHF CORRELATIONS FOR PF-5060 DIELECTRIC LIQUID ON INCLINED ROUGH COPPER SURFACES. Multiphase Science and Technology, 2014, 26, 139-170.	0.5	6
185	Transient Debris Freezing and Potential Wall Melting During a Severe Reactivity Initiated Accident Experiment. Nuclear Technology, 1981, 53, 354-373.	1.2	5
186	An analysis of Ya-21U thermionic fuel elements test results. AIP Conference Proceedings, 1996, , .	0.4	5
187	TRANSIENT HEAT CONDUCTION DURING QUENCHING OF DOWNWARD FACING COPPER AND STAINLESS STEEL CONVEX SURFACES. Numerical Heat Transfer; Part A: Applications, 1996, 29, 543-573.	2.1	5
188	Coated particle fuel for radioisotope power systems (RPSs) and radioisotope heater units (RHUs). , 1999, , .		5
189	Capillary Limit of Evaporator Wick in Alkali Metal Thermal-to-Electric Converters. Journal of Thermophysics and Heat Transfer, 2002, 16, 141-153.	1.6	5
190	Effects of decreasing fuel enrichment on the design of the Pellet Bed Reactor (PeBR) for lunar outposts. Progress in Nuclear Energy, 2018, 104, 288-297.	2.9	5
191	Friction factor correlation for hexagonal bundles of bare tubes/rods and with flat and scalloped walls. Nuclear Engineering and Design, 2019, 353, 110230.	1.7	5
192	Gas-lift enhanced natural circulation of alkali and heavy liquid metals for passive cooling of nuclear reactors. International Journal of Multiphase Flow, 2021, 143, 103783.	3.4	5
193	NUMERICAL SOLUTION OF TRANSIENT HEAT CONDUCTION IN A CYLINDRICAL SECTION DURING QUENCHING. Numerical Heat Transfer; Part A: Applications, 1995, 28, 547-574.	2.1	4
194	Analysis of Ya-21u Thermionic Fuel Elements. Nuclear Technology, 1996, 116, 261-269.	1.2	4
195	Electrical breakdown experiments with application to alkali metal thermal-to-electric converters. Energy Conversion and Management, 2003, 44, 819-843.	9.2	4
196	Effect of Inclination on Pool Boiling of FC-72 Dielectric Liquid on Porous Graphite. , 2005, , 527.		4
197	Comparative CFD analyses of liquid metal cooled reactor for lunar surface power. Nuclear Engineering and Design, 2014, 280, 105-121.	1.7	4
198	SATURATION NUCLEATE BOILING OF PF-5060 ON INCLINED DIMPLED SURFACES. , 2016, , .		4

#	Article	IF	Citations
199	Decay Heat Removal by Natural Circulation in a 550-kW(electric) SP-100 Power System for a Lunar Outpost. Nuclear Technology, 1992, 100, 271-286.	1.2	3
200	Forced convection of water in rod-bundles. International Communications in Heat and Mass Transfer, 1993, 20, 295-300.	5.6	3
201	Effect of oxygen on the operation of a planar thermionic converter for isothermal and isoflux heating conditions. Energy Conversion and Management, 1998, 39, 375-390.	9.2	3
202	Effect of oxygen on the operation of a single-cell thermionic fuel element. Journal of Nuclear Materials, 1998, 256, 218-228.	2.7	3
203	A thermionic converter with a planar, macro-grooved emitter and 0.5 mm Gap. , 1999, , .		3
204	Static Converter for High Energy Utilization, Modular, Small Nuclear Power Plants. , 2002, , 7.		3
205	Benefit of Lunar Regolith on Reflector Mass Savings. AIP Conference Proceedings, 2007, , .	0.4	3
206	Small Size Turbo-Machines for HTR Plants. , 2009, , .		3
207	Effects of Surface Roughness and Inclination Angle on Nucleate Boiling of PF-5060 Dielectric Liquid on Copper. , 2013, , .		3
208	Post-operation radiological source term and dose rate estimates for the Scalable LIquid Metal-cooled small Modular Reactor. Annals of Nuclear Energy, 2018, 115, 442-458.	1.8	3
209	Convection heat transfer of alkali liquid metals and LBE in hexagonal bundles of uniformly heated tubes with helical spacers. Thermal Science and Engineering Progress, 2018, 5, 339-350.	2.7	3
210	Thermal analyses of high-power advanced thermoacoustic radioisotope power system for future space exploration missions. Nuclear Engineering and Design, 2021, 385, 111504.	1.7	3
211	Extinguishing by â€œslow quenchingâ€™â€™ in a thick grid Csâ€“Ba tacitron. Journal of Applied Physics, 1997, 81, 50-57.	2.5	2
212	Performance evaluation of a thermionic converter with a macro-grooved emitter and a smooth collector. AIP Conference Proceedings, 1998, , .	0.4	2
213	Experimental uncertainties in vacuum tests of PX-series AMTEC cells. AIP Conference Proceedings, 1998, , .	0.4	2
214	Mechanically Alloyed-Oxide Dispersion Strengthened Steels for Use in Space Nuclear Power Systems. AIP Conference Proceedings, 2004, , .	0.4	2
215	Methods for determining operation life and reactivity depletion for space reactors with fast energy spectra. Progress in Nuclear Energy, 2009, 51, 366-373.	2.9	2
216	On the Performance of Very High Temperature Reactor Plants With Direct and Indirect Closed Brayton Cycles. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	2

#	Article	IF	Citations
217	Saturation and Subcooled Boiling on Copper Nano-Dendrites Surfaces. , 2010, , .		2
218	A point kinetics model for dynamic simulations of next generation nuclear reactor. Progress in Nuclear Energy, 2016, 92, 91-103.	2.9	2
219	A study of irradiation effects in TiO2 using molecular dynamics simulation and complementary in situ transmission electron microscopy. Journal of Applied Physics, 2018, 124, 095901.	2.5	2
220	Extrapolation of thermal conductivity in non-equilibrium molecular dynamics simulations to bulk scale. International Communications in Heat and Mass Transfer, 2020, 118, 104880.	5.6	2
221	Subcooled boiling critical heat flux of HFE-7000 dielectric liquid on inclined rough Cu. International Journal of Heat and Mass Transfer, 2021, 175, 121354.	4.8	2
222	SATURATION BOILING ON MPC: EFFECTS OF THICKNESS, INCLINATION ANGLE, TRANSIENT BUBBLE GROWTH, AND NUCLEATION SITE DENSITY. Multiphase Science and Technology, 2013, 25, 201-236.	0.5	2
223	Molten fuel radial motion and cladding melting during a PCM event in LWRs. Nuclear Engineering and Design, 1979, 54, 349-377.	1.7	1
224	Experimental Studies of the Air Coolability of TRIGA Reactors Following a Loss-of-Coolant Accident. Nuclear Technology, 1987, 76, 360-369.	1.2	1
225	FREE CONVECTION EXPERIMENTS OF ATMOSPHERIC AIR IN VERTICAL OPEN ANNULI. Chemical Engineering Communications, 1988, 63, 225-243.	2.6	1
226	Pool Boiling from Downward-Facing Curved Surfaces: Effects of Radius of Curvature and Edge Angle. Nuclear Technology, 1996, 114, 351-364.	1.2	1
227	Optimization of liquid-return artery in a vapor-anode, multitube AMTEC. AIP Conference Proceedings, 1998, , .	0.4	1
228	Application of Radio-Frequency Plasma Glow Discharge to Removal of Uranium Dioxide from Metal Surfaces. Nuclear Technology, 2000, 132, 290-308.	1.2	1
229	Conical evaporator and liquid-return wick model for vapor anode, multi-tube AMTEC cells. AIP Conference Proceedings, 2000, , .	0.4	1
230	Stress and Buckling Analyses of Multitube, Vapor-Anode, Nb-1Zr/C-103 AMTEC Cells. Journal of Propulsion and Power, 2001, 17, 557-565.	2.2	1
231	Radar Men on the Moon: A Brief Survey of Fission Surface Power Studies. AIP Conference Proceedings, 2008, , .	0.4	1
232	Numerical analysis of spreaders with an enhancing nucleate boiling surface for immersion cooling of chips with central hot spots. , 2012, , .		1
233	A Heat Transfer Correlation for Flow Channels in a Prismatic Core VHTR. Fusion Science and Technology, 2012, 61, 161-166.	1.1	1
234	Neutronics and Thermal-Hydraulics Analysis of a Long Operational Life LMR for Lunar Surface Power. Fusion Science and Technology, 2012, 61, 349-354.	1.1	1

#	Article	IF	Citations
235	Transient gasification in an NBG-18 coolant channel of a VHTR prismatic fuel element. Progress in Nuclear Energy, 2013, 64, 16-30.	2.9	1
236	Characterization of radiation damage in TiO₂ using molecular dynamics simulations. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 085005.	2.0	1
237	Selection and Validation of Fast and Synchronous Interface to the Controller of a Space Nuclear Reactor Power System. , 2020, , .		1
238	Performance analysis of coated [sup 238]PuO[sub 2] fuel particles compact for radioisotope heater units. AIP Conference Proceedings, 2000, , .	0.4	0
239	Experimental investigation of a thermionic converter with Molybdenum electrodes for low temperature applications. AIP Conference Proceedings, 2001, , .	0.4	0
240	Reactivity Control Schemes for Fast Spectrum Space Nuclear Reactors. AIP Conference Proceedings, 2008, , .	0.4	0
241	A Composite Cu/HOPG Heat Spreader for Immersion Cooling of High Power Chips. , 2015, , .		0
242	CFD analyses of passive decay heat removal for the Very-Small, Long-LIfe, Modular (VSLLIM) reactor by natural circulation of ambient air. Thermal Science and Engineering Progress, 2019, 11, 50-65.	2.7	0
243	Passive and Walk-Away Safe Small and Microreactors for Electricity Generation and Production of Process Heat for Industrial Uses. Journal of Nuclear Engineering and Radiation Science, 2021, 7, .	0.4	0
244	Postoperation Dose Rate Estimates for the Very-Small, Long-Life, Modular Reactor. Journal of Nuclear Engineering and Radiation Science, 2020, 6, .	0.4	0