## **Shengqiang Shen**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7994632/publications.pdf

Version: 2024-02-01

115	2,173	26 h-index	40
papers	citations		g-index
115	115	115	1209
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Boiling from liquid drops impact on a heated wall. International Journal of Heat and Mass Transfer, 2016, 100, 48-57.	2.5	104
2	Release and transformation of alkali metals during co-combustion of coal and sulfur-rich wheat straw. Energy Conversion and Management, 2014, 83, 197-202.	4.4	81
3	Special phenomena from a single liquid drop impact on wetted cylindrical surfaces. Experimental Thermal and Fluid Science, 2013, 51, 18-27.	1.5	78
4	Measurement on falling film thickness distribution around horizontal tube with laser-induced fluorescence technology. International Journal of Heat and Mass Transfer, 2015, 89, 707-713.	2.5	77
5	Experimental study of falling film evaporation heat transfer outside horizontal tubes. Desalination, 2008, 220, 654-660.	4.0	71
6	Simulation of droplets impact on curved surfaces with lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2012, 55, 6938-6943.	2.5	64
7	Simulation of droplet impact on liquid film with CLSVOF. International Communications in Heat and Mass Transfer, 2014, 53, 26-33.	2.9	60
8	Numerical study of falling film thickness over fully wetted horizontal round tube. International Journal of Heat and Mass Transfer, 2015, 84, 893-897.	2.5	59
9	Numerical research on the dynamic characteristics of a droplet impacting a hydrophobic tube. Physics of Fluids, 2017, 29, .	1.6	58
10	3D numerical study of the liquid film distribution on the surface of a horizontal-tube falling-film evaporator. International Journal of Heat and Mass Transfer, 2018, 124, 943-952.	2.5	55
11	Crown behavior and bubble entrainment during a drop impact on a liquid film. Theoretical and Computational Fluid Dynamics, 2014, 28, 159-170.	0.9	54
12	Energy, exergy and exergoeconomic analysis of a combined cooling, desalination and power system. Energy Conversion and Management, 2020, 218, 113006.	4.4	51
13	Spreading and splashing during a single drop impact on an inclined wetted surface. Acta Mechanica, 2013, 224, 2993-3004.	1.1	49
14	Three-dimensional film thickness distribution of horizontal tube falling film with column flow. Applied Thermal Engineering, 2019, 154, 140-149.	3.0	48
15	Simultaneous Impact of Multiple Droplets on Liquid Film. Journal of Industrial and Engineering Chemistry, 2018, 65, 51-61.	2.9	44
16	Rebound and spreading during a drop impact on wetted cylinders. Experimental Thermal and Fluid Science, 2014, 52, 97-103.	1.5	42
17	Contact vaporization of an impacting drop on heated surfaces. Experimental Thermal and Fluid Science, 2016, 74, 73-80.	1.5	40
18	Experimental investigation of a drop impacting on wetted spheres. Experimental Thermal and Fluid Science, 2014, 55, 150-157.	<b>1.</b> 5	37

#	Article	IF	CITATIONS
19	Mathematical modeling and performance analysis for multi-effect evaporation/multi-effect evaporation with thermal vapor compression desalination system. Applied Thermal Engineering, 2019, 159, 113759.	3.0	35
20	Single-phase heat transfer of multi-droplet impact on liquid film. International Journal of Heat and Mass Transfer, 2019, 132, 288-292.	2.5	35
21	Successive impact of multiple droplets on liquid film. European Journal of Mechanics, B/Fluids, 2019, 74, 389-398.	1.2	35
22	Heat transfer performance and bundle-depth effect in horizontal-tube falling film evaporators. Desalination and Water Treatment, 2013, 51, 830-836.	1.0	33
23	Study of the surface wettability effect on dynamic characteristics of droplet impacting a tube with different curvature ratios. Experimental Thermal and Fluid Science, 2020, 115, 110060.	1.5	33
24	Two-phase heat transfer of multi-droplet impact on liquid film. International Journal of Heat and Mass Transfer, 2019, 139, 832-847.	2.5	31
25	Conceptual design and techno-economic analysis for a coal-to-SNG/methanol polygeneration process in series and parallel reactors with integration of waste heat recovery. Energy Conversion and Management, 2020, 214, 112890.	4.4	31
26	Experimental study of falling film evaporation heat transfer coefficient on horizontal tube. Desalination and Water Treatment, 2012, 50, 310-316.	1.0	30
27	Liquid sheet behaviors during a drop impact on wetted cylindrical surfaces. International Communications in Heat and Mass Transfer, 2014, 54, 67-74.	2.9	27
28	Flow and heat transfer during a single drop impact on a liquid film. Numerical Heat Transfer, Part B: Fundamentals, 2016, 69, 575-582.	0.6	26
29	Three-dimensional heat transfer coefficient distributions in a large horizontal-tube falling film evaporator. Desalination, 2015, 357, 104-116.	4.0	25
30	Experimental study on the distribution of local heat transfer coefficient of falling film heat transfer outside horizontal tube. International Journal of Heat and Mass Transfer, 2021, 170, 121031.	2.5	24
31	Effect of operation parameters on performance of tubular solid oxide fuel cell. AICHE Journal, 2008, 54, 554-564.	1.8	23
32	Maximum Spreading for Liquid Drop Impacting on Solid Surface. Industrial & Engineering Chemistry Research, 2019, 58, 10053-10063.	1.8	23
33	Numerical and experimental investigation of convective drying in unsaturated porous media with bound water. Heat and Mass Transfer, 2005, 41, 1103-1111.	1,2	22
34	Thermodynamic performance assessment of SOFC-RC-KC system for multiple waste heat recovery. Energy Conversion and Management, 2021, 245, 114579.	4.4	22
35	Advanced exergy analysis for the solid oxide fuel cell system combined with a kinetic-based modeling pre-reformer. Energy Conversion and Management, 2021, 245, 114560.	4.4	20
36	Study of steam parameters on the performance of a TVC-MED desalination plant. Desalination and Water Treatment, 2011, 33, 300-308.	1.0	19

#	Article	IF	Citations
37	A study of a single liquid drop impact on inclined wetted surfaces. Acta Mechanica, 2014, 225, 3353-3363.	1.1	18
38	Dynamic behaviors during a single liquid drop impact on a static drop located on spheres. Experimental Thermal and Fluid Science, 2014, 53, 244-250.	1.5	18
39	Effect of design parameters on thermodynamic losses of the heat transfer process in LT-MEE desalination plant. Desalination, 2015, 375, 40-47.	4.0	18
40	Circumferential distribution of local heat transfer coefficient during steam stratified flow condensation in vacuum horizontal tube. International Journal of Heat and Mass Transfer, 2017, 114, 816-825.	2 <b>.</b> 5	18
41	Interfacial phenomena in impact of droplet array on solid wall. Acta Mechanica, 2020, 231, 305-319.	1.1	18
42	Evaluation of a novel ammonia-water based combined cooling, desalination and power system based on thermodynamic and exergoeconomic analyses. Energy Conversion and Management, 2021, 239, 114176.	4.4	18
43	Characteristic study of steam maldistribution in horizontal-tube falling film evaporators. Applied Thermal Engineering, 2015, 75, 635-647.	3.0	16
44	Effects of preheater arrangement on performance of MED desalination system. Desalination, 2020, 496, 114702.	4.0	16
45	Condensation character of a stratified flow inside a horizontal tube. Desalination and Water Treatment, 2011, 33, 218-223.	1.0	15
46	Analysis of heat transfer critical point in LT-MEE desalination plant. Desalination, 2018, 432, 64-71.	4.0	15
47	A numerical investigation of liquid film flow and film thickness distribution outside a horizontal tube. International Journal of Low-Carbon Technologies, 2018, 13, 424-431.	1.2	15
48	Experimental Investigation of Adjustable Ejector Performance. Journal of Energy Engineering - ASCE, 2012, 138, 125-129.	1.0	14
49	Assessment of energy requirement for water production at dual-purpose plants in China. Desalination, 2007, 205, 214-223.	4.0	13
50	Heat transfer characteristics of horizontal tube falling film evaporation for desalination. Desalination and Water Treatment, 2015, 55, 3343-3349.	1.0	13
51	Crown and drop rebound on thin curved liquid films. International Journal of Heat and Mass Transfer, 2016, 98, 455-461.	2.5	13
52	Heat transfer characteristics of steam condensation flow in vacuum horizontal tube. International Journal of Heat and Mass Transfer, 2017, 108, 128-135.	2.5	13
53	Frictional pressure drop during steam stratified condensation flow in vacuum horizontal tube. International Journal of Heat and Mass Transfer, 2017, 115, 979-990.	2.5	13
54	Study of impact velocity and curvature ratio on the dynamic characteristics of double droplets impacting super-hydrophobic tubes. Physics of Fluids, 2021, 33, 013301.	1.6	13

#	Article	IF	CITATIONS
55	A simultaneous optimization model for a heat-integrated syngas-to-methanol process with Kalina Cycle for waste heat recovery. Energy, 2021, 227, 120536.	4.5	12
56	Experimental Studies on Heat Transfer Coefficients of Horizontal Tube Falling Film Evaporation With Seawater. Journal of Heat Transfer, 2017, 139, .	1.2	11
57	Numerical study on dynamic characteristics of double droplets impacting a super-hydrophobic tube with different impact velocities. International Journal of Computational Fluid Dynamics, 2019, 33, 222-233.	0.5	11
58	Non-simultaneous impact of multiple droplets on liquid film. Numerical Heat Transfer; Part A: Applications, 2019, 75, 137-147.	1.2	11
59	Flow and heat transfer characteristics of droplet obliquely impact on a stationary liquid film. Numerical Heat Transfer, Part B: Fundamentals, 2020, 77, 228-241.	0.6	11
60	Numerical study of oblique droplet impact on a liquid film. European Journal of Mechanics, B/Fluids, 2021, 85, 386-396.	1.2	11
61	Numerical and experimental investigation of heat and mass transfer in unsaturated porous media with low convective drying intensity. Heat Transfer - Asian Research, 2008, 37, 290-312.	2.8	10
62	High Temperature Steam Gasification of Corn Straw Pellets in Downdraft Gasifier: Preparation of Hydrogen-Rich Gas. Waste and Biomass Valorization, 2019, 10, 1333-1341.	1.8	10
63	Thermodynamic performance of a low temperature multi-effect distillation experimental unit with horizontal-tube falling film evaporation. Desalination and Water Treatment, 2011, 33, 202-208.	1.0	9
64	The research on thermal and economic performance of solar desalination system with evacuated tube collectors. Desalination and Water Treatment, 2013, 51, 3728-3734.	1.0	9
65	Parametric distributions of a horizontal-tube falling film evaporator for desalination. Desalination and Water Treatment, 2016, 57, 11699-11711.	1.0	9
66	Distribution of brine temperature in a large-scale horizontal-tube falling film evaporator. Applied Thermal Engineering, 2020, 164, 114437.	3.0	9
67	Impact of droplet on flowing liquid film: Experimental and numerical determinations. International Communications in Heat and Mass Transfer, 2021, 126, 105459.	2.9	9
68	Numerical investigation of the falling film thickness and heat transfer characteristics over horizontal round tube. International Journal of Multiphase Flow, 2022, 149, 103977.	1.6	9
69	Gas Properties on Crown Behavior and Drop Coalescence. Numerical Heat Transfer, Part B: Fundamentals, 2014, 65, 537-553.	0.6	8
70	Experimental study on overall heat transfer coefficient of seawater on three tube arrangements for horizontal-tube falling film evaporator. Desalination and Water Treatment, 2016, 57, 9993-10002.	1.0	8
71	Numerical analysis and insight of drop impacting dynamics upon a liquid film. Acta Mechanica, 2017, 228, 385-400.	1.1	8
72	Interfacial phenomena and heat transfer associated with multi-droplet impact on flowing liquid film. Numerical Heat Transfer; Part A: Applications, 2020, 77, 80-89.	1.2	8

#	Article	IF	CITATIONS
73	Interfacial phenomena in impact of droplet array on liquid film. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 615, 126292.	2.3	8
74	Numerical Investigation of Homogeneous Nucleation and Shock Effect in High-Speed Transonic Steam Flow. Heat Transfer Engineering, 2010, 31, 1007-1014.	1.2	7
75	Gas Characteristics of Pine Sawdust Catalyzed Pyrolysis by Additives. Journal of Thermal Science, 2021, 30, 333-342.	0.9	7
76	Investigation and optimization for multi-effect evaporation with thermal vapor compression (MEE-TVC) desalination system with various feed preheater arrangements. Desalination, 2022, 521, 115379.	4.0	7
77	Experimental study of two-phase heat transfer of droplet impact on liquid film. Physics of Fluids, 2022, 34, 042119.	1.6	7
78	Interface evolution characteristics of dual droplet successive oblique impact on liquid film. Physics of Fluids, 2022, 34, .	1.6	7
79	The research on thermal and economic performance of solar desalination system with salinity-gradient solar pond. Desalination and Water Treatment, 2013, 51, 3735-3742.	1.0	6
80	Experimental investigation on heat transfer in horizontal-tube falling-film evaporator. Desalination and Water Treatment, 2015, 56, 1440-1446.	1.0	6
81	Evolution and heat transfer after droplet impact on heated liquid film with vapor bubbles inside. Numerical Heat Transfer, Part B: Fundamentals, 2019, 76, 273-284.	0.6	6
82	Comprehensive Evaluation of the Control Efficiency of Heavy-Metal Emissions during Two-Step Thermal Treatment of Sewage Sludge. ACS Omega, 2020, 5, 24467-24476.	1.6	6
83	Study of the effect of surface wettability on droplet impact on spherical surfaces. International Journal of Low-Carbon Technologies, 2020, 15, 414-420.	1.2	6
84	Research progress of droplet impact on dry curve surfaces. AIP Conference Proceedings, 2018, , .	0.3	5
85	Parametric distribution of the condensation and evaporation processes in horizontal tube falling film evaporator. Applied Thermal Engineering, 2019, 162, 114103.	3.0	5
86	Spreading and oscillation induced by liquid drop impacting onto sessile drop. European Journal of Mechanics, B/Fluids, 2020, 79, 247-254.	1,2	5
87	Parametric Effects on Interface Evolution and Heat Transfer in Droplet Impact on Flowing Liquid Film. Industrial & Droplet Impact on Flowing Liquid Film.	1.8	5
88	Energy and exergy analysis of novel solar bi-ejector refrigeration system with injector. International Journal of Energy Research, 2009, 34, 815-826.	2.2	4
89	Analysis of adjusting method for load performance of TVC-MED desalination plant. Desalination and Water Treatment, 2013, 51, 857-862.	1.0	4
90	Exergy analysis of a solar-assisted MED desalination experimental unit. Desalination and Water Treatment, 2013, 51, 1272-1278.	1.0	4

#	Article	IF	Citations
91	Heat transfer characteristics of in-tube steam condensation process under stratified flow. International Journal of Heat and Mass Transfer, 2019, 145, 118798.	2.5	4
92	Simultaneous Optimization of a Heat-Integrated Coal-to-SNG/MeOH Polygeneration Process Based on Rigorous Kinetic Models. Industrial & Engineering Chemistry Research, 2020, 59, 22247-22257.	1.8	4
93	Droplet Wetting Propagation on a Hybrid-Wettability Surface. Langmuir, 2021, 37, 11646-11656.	1.6	4
94	Comparative performance evaluation of LT-MEE desalination systems with three feed configurations. , 0, 69, 217-228.		4
95	Numerical analysis on flow and heat transfer of a tube bundle in a horizontal-tube falling film evaporator. Desalination and Water Treatment, 2015, 55, 3336-3342.	1.0	3
96	Characterization of the microscopic mechanics in falling film evaporation outside a horizontal tube. Desalination and Water Treatment, 2015, 55, 3330-3335.	1.0	3
97	Research for the adjustable performance of the thermal vapor compressor in the MED–TVC system. Desalination and Water Treatment, 2015, 53, 1725-1734.	1.0	3
98	Thermal analysis of heat transfer performance in a horizontal tube bundle. Desalination and Water Treatment, 2015, 54, 1809-1818.	1.0	3
99	An investigation on the falling film thickness of sheet flow over a completely wetted horizontal round tube surface. Desalination and Water Treatment, 2016, 57, 16277-16287.	1.0	3
100	Interaction between liquid drop with low impact momentum and heated wall. Acta Mechanica, 2018, 229, 4459-4470.	1.1	3
101	Influence of Ammonium Dihydrogen Phosphate Addition on the Behavior of Potassium During Biomass Combustion. Waste and Biomass Valorization, 2020, 11, 6359-6367.	1.8	3
102	Thermoeconomic analysis of a CHP-based dual-purpose power plant. Desalination and Water Treatment, 2010, 22, 371-378.	1.0	2
103	Thermal analysis of internal condensation process in a horizontal tube of falling film evaporation. Desalination and Water Treatment, 2010, 24, 101-108.	1.0	2
104	Performance analysis of mixed feed LT-MED desalination system with thermal vapor compressor. Desalination and Water Treatment, 2012, 42, 248-255.	1.0	2
105	Numerical investigation for the supersonic steam jetting flow in the thermal vapor compressor. Desalination and Water Treatment, 2013, 51, 4684-4693.	1.0	2
106	Spherical drop impact on solid surfaces: Un-damped oscillation theoretical model. AIP Conference Proceedings, 2018, , .	0.3	2
107	Wave propagation on splat induced by liquid drop impingement. European Journal of Mechanics, B/Fluids, 2019, 76, 122-131.	1.2	2
108	Preparation of phosphorus-doped boron nitride and its adsorption of heavy metals from flue gas. Royal Society Open Science, 2020, 7, 200079.	1.1	2

#	Article	IF	CITATIONS
109	Comparative Study on Parallel Feed and Mixed Feed LT-MED Desalination Systems. , 2011, , .		1
110	Analysis of energy utilization coefficient in heat, power and gas cogeneration system. International Journal of Low-Carbon Technologies, 2008, 3, 139-146.	1.2	0
111	Performance Analysis of Water and Power Cogeneration System with Thermal Vapor Compressor. , 2010, , .		0
112	The Analysis of Influence Factors on Sprinkle Density of Falling Film in Horizontal Tube Evaporator for Seawater Desalination. , $2011, \ldots$		0
113	Critical dimensions of a large-scale falling film evaporator based on temperature difference loss. AIP Conference Proceedings, 2018, , .	0.3	0
114	Numerical investigation of flow and heat transfer in the sub-channel of an SCWR core with split-vanes. International Journal of Low-Carbon Technologies, 2018, 13, 414-423.	1.2	0
115	Experimental investigation on flow condensation pressure drop of steam in a horizontal tube. Thermal Science, 2022, 26, 4945-4955.	0.5	0