

Mehdi Ashjaee, Ph.D

School of Mechanical Engineering, University of Tehran, Tehran, Iran

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University of Tehran

Objectives

Research, design, education and implementation of new technologies for a sustainable future

Recent Employment

- **Full Professor** of Mechanical Engineering, **University of Tehran**, Iran (1989-Present)
- Research Engineer, **Solar Energy Research Center**, University of Nebraska-Lincoln, Argonne National Lab. Projects (1979-1981).
- Lecturer, Department of Mechanical Engineering, University of Wisconsin-Madison, USA, 1987-1987
- Research and Design Engineer, **Design of refrigerator system with different alternatives**, Admiral Company-Galesburg-Illinois, (1987-1989), USA.
- **Vice-President for Research**, faculty of Engineering, University of Tehran, (1990-1993). Member of Research Council of University of Tehran, (1990-1993).
- **Supervisor of Heat transfer Laboratory**, Mechanical Engineering Department, University of Tehran, (1990-1993).
- **Founder and Director**, Laser Diagnostic and Nano Heat Transfer Laboratory, Mechanical Engineering Department, University of Tehran, (1990-Present).
- **Managing Director**, Home Appliance Research Co., (1996-2009). Energy Label Design project contracts Design for All the gas and Electric Home Appliances.

Teaching Experience

- **Instructor** **University of Wisconsin-Madison**
Department of Mechanical Engineering *1986-1988*
 - MSE321----- Heat Transfer
 - ME241-----Thermodynamics
 - ME331-----Energy Systems LabResponsibilities included:
 - Designing exams
 - Preparing assignment solutions and running problem solving classes (tutorials);
 - Holding regular office hours;
 - Marking midterm tests, final exams, and quizzes;
- **Instructor** **University of Tehran, Iran**
Department of Mechanical Engineering *1989-Now*
 - MECE21----- Thermodynamics I
 - MECE22----- Thermodynamics II
 - MECE32----- Fluid Mechanics
 - MECE31----- Power Plant Design and Simulation
 - MECE51----- Convection Heat TransferResponsibilities included:



Mehdi Ashjaee

Professor of Mechanical Engineering,
University of Tehran

Thermal-fluid sciences

Director of Laser Interferometry and Nan...

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Journals' Rankings

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TITLE	CITED BY	YEAR
The effects of driving patterns and PEM fuel cell degradation on the lifecycle assessment of hydrogen fuel cell vehicles P Ahmadi, SH Torabi, H Afsaneh, Y Sadegheih, H Ganjehsarabi, ... 35 International Journal of Hydrogen Energy 45 (5), 3595-3608	217	2020
A novel hybrid thermal management for Li-ion batteries using phase change materials embedded in copper foams combined with forced-air convection M Mehrabi-Kermani, E Houshfar, M Ashjaee 3 International Journal of Thermal Sciences 141, 47-61	212	2019
Multi-objective optimization of a hybrid biomass-based SOFC/GT/double effect absorption chiller/RO desalination system with CO2 recycle A Behzadi, A Habibollahzade, V Zare, M Ashjaee 59 Energy conversion and management 181, 302-318	196	2019
Renewable energy development in rural areas of Iran N Afsharzade, A Papzan, M Ashjaee, S Delangizan, S Van Passel, ... 31 Renewable and Sustainable Energy Reviews 65, 743-755	194	2016
Convective heat transfer characteristics of magnetite nanofluid under the influence of constant and alternating magnetic field M Goharkhah, A Salarian, M Ashjaee, M Shahabadi 71 Powder Technology 274, 258-267	180	2015
Experimental investigation on convective heat transfer and hydrodynamic characteristics of magnetite nanofluid under the influence of an alternating magnetic field M Goharkhah, M Ashjaee, M Shahabadi 3 International Journal of Thermal Sciences 99, 113-124	166	2016
Lithium-ion battery thermal management system with Al₂O₃/AgO/CuO nanofluids and phase change material M Kiani, S Omiddezyani, E Houshfar, SR Miremadi, M Ashjaee, AM Nejad	157	2020

	TITLE	CITED BY	YEAR
79	Q1 NA A Applied Thermal Engineering 180, 115840 		
	Energy, exergy and exergoeconomic (3E) analyses and multi-objective optimization of a solar and geothermal based integrated energy system A Behzadi, E Gholamian, P Ahmadi, A Habibollahzade, M Ashjaee	153	2018
79	Q1 NA A Applied Thermal Engineering 143, 1011-1022 		
	Experimental and numerical investigation of heat transfer in a miniature heat sink utilizing silica nanofluid SA Fazeli, SMH Hashemi, H Zirakzadeh, M Ashjaee	151	2012
	NA Superlattices and Microstructures 51 (2), 247-264		
	Heat transfer characteristics of Fe ₃ O ₄ ferrofluid flowing in a mini channel under constant and alternating magnetic fields M Ghasemian, ZN Ashrafi, M Goharkhah, M Ashjaee	145	2015
21	Q2 NA A Journal of Magnetism and Magnetic Materials 381, 158-167 		
	Effect of an alternating nonuniform magnetic field on ferrofluid flow and heat transfer in a channel M Goharkhah, M Ashjaee	135	2014
21	Q2 NA A Journal of magnetism and magnetic materials 362, 80-89 		
	Development of hybrid cooling method with PCM and Al ₂ O ₃ nanofluid in aluminium minichannels using heat source model of Li-ion batteries M Mashayekhi, E Houshfar, M Ashjaee	133	2020
79	Q1 NA A Applied Thermal Engineering 178, 115543 		
	Hybrid thermal management of lithium-ion batteries using nanofluid, metal foam, and phase change material: an integrated numerical–experimental approach. M Kiani, M Ansari, AA Arshadi, E Houshfar, M Ashjaee	109	2020
51	Q2 NA A Journal of Thermal Analysis & Calorimetry 141 (5) 		
	Enhanced power generation through integrated renewable energy plants: Solar chimney and waste-to-energy A Habibollahzade, E Houshfar, M Ashjaee, A Behzadi, E Gholamian, ...	100	2018
59	Q1 NA A Energy conversion and management 166, 48-63 		
	A comprehensive feasibility study of applying solar energy to design a zero energy building for a typical home in Tehran J Eshraghi, N Narjabadifam, N Mirkhani, SS Khosroshahi, M Ashjaee	96	2014
31	Q1 NA A Energy and Buildings 72, 329-339 		
	Effect of magnetic field on the forced convection heat transfer and pressure drop of a magnetic nanofluid in a miniature heat sink M Ashjaee, M Goharkhah, LA Khadem, R Ahmadi	95	2015
18	Q2 NA A Heat and Mass Transfer 51 (7), 953-964 		

	TITLE	CITED BY	YEAR
	The thermal efficiency improvement of a steam Rankine cycle by innovative design of a hybrid cooling tower and a solar chimney concept A Zandian, M Ashjaee	94	2013
3	 Renewable energy 51, 465-473 		
	Multi-criteria optimization and comparative performance analysis of a power plant fed by municipal solid waste using a gasifier or digester A Behzadi, E Houshfar, E Gholamian, M Ashjaee, A Habibollahzade	88	2018
59	 Energy Conversion and Management 171, 863-878 		
	Experimental investigation on thermal conductivity of MFe₂O₄ (M= Fe and Co) magnetic nanofluids under influence of magnetic field A Karimi, SSS Afghahi, H Shariatmadar, M Ashjaee	84	2014
4	 Thermochimica Acta 598, 59-67 		
	Electricity production with low grade heat in thermal power plants by design improvement of a hybrid dry cooling tower and a solar chimney concept B Ghorbani, M Ghashami, M Ashjaee, H Hosseinzadegan	83	2015
59	 Energy conversion and management 94, 1-11 		
	Experimental investigation on thermal conductivity of water based nickel ferrite nanofluids A Karimi, MAA Sadatlu, B Saberi, H Shariatmadar, M Ashjaee	78	2015
26	 Advanced Powder Technology 26 (6), 1529-1536 		
	A comparative investigation on temperature distribution in electric discharge machining process through analytical, numerical and experimental methods HRF Shahri, R Mahdavinejad, M Ashjaee, A Abdullah	75	2017
77	 International Journal of Machine Tools and Manufacture 114, 35-53 		
	Spray characteristics of a liquid–liquid coaxial swirl atomizer at different mass flow rates MR Soltani, K Ghorbanian, M Ashjaee, MR Morad	75	2005
37	 Aerospace science and technology 9 (7), 592-604 		
	Toward renewable and sustainable energies perspective in Iran A Tavana, AE Javid, E Houshfar, AM Andwari, M Ashjaee, S Shoaee, ...	74	2019
3	 Renewable energy 139, 1194-1216 		
	Thermal Conductivity of Fe₂O₃ and Fe₃O₄ Magnetic Nanofluids Under the Influence of Magnetic Field A Karimi, M Goharkhah, M Ashjaee, MB Shafii	74	2015
49	 International Journal of Thermophysics 36 (10), 2720-2739 		
	Novel hybrid thermal management for Li-ion batteries with nanofluid cooling in the presence of alternating magnetic field: An experimental study M Kiani, S Omiddezyani, AM Nejad, M Ashjaee, E Houshfar	70	2021
31	 Case Studies in Thermal Engineering 28, 101539 		
	Study of heat transfer enhancement in a nanofluid-cooled miniature heat sink	67	2012

	TITLE	CITED BY	YEAR
	SMH Hashemi, SA Fazeli, H Zirakzadeh, M Ashjaee		
33	 International Communications in Heat and Mass Transfer 39 (6), 877-884 		
	Dynamic feasibility assessment and 3E analysis of a smart building energy system integrated with hybrid photovoltaic-thermal panels and energy storage	62	2020
	E Gholamian, P Ahmadi, P Hanafizadeh, M Ashjaee		
36	 Sustainable Energy Technologies and Assessments 42, 100835 		
	Experimental study of natural convection heat transfer from vertical array of isothermal horizontal elliptic cylinders	62	2007
	T Yousefi, M Ashjaee		
58	 Experimental Thermal and Fluid Science 32 (1), 240-248 		
	Multi-objective optimization of a sandwich rectangular-channel liquid cooling plate battery thermal management system: a deep-learning approach	60	2023
	S Mansour, A Jalali, M Ashjaee, E Houshfar		
59	 Energy Conversion and Management 290, 117200 		
	Experimental study of free convection heat transfer from horizontal isothermal cylinders arranged in vertical and inclined arrays	56	2007
	M Ashjaee, T Yousefi		
44	 Heat transfer engineering 28 (5), 460-471 		
	Continuous power generation through a novel solar/geothermal chimney system: Technical/cost analyses and multi-objective particle swarm optimization	55	2021
	A Habibollahzade, E Houshfar, M Ashjaee, K Ekradi		
74	 Journal of Cleaner Production 283, 124666 		
	Design, dynamic simulation, and optimal size selection of a hybrid solar/wind and battery-based system for off-grid energy supply	47	2022
	Y Cao, MS Taslimi, SM Dastjerdi, P Ahmadi, M Ashjaee		
3	 Renewable Energy 187, 1082-1099 		
	Thermo-economic optimization of low-grade waste heat recovery in Yazd combined-cycle power plant (Iran) by a CO2 transcritical Rankine cycle	47	2015
	A Amini, N Mirkhani, PP Pourfard, M Ashjaee, MA Khodkar		
11	 Energy 86, 74-84 		
	Experimental investigation on free convection from a horizontal cylinder beneath an adiabatic ceiling	45	2007
	M Ashjaee, AH Eshtiaghi, M Yaghoubi, T Yousefi		
58	 Experimental Thermal and Fluid Science 32 (2), 614-623 		
	Techno-economic optimization of a biomass gasification energy system with Supercritical CO2 cycle for hydrogen fuel and electricity production	40	2023
	MM Soltani, P Ahmadi, M Ashjaee		
14	 Fuel 333, 126264 		

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	Design and mixed integer linear programming optimization of a solar/battery based Conex for remote areas and various climate zones M Taslimi, P Ahmadi, M Ashjaee, MA Rosen	40	2021
36	 Sustainable Energy Technologies and Assessments 45, 101104 		
	Thermoeconomic analysis of a hybrid PVT solar system integrated with double effect absorption chiller for cooling/hydrogen production A Behzadi, E Gholamian, E Houshfar, M Ashjaee, A Habibollahzade	40	2018
38	 Energy Equipment and Systems 6 (4), 413-427 		
	Open cycle CFD investigation of SI engine fueled with hydrogen/methane blends using detailed kinetic mechanism K Zaker, MH Askari, A Jazayeri, R Ebrahimi, B Zaker, M Ashjaee	39	2015
35	 International Journal of Hydrogen Energy 40 (40), 14006-14019 		
	The effect of corona discharge on free convection heat transfer from a horizontal cylinder SR Mahmoudi, K Adamiak, P Castle, M Ashjaee	39	2010
58	 Experimental Thermal and Fluid Science 34 (5), 528-537 		
	Experimental and numerical study of mixed and natural convection in an enclosure with a discrete heat source and ventilation ports A Minaei, M Ashjaee, M Goharkhah	38	2014
44	 Heat transfer engineering 35 (1), 63-73 		
	The comparative study of single and two-phase models for magnetite nanofluid forced convection in a tube P Hanafizadeh, M Ashjaee, M Goharkhah, K Montazeri, M Akram	37	2015
33	 International Communications in Heat and Mass Transfer 65, 58-70 		
	Two-dimensional temperature field measurement of a premixed methane/air flame using Mach–Zehnder interferometry ZN Ashrafi, M Ashjaee, MH Askari	37	2015
26	 Optics Communications 341, 55-63 		
	Assessment and multi-objective optimization of an off-grid solar based energy system for a Conex MS Taslimi, S Maleki Dastjerdi, S Bashiri Mousavi, P Ahmadi, M Ashjaee	36	2021
38	 Energy Equipment and Systems 9 (2), 127-143 		
	Experimental investigation on heat transfer of MgO nanofluid in tubes partially filled with metal foam P Rabbani, A Hamzehpour, M Ashjaee, M Najafi, E Houshfar	36	2019
71	 Powder Technology 354, 734-742 		
	Experimental investigation of heat transfer in a novel heat sink by means of alumina nanofluids H Zirakzadeh, A Mashayekh, HN Bidgoli, M Ashjaee	36	2012
54	 Heat Transfer Research 43 (8) 		
	Experimental investigation on thermo-physical properties and heat transfer characteristics of green synthesized highly stable CoFe₂O₄/rGO nanofluid	35	2021

	TITLE	CITED BY	YEAR
	S Omiddezyani, S Gharehkhani, V Yousefi-Asli, I Khazaee, M Ashjaee, ...		
44	 Colloids and Surfaces A: Physicochemical and Engineering Aspects 610, 125923 		
	Energy and exergy analysis of biogas fired regenerative gas turbine cycle with CO₂ recirculation for oxy-fuel combustion power generation M Mohammadpour, E Houshfar, M Ashjaee, A Mohammadpour	34	2021
11	 Energy 220, 119687 		
	Experimental investigation of heat transfer and pressure drop of alumina–water nano-fluid in a porous miniature heat sink E Pourfarzad, K Ghadiri, A Behrangzade, M Ashjaee	32	2018
19	 Experimental Heat Transfer 31 (6), 495-512 		
	Experimental and numerical study on heat transfer characteristics of various geometrical arrangement of impinging jet arrays H Shariatmadar, S Mousavian, M Sadoughi, M Ashjaee	32	2016
3	 International Journal of Thermal Sciences 102, 26-38 		
	Enhanced performance and reduced payback period of a low grade geothermal-based ORC through employing two TEGs A Habibollahzade, E Houshfar, M Ashjaee, E Gholamian, A Behzadi	30	2019
38	 Energy Equipment and Systems 7 (1), 23-39 		
	Effect of orifice shape on bubble formation mechanism P Hanafizadeh, A Sattari, SE Hosseini-Doost, AG Nouri, M Ashjaee	30	2018
37	 Meccanica 53 (10), 2461-2483 		
	Comparative transient assessment and optimization of battery and hydrogen energy storage systems for near-zero energy buildings Z Mohammadi, P Ahmadi, M Ashjaee	29	2024
3	 Renewable Energy 220, 119680 		
	4E analysis and tri-objective optimization of a triple-pressure combined cycle power plant with combustion chamber steam injection to control NO_x emission I Fakhari, P Behinfar, F Raymand, A Azad, P Ahmadi, E Houshfar, ...	29	2021
51	 Journal of Thermal Analysis and Calorimetry 145 (3), 1317-1333 		
	Experimental investigation of thermal conductivity and viscosity of SiO₂/multiwalled carbon nanotube hybrid nanofluids F Amini, SZ Miry, A Karimi, M Ashjaee	29	2019
	 Journal of nanoscience and nanotechnology 19 (6), 3398-3407		
	Hydrodynamics and Heat Transfer Characteristics of a Miniature Plate Pin-Fin Heat Sink Utilizing Al₂O₃–Water and TiO₂–Water Nanofluids M Roshani, S Ziaeddin Miry, P Hanafizadeh, M Ashjaee	29	2015
1	 Journal of Thermal Science and Engineering Applications 7 (3), 031007 		
	Experimental investigation on temperature field and heat transfer distribution of a slot burner methane/air flame impinging on a curved	28	2018

	TITLE	CITED BY	YEAR
	surface V Yousefi-Asli, E Houshfar, F Beygi-Khosroshahi, M Ashjaee 79  Applied Thermal Engineering 129, 761-771 		
	Thermal and hydrodynamic performances of MHD ferrofluid flow inside a porous channel A Salehpour, S Salehi, S Salehpour, M Ashjaee 58  Experimental Thermal and Fluid Science 90, 1-13 	28	2018
	Optimization arrangement of two pulsating impingement slot jets for achieving heat transfer coefficient uniformity SD Farahani, MA Bijarchi, F Kowsary, M Ashjaee  Journal of Heat Transfer 138 (10), 102001	28	2016
	Heat transfer characteristics of laminar slot jet arrays impinging on a constant target surface temperature H Shariatmadar, A Momeni, A Karimi, M Ashjaee 79  Applied Thermal Engineering 76, 252-260 	28	2015
	Estimating direct, diffuse, and global solar radiation for various cities in Iran by two methods and their comparison with the measured data M Ashjaee, MR Roomina, R Ghafouri-Azar 14  Solar energy 50 (5), 441-446 	28	1993
	Investigation on trajectories and capture of magnetic drug carrier nanoparticles after injection into a direct vessel M Mahmoodpour, M Goharkhah, M Ashjaee 21  Journal of Magnetism and Magnetic Materials 497, 166065 	27	2020
	Experimental investigation on heat transfer and hydrodynamic behavior of magnetite nanofluid flow in a channel with recognition of the best models for transport properties M Goharkhah, M Ashjaee, J Jamali 58  Experimental Thermal and Fluid Science 68, 582-592 	27	2015
	Experimental and numerical investigation on free convection from a horizontal cylinder located above an adiabatic surface M Ashjaee, S Yazdani, S Bigham, T Yousefi 44  Heat transfer engineering 33 (3), 213-224 	27	2012
	Heat Transfer and Hydrodynamic Performance Analysis of a Miniature Tangential Heat Sink Using Al₂O₃-H₂O and TiO₂-H₂O Nanofluids SZ Miry, M Roshani, P Hanafizadeh, M Ashjaee, F Amini 19  Experimental Heat Transfer 29 (4), 536-560 	26	2016
	Effect of flow conditions on spray cone angle of a two-fluid atomizer M Shafaei, SA Banitabaei, M Ashjaee, V Esfahani 18  Journal of mechanical science and technology 25 (2), 365-369 	26	2011
	Experimental flow visualization of single swirl spray pattern at various pressure drops K Ghorbanian, M Ashjaee, M Soltani, M Mesbahi, M Morad	26	2003

	TITLE	CITED BY	YEAR
	NA 39th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, 4758		
	A novel hybrid liquid-cooled battery thermal management system for electric vehicles in highway fuel-economy condition M Sadeh, M Tousi, A Sarchami, R Sanaie, M Kiani, M Ashjaee, ...	25	2024
3	Q1 NA A Journal of Energy Storage 86, 111195 🇮🇷		
	Effects of confining walls on heat transfer from a vertical array of isothermal horizontal elliptic cylinders T Yousefi, M Paknezhad, M Ashjaee, S Yazdani	25	2009
58	Q1 NA A Experimental Thermal and Fluid Science 33 (6), 983-990 🇺🇸		
	A correlation for free convection heat transfer from vertical wavy surfaces M Ashjaee, M Amiri, J Rostami	25	2007
18	Q2 NA A Heat and Mass Transfer 44 (1), 101-111 🇩🇪		
	Derivation and application of the adjoint method for estimation of both spatially and temporally varying convective heat transfer coefficient H Razzaghi, F Kowsary, M Ashjaee	24	2019
79	Q1 NA A Applied Thermal Engineering 154, 63-75 🇬🇧		
	Experimental measurement of laminar burning velocity and flammability limits of landfill gas at atmospheric and elevated pressures MH Askari, M Ashjaee	24	2017
24	Q1 NA A Energy & Fuels 31 (3), 3196-3205 🇺🇸		
	Performance evaluation and multi-objective optimization of an innovative solar-assisted multigeneration energy storage system for freshwater/O₂/H₂ generation M Mohammadpour, E Houshfar, M Ashjaee	23	2022
36	Q1 NA A Sustainable Energy Technologies and Assessments 53, 102755 🇬🇧		
	Slot jet impingement cooling of a concave surface in an annulus A Azimi, M Ashjaee, P Razi	23	2015
58	Q1 NA A Experimental Thermal and Fluid Science 68, 300-309 🇺🇸		
	Convective Heat Transfer and Pumping Power Analysis of MWCNT + Fe₃O₄/Water Hybrid Nanofluid in a Helical Coiled Heat Exchanger with Orthogonal Rib ... M Irandoost Shahrestani, E Houshfar, M Ashjaee, P Allahvirdizadeh	22	2021
53	Q2 NA A Frontiers in Energy Research 9, 630805 🇨🇭		
	A novel numerical approach for investigation of the gas bubble characteristics in stagnant liquid using Young-Laplace equation H Gharedaghi, A Dousti, J Eshraghi, P Hanafizadeh, M Ashjaee	22	2017
4	Q1 NA A Chemical Engineering Science 173, 37-48 🇬🇧		
	Temperature measurement of a premixed radially symmetric methane flame jet using the Mach–Zehnder Interferometry M Ahmadi, MS Avval, T Yousefi, M Goharkhah, B Nasr, M Ashjaee	22	2011
	Q1 NA A Optics and Lasers in Engineering 49 (7), 859-865 🇬🇧		

	TITLE	CITED BY	YEAR
	Experimental and numerical study on heat transfer characteristics for methane/air flame impinging on a flat surface MR Morad, A Momeni, EE Fordoei, M Ashjaee Q1 NA A International Journal of Thermal Sciences 110, 229-240	21	2016
3	Application of artificial neural networks for prediction of natural convection heat transfer from a confined horizontal elliptic tube M Hayati, T Yousefi, M Ashjaee, A Hamidi, Y Shirvany NA Proceedings of World Academy of Science, Engineering and Technology 22, 269-274	21	2007
	Experimental and Numerical Investigation of NH₃/CH₄ Mixture Combustion Properties under Elevated Initial Pressure and Temperature MR Kohansal, M Kiani, S Masoumi, S Nourinejad, M Ashjaee, E Houshfar Q1 NA A Energy & Fuels 37 (14), 10681-10696	20	2023
24	Temperature measurement of axisymmetric partially premixed methane/air flame in a co-annular burner using Mach–Zehnder interferometry MS Irandoost, M Ashjaee, MH Askari, S Ahmadi Q1 NA A Optics and Lasers in Engineering 74, 94-102	20	2015
	Laminar flame stability analysis of ammonia-methane and ammonia-hydrogen dual-fuel combustion S Masoumi, M Ashjaee, E Houshfar Q1 NA A Fuel 363, 131041	19	2024
14	Experimental study on the effects of inclination situation of the sintered heat pipe on its thermal performance M Nazarimanesh, T Yousefi, M Ashjaee Q1 NA A Experimental Thermal and Fluid Science 68, 625-633	19	2015
58	Achieving heat flux uniformity using an optimal arrangement of impinging jet arrays M Forouzanmehr, H Shariatmadar, F Kowsary, M Ashjaee NA Journal of Heat Transfer 137 (6), 061002	19	2015
	The influence of SiO₂ nanoparticles on cavitation initiation and intensity in a centrifugal water pump ME Bidhandi, A Riasi, M Ashjaee Q1 NA A Experimental thermal and fluid science 55, 71-76	19	2014
58	Thermo-economic analysis of transcritical CO₂ cycles with bounded and unbounded reheats in low-temperature heat recovery applications N Mirkhani, A Amini, M Ashjaee Q1 NA A Energy 133, 676-690	18	2017
11	Proposal and multi-criteria optimization of a novel biomass-based and PEMfuel cell system for generating clean power for building applications Z Mohammadi, P Ahmadi, M Ashjaee Q1 NA A Energy 277, 127352	17	2023

	TITLE	CITED BY	YEAR
	Investigating the effect of wearing glasses on the human eyes' temperature distribution in different ambient conditions K Zarei, M Lahonian, S Aminian, S Saedi, M Ashjaee	17	2021
47	 Journal of Thermal Biology 99, 102971 		
	An experimental and numerical study on the combustion and flame characteristics of hydrogen in intersecting slot burners M Kiani, E Houshfar, M Ashjaee	17	2018
35	 International Journal of Hydrogen Energy 43 (5), 3034-3049 		
	Study of mixed convection characteristics of confined planar jet impingement using the direct temperature gradient interferometric method K Habibi, S Amiri, M Ashjaee	17	2013
3	 International journal of thermal sciences 71, 205-215 		
	Combustion of syngas in intersecting burners using the interferometry method M Kiani, E Houshfar, AE Niaraki Asli, M Ashjaee	16	2017
24	 Energy & Fuels 31 (9), 10121-10132 		
	Study of electrohydrodynamic micropumping through conduction phenomenon SR Mahmoudi, K Adamiak, GSP Castle, M Ashjaee	16	2011
26	 IEEE Transactions on Industry Applications 47 (5), 2224-2234 		
	Thermal study of an array of inline horizontal cylinders below a nearly adiabatic ceiling M Yaghoubi, M Ashjaee, AH Eshtiaghi, T Yousefi	16	2009
58	 Experimental thermal and fluid science 33 (2), 232-239 		
	Sustainability analysis and optimization of innovative geothermal-driven energy storage system for green production of H₂, NH₃, and pure O₂ M Mohammadpour, E Houshfar, M Ashjaee	15	2022
35	 International Journal of Hydrogen Energy 47 (62), 26156-26177 		
	An investigation on effect of geometrical parameters on spray cone angle and droplet size distribution of a two-fluid atomizer M Shafaei, SA Banitabaei, V Eshahanian, M Ashjaee	15	2011
18	 Journal of mechanical science and technology 25 (12), 3047-3052 		
	Analytical investigation of the effect of viscous dissipation on Couette flow in a channel partially filled with a porous medium O Ghazian, H Rezvantlab, M Ashjaee	15	2011
58	 Transport in Porous media 89 (1), 1-13 		
	Experimental and numerical analysis of ammonia/hydrogen combustion under artificial exhaust gas recirculation S Masoumi, E Houshfar, M Ashjaee	14	2024
14	 Fuel 357, 130081 		
	On-demand heat transfer augmentation using magnetically triggered ferrofluid containing eco-friendly treated CoFe₂O₄/rGO	14	2021

	TITLE	CITED BY	YEAR
	S Omiddezyani, V Yousefi-Asli, E Houshfar, S Gharehkhani, M Ashjaee, ...		
71	 Powder Technology 378, 468-486 		
	Experimental investigation on premixed flame of H₂/CO in a slot burner using the Mach-Zehnder interferometry P Nournai, E Houshfar, M Ashjaee, S Pilva  Optics & Laser Technology 115, 140-148 	14	2019
	Temperature field investigation of hydrogen/air and syngas/air axisymmetric laminar flames using Mach–Zehnder interferometry S Karaminejad, MH Askari, M Ashjaee	14	2018
51	 Applied Optics 57 (18), 5057-5067 		