Shahzada Shuja

List of Publications by Year
in descending order

86 papers	1,164 citations	394421 19 h-index	477307 29 g-index
87 all docs	87 docs citations	87 times ranked	719 citing authors

#	Article	IF	Citations
1	Laser-shock processing of steel. Journal of Materials Processing Technology, 2003, 135, 6-17.	6.3	62
2	Heat transfer analysis of laser heated surfaces â€" conduction limited case. Applied Surface Science, 1997, 108, 167-175.	6.1	53
3	Laser-induced thermal stresses on steel surface. Optics and Lasers in Engineering, 1998, 30, 25-37.	3.8	51
4	Local entropy generation in an impinging jet: minimum entropy concept evaluating various turbulence models. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 3623-3644.	6.6	49
5	Laser melting of plasma nitrided Tiî—¸6A1î—¸4V alloy. Wear, 1997, 212, 140-149.	3.1	43
6	Confined swirling jet impingement onto an adiabatic wall. International Journal of Heat and Mass Transfer, 2003, 46, 2947-2955.	4.8	43
7	Mixed convection in a square cavity due to heat generating rectangular body. International Journal of Numerical Methods for Heat and Fluid Flow, 2000, 10, 824-841.	2.8	41
8	Second law analysis of a swirling flow in a circular duct with restriction. International Journal of Heat and Mass Transfer, 1999, 42, 4027-4041.	4.8	38
9	Laser treatment and PVD TiN coating of Tiâ€"6Alâ€"4V alloy. Surface and Coatings Technology, 2000, 130, 152-157.	4.8	36
10	Laser treatment and PVD TiN coating of Ti-6Al-4V alloy. Surface and Coatings Technology, 2001, 140, 244-250.	4.8	36
11	Pulsative heating of surfaces. International Journal of Heat and Mass Transfer, 1998, 41, 3899-3918.	4.8	30
12	Investigation into topping cycle: Thermal efficiency with and without presence of thermoelectric generator. Energy, 2011, 36, 4048-4054.	8.8	29
13	Fluid flow and heat transfer characteristics in axisymmetric annular diffusers. Computers and Fluids, 1996, 25, 133-150.	2.5	27
14	Melting enhancement of a phase change material with presence of a metallic mesh. Applied Thermal Engineering, 2015, 79, 163-173.	6.0	27
15	Laser produced melt pool: Influence of laser intensity parameter on flow field in melt pool. Optics and Laser Technology, 2011, 43, 767-775.	4.6	25
16	A numerical solution for laser heating of titanium and nitrogen diffusion in solid. Journal of Materials Processing Technology, 2003, 136, 12-23.	6.3	23
17	Laser heating of titanium and steel: Phase change at the surface. International Journal of Thermal Sciences, 2012, 54, 230-241.	4.9	23
18	A thermal battery mimicking a concentrated volumetric solar receiver. Applied Energy, 2016, 175, 16-30.	10.1	21

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19	Investigation Into Laser Shock Processing. Journal of Materials Engineering and Performance, 2004, 13, 47-54.	2.5	20
20	Laser heating of a moving slab: Influence of laser intensity parameter and scanning speed on temperature field and melt size. Optics and Lasers in Engineering, 2011, 49, 265-272.	3.8	20
21	A laminar swirling jet impingement on to an adiabatic wall â€•Effect of inlet velocity profiles. International Journal of Numerical Methods for Heat and Fluid Flow, 2001, 11, 237-254.	2.8	19
22	Laser repetitive pulse heating of tool surface. Optics and Laser Technology, 2011, 43, 754-761.	4.6	19
23	3-Dimensional conjugate laser heating of a moving slab. Applied Surface Science, 2000, 167, 134-148.	6.1	18
24	Nano-second laser pulse heating and assisting gas jet considerations. International Journal of Machine Tools and Manufacture, 2000, 40, 1023-1038.	13.4	18
25	Jet impingement onto a conical cavity: Effects of annular nozzle outer angle and jet velocity on heat transfer and skin friction. International Journal of Thermal Sciences, 2009, 48, 985-997.	4.9	18
26	Flow over porous blocks in a square cavity: Influence of heat flux and porosity on heat transfer rates. International Journal of Thermal Sciences, 2009, 48, 1564-1573.	4.9	17
27	Laser heating of a moving slab: Influence pulse intensity parameter on temperature and stress fields. Optics and Laser Technology, 2015, 70, 7-16.	4.6	17
28	Investigation into a confined laminar swirling jet and entropy production. International Journal of Numerical Methods for Heat and Fluid Flow, 2002, 12, 870-887.	2.8	16
29	Jet impingement onto a cavity. International Journal of Numerical Methods for Heat and Fluid Flow, 2002, 12, 817-838.	2.8	15
30	Laser melting of carbide tool surface: Model and experimental studies. Applied Surface Science, 2009, 255, 9396-9403.	6.1	15
31	Laser consecutive pulse heating and phase change: Influence of spatial distribution of laser pulse intensity on melting. International Journal of Thermal Sciences, 2009, 48, 1960-1966.	4.9	15
32	Jet impingement on cylindrical cavity: Conical nozzle considerations. Journal of Fluids and Structures, 2007, 23, 1106-1118.	3.4	14
33	Laser multi-beam heating of moving steel sheet: Thermal stress analysis. Optics and Lasers in Engineering, 2013, 51, 446-452.	3.8	13
34	Entropy generation in a square cavity. International Journal of Numerical Methods for Heat and Fluid Flow, 2010, 20, 332-347.	2.8	12
35	Axisymmetric stagnation point flow on linearly stretching surfaces and heat transfer: Nanofluid with variable physical properties. Case Studies in Thermal Engineering, 2021, 24, 100839.	5.7	12
36	Jet impingement onto a conical cavity with elevated wall temperature. International Journal of Numerical Methods for Heat and Fluid Flow, 2004, 14, 1011-1028.	2.8	11

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37	Laser heating of semi-infinite solid with consecutive pulses: Influence of materaial properties on temperature field. Optics and Laser Technology, 2008, 40, 472-480.	4.6	11
38	Laser pulse heating of steel mixing with WC particles in a irradiated region. Optics and Laser Technology, 2016, 86, 126-135.	4.6	11
39	Entropy generation due to jet impingement on a surface: effect of annular nozzle outer angle. International Journal of Numerical Methods for Heat and Fluid Flow, 2007, 17, 677-691.	2.8	10
40	Flow over solid blocks in open ended cavity. International Journal of Numerical Methods for Heat and Fluid Flow, 2009, 19, 633-649.	2.8	10
41	Energy and entropy analysis in a square cavity with protruding body: effects of protruding body aspect ratio. International Journal of Energy Research, 2002, 26, 851-866.	4.5	9
42	Laser pulse heating of steel surface and flexural wave analysis. Optics and Lasers in Engineering, 2002, 37, 63-83.	3.8	9
43	Flow analysis of a rectangular channel with triangular and semi-spherical protrusions. International Journal of Thermal Sciences, 2021, 162, 106793.	4.9	9
44	One-Equation, Two-Equation and Kinetic Theory: Laser Pulse Heating. Japanese Journal of Applied Physics, 2000, 39, 4018-4027.	1.5	8
45	Innovative design of a solar volumetric receiver: Arrangements of absorbing block configurations. Solar Energy, 2017, 146, 105-112.	6.1	8
46	Investigation of nitrogen diffusion during laser heating of titanium. Surface Engineering, 2000, 16, 519-523.	2.2	7
47	Laser heating and surface evaporation. International Communications in Heat and Mass Transfer, 2005, 32, 822-830.	5.6	7
48	Flow subjected to porous blocks in the cavity: Consideration of block aspect ratio and porosity. Chemical Engineering Journal, 2008, 139, 84-92.	12.7	7
49	Laser induced melt pool formation in titanium surface: influence of laser scanning speed. International Journal of Numerical Methods for Heat and Fluid Flow, 2012, 22, 990-1009.	2.8	7
50	Assessment of thermo-fluid analogies for different flow configurations: the effect of Prandtl number, and laminar-to-turbulent flow regimes. International Journal of Thermal Sciences, 2018, 129, 145-170.	4.9	7
51	Numerical investigation of a transient free jet resembling a laser-produced vapor jet. International Journal of Heat and Mass Transfer, 2004, 47, 1037-1052.	4.8	6
52	Jet impingement onto a cylindrical cavity. International Journal of Numerical Methods for Heat and Fluid Flow, 2009, 19, 182-200.	2.8	6
53	CO2 laser heating of surfaces: Melt pool formation at surface. Optics and Laser Technology, 2012, 44, 463-470.	4.6	6
54	Laser induced heating of coated carbon steel sheets: Consideration of melting and Marangoni flow. Optics and Laser Technology, 2013, 47, 47-55.	4.6	6

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55	Volumetric solar absorption in a channel with presence of phase change material in a carrier fluid. Applied Thermal Engineering, 2016, 102, 1059-1068.	6.0	6
56	Laser pulse heating of steel surfaces including impinging gas effect and variable properties. International Journal of Numerical Methods for Heat and Fluid Flow, 2002, 12, 195-219.	2.8	5
57	Thermal characteristics of n-octadecane and carbon nanotubes mixture. Applied Thermal Engineering, 2016, 98, 646-655.	6.0	5
58	Solution Crystallization of Polycarbonate Surfaces for Hydrophobic State: Water Droplet Dynamics and Life Cycle Assessment towards Self-Cleaning Applications. Polymers, 2021, 13, 1449.	4.5	5
59	Flow impingement onto a flat plate with limited heated area in relation to laser gas assisted processing. International Journal of Numerical Methods for Heat and Fluid Flow, 2005, 15, 363-378.	2.8	4
60	Jet impingement onto a laser produced kerf. International Journal of Numerical Methods for Heat and Fluid Flow, 2011, 21, 754-778.	2.8	4
61	MULTI-BEAM LASER HEATING OF STEEL: TEMPERATURE AND THERMAL STRESS ANALYSIS. Transactions of the Canadian Society for Mechanical Engineering, 2012, 36, 373-381.	0.8	4
62	Jet impinging onto a laser drilled tapered hole: Influence of tapper location on heat transfer and skin friction at hole surface. Optics and Laser Technology, 2013, 45, 236-245.	4.6	4
63	Jet impingement onto kerf: Effect of kerf wedge angle on heat transfer rates and skin friction. Optics and Laser Technology, 2014, 56, 76-87.	4.6	4
64	Flow and heat transfer characteristics of assisting gas impingining onto an alumina coated hole in relation to laser drilling. Optics and Laser Technology, 2014, 59, 123-130.	4.6	4
65	Simulation of elastic displacement of surface during laser short pulse heating of gold. Optical and Quantum Electronics, 2001, 33, 1241-1258.	3.3	3
66	Laser induced flexural wave analysis: an aluminum element in steel substrate. Journal of Materials Processing Technology, 2003, 136, 24-34.	6.3	3
67	Flow over a heated block in a vertical channel. International Journal of Numerical Methods for Heat and Fluid Flow, 2014, 24, 1044-1056.	2.8	3
68	Pulsed laser heating of steel surfaces â€" Fourier and electron kinetic theory approaches. International Communications in Heat and Mass Transfer, 1998, 25, 843-852.	5.6	2
69	Efficiency analysis of a repetitive pulsed-laser heating. Optics and Lasers in Engineering, 1999, 31, 51-61.	3.8	2
70	Flexural motion in laser evaporative heated cantilever workpiece: Three-dimensional analysis. Optical and Quantum Electronics, 2003, 35, 111-128.	3.3	2
71	Laser shortpulse heatingâ€“variable properties case. Physica A: Statistical Mechanics and Its Applications, 2006, 364, 87-102.	2.6	2
72	Flow emerging from annular-conical nozzle combinations and impinging onto a cylindrical cavity. International Journal of Thermal Sciences, 2009, 48, 975-984.	4.9	2

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73	Effect of coating material on heat transfer and skin friction due to impinging jet onto a laser producedhole. Optics and Laser Technology, 2013, 49, 243-250.	4.6	2
74	Entropy generation due flow passing over the porous block in the cavity. Progress in Computational Fluid Dynamics, 2015, 15, 16.	0.2	2
75	Vortex shedding over a rectangular cylinder with ground effect: flow and heat transfer characteristics. International Journal of Numerical Methods for Heat and Fluid Flow, 2002, 12, 916-939.	2.8	1
76	Parametric variation analysis on time corresponding to initiation and ending of evaporation during laser heating. International Communications in Heat and Mass Transfer, 2002, 29, 243-254.	5.6	1
77	Flow into a hole in relation to laser drilling: influence of coating thickness. International Journal of Numerical Methods for Heat and Fluid Flow, 2014, 24, 988-1004.	2.8	1
78	Thermal Assessment of Selective Solar Troughs. Energies, 2019, 12, 3130.	3.1	1
79	Additive manufacturing of Ti-alloy: Thermal analysis and assessment of properties. Advances in Mechanical Engineering, 2020, 12, 168781402093306.	1.6	1
80	Influence of Hydrophobic Fin Configuration in Thermal System in Relation to Electronic Device Cooling Applications. Energies, 2020, 13, 1631.	3.1	1
81	Jet impingement onto a conical hole in relation to laser machining. Journal of Materials Processing Technology, 2004, 155-156, 2039-2044.	6.3	0
82	A turbulent submerged swirling jet expansion in still air and entropy generation. International Journal of Exergy, 2004, 1, 399.	0.4	0
83	Thermoeconomic considerations in the design and analysis of a finned heat sink array: the effect of material cost. International Journal of Exergy, 2011, 9, 370.	0.4	0
84	Practical Applications of Laser Surface Treatment. Materials Forming, Machining and Tribology, 2013, , 111-138.	1.1	0
85	Laser Melting of Solid Surfaces. Materials Forming, Machining and Tribology, 2013, , 29-58.	1.1	0
86	Numerical Analysis for Laser Forming and Welding. Materials Forming, Machining and Tribology, 2013, , 39-84.	1.1	0