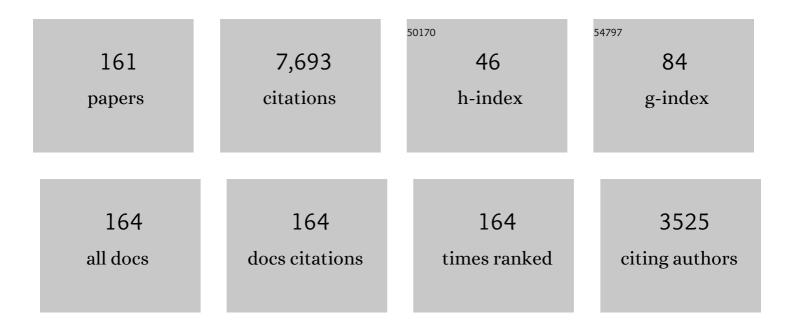
## Sanjeev Chandra

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Capillary effects during droplet impact on a solid surface. Physics of Fluids, 1996, 8, 650-659.	1.6	995
2	Impact, recoil and splashing of molten metal droplets. International Journal of Heat and Mass Transfer, 2000, 43, 2841-2857.	2.5	375
3	On a three-dimensional volume tracking model of droplet impact. Physics of Fluids, 1999, 11, 1406-1417.	1.6	351
4	Modeling the splash of a droplet impacting a solid surface. Physics of Fluids, 2000, 12, 3121-3132.	1.6	321
5	A three-dimensional model of droplet impact and solidification. International Journal of Heat and Mass Transfer, 2002, 45, 2229-2242.	2.5	288
6	Deposition of tin droplets on a steel plate: simulations and experiments. International Journal of Heat and Mass Transfer, 1998, 41, 2929-2945.	2.5	232
7	Splat Shapes in a Thermal Spray Coating Process: Simulations and Experiments. Journal of Thermal Spray Technology, 2002, 11, 206-217.	1.6	205
8	Cooling effectiveness of a water drop impinging on a hot surface. International Journal of Heat and Fluid Flow, 2001, 22, 201-210.	1.1	203
9	Effect of liquid-solid contact angle on droplet evaporation. Fire Safety Journal, 1996, 27, 141-158.	1.4	190
10	Formation of Solid Splats During Thermal Spray Deposition. Journal of Thermal Spray Technology, 2009, 18, 148-180.	1.6	156
11	Air bubble entrapment under an impacting droplet. Physics of Fluids, 2003, 15, 173-183.	1.6	155
12	Effect of Substrate Temperature on Adhesion Strength of Plasma-Sprayed Nickel Coatings. Journal of Thermal Spray Technology, 2003, 12, 370-376.	1.6	140
13	Formation of fingers around the edges of a drop hitting a metal plate with high velocity. Journal of Fluid Mechanics, 2004, 510, 353-373.	1.4	125
14	Predicting splat morphology in a thermal spray process. Surface and Coatings Technology, 2007, 201, 7789-7801.	2.2	123
15	Experiments on adding a surfactant to water drops boiling on a hot surface. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1997, 453, 673-689.	1.0	119
16	Drop impact onto a dry surface: Role of the dynamic contact angle. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 322, 183-191.	2.3	115
17	Parameters controlling solidification of molten wax droplets falling on a solid surface. Journal of Materials Science, 1999, 34, 4883-4894.	1.7	108
18	Spray Cooling Enhancement by Addition of a Surfactant. Journal of Heat Transfer, 1998, 120, 92-98.	1.2	103

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19	Observations of droplet impingement on a ceramic porous surface. International Journal of Heat and Mass Transfer, 1992, 35, 2377-2388.	2.5	94
20	Producing molten metal droplets with a pneumatic droplet-on-demand generator. Journal of Materials Processing Technology, 2005, 159, 295-302.	3.1	90
21	Modeling thermal spray coating processes: a powerful tool in design and optimization. Surface and Coatings Technology, 2003, 163-164, 1-11.	2.2	84
22	Thermal contact resistance between plasma-sprayed particles and flat surfaces. International Journal of Heat and Mass Transfer, 2007, 50, 1737-1749.	2.5	83
23	A Stochastic Model to Simulate the Formation of a Thermal Spray Coating. Journal of Thermal Spray Technology, 2003, 12, 53-69.	1.6	81
24	Dynamics of Splat Formation in Plasma Spray Coating Process. Plasma Chemistry and Plasma Processing, 2002, 22, 59-84.	1.1	80
25	Interactions between molten metal droplets impinging on a solid surface. International Journal of Heat and Mass Transfer, 2003, 46, 1395-1407.	2.5	80
26	Impact of plasma-sprayed metal particles on hot and cold glass surfaces. Thin Solid Films, 2006, 514, 212-222.	0.8	79
27	Boiling of droplets on a hot surface in low gravity. International Journal of Heat and Mass Transfer, 1996, 39, 1379-1393.	2.5	76
28	Freezing-induced splashing during impact of molten metal droplets with high Weber numbers. International Journal of Heat and Mass Transfer, 2005, 48, 5625-5638.	2.5	75
29	Splashing of molten tin droplets on a rough steel surface. International Journal of Heat and Mass Transfer, 2002, 45, 4561-4575.	2.5	74
30	Building threeâ€dimensional objects by deposition of molten metal droplets. Rapid Prototyping Journal, 2008, 14, 44-52.	1.6	69
31	A fast-response thin film thermocouple to measure rapid surface temperature changes. Experimental Thermal and Fluid Science, 2005, 30, 153-159.	1.5	68
32	Deducing Drop Size and Impact Velocity from Circular Bloodstains. Journal of Forensic Sciences, 2005, 50, 1-10.	0.9	68
33	Modeling the impact of a molten metal droplet on a solid surface using variable interfacial thermal contact resistance. Journal of Materials Science, 2007, 42, 9-18.	1.7	66
34	Numerical Simulation of Droplet Impact on Patterned Surfaces. Journal of Thermal Spray Technology, 2007, 16, 713-721.	1.6	66
35	Optimization of supersonic nozzle flow for titanium dioxide thin-film coating by aerosol deposition. Journal of Aerosol Science, 2011, 42, 771-780.	1.8	66
36	A pneumatic droplet-on-demand generator. Experiments in Fluids, 2003, 34, 755-762.	1.1	65

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37	SIMULATING DROPLET IMPACT ON A SUBSTRATE OF ARBITRARY SHAPE. Atomization and Sprays, 2001, 11, 397-414.	0.3	61
38	A fast response thermocouple for internal combustion engine surface temperature measurements. Experimental Thermal and Fluid Science, 2010, 34, 183-189.	1.5	59
39	Cold Spray Deposition of Copper Electrodes on Silicon and Glass Substrates. Journal of Thermal Spray Technology, 2013, 22, 1092-1102.	1.6	59
40	The Effect of Dissolving Salts in Water Sprays Used for Quenching a Hot Surface: Part 2—Spray Cooling. Journal of Heat Transfer, 2003, 125, 333-338.	1.2	58
41	Modeling development of residual stresses in thermal spray coatings. Computational Materials Science, 2006, 35, 13-26.	1.4	58
42	The Effect of Dissolving Gases or Solids in Water Droplets Boiling on a Hot Surface. Journal of Heat Transfer, 2001, 123, 719-728.	1.2	56
43	Coalescence of two droplets impacting a solid surface. Experiments in Fluids, 2010, 48, 1025-1035.	1.1	53
44	Predicting Thermal Contact Resistance Between Molten Metal Droplets and a Solid Surface. Journal of Heat Transfer, 2005, 127, 1269-1275.	1.2	50
45	Investigation of Splat Curling up in Thermal Spray Coatings. Journal of Thermal Spray Technology, 2006, 15, 531-536.	1.6	50
46	Supersonic Nozzle Flow Simulations for Particle Coating Applications: Effects of Shockwaves, Nozzle Geometry, Ambient Pressure, and Substrate Location upon Flow Characteristics. Journal of Thermal Spray Technology, 2011, 20, 514-522.	1.6	49
47	Producing droplets smaller than the nozzle diameter by using a pneumatic drop-on-demand droplet generator. Experiments in Fluids, 2007, 44, 105-114.	1.1	42
48	Effect of substrate oxidation on spreading of plasma-sprayed nickel on stainless steel. Surface and Coatings Technology, 2007, 202, 23-33.	2.2	41
49	The Effect of Dissolving Salts in Water Sprays Used for Quenching a Hot Surface: Part 1—Boiling of Single Droplets. Journal of Heat Transfer, 2003, 125, 326-332.	1.2	39
50	Effect of substrate temperature on the properties of coatings and splats deposited by wire arc spraying. Surface and Coatings Technology, 2006, 201, 3350-3358.	2.2	38
51	Rupture of thin films formed during droplet impact. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 1229-1245.	1.0	38
52	Producing molten metal droplets smaller than the nozzle diameter using a pneumatic drop-on-demand generator. Experimental Thermal and Fluid Science, 2013, 47, 26-33.	1.5	37
53	Particle Size Distribution in a Wire-Arc Spraying System. Journal of Thermal Spray Technology, 2005, 14, 502-510.	1.6	36
54	Photographing Impact of Molten Molybdenum Particles in a Plasma Spray. Journal of Thermal Spray Technology, 2005, 14, 354-361.	1.6	36

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55	Photographing Impact of Plasma-Sprayed Particles on Metal Substrates. Journal of Thermal Spray Technology, 2006, 15, 708-716.	1.6	36
56	Experiments on Remelting and Solidification of Molten Metal Droplets Deposited in Vertical Columns. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2007, 129, 311-318.	1.3	35
57	Droplet generation from pulsed micro-jets. Experimental Thermal and Fluid Science, 2008, 32, 1679-1686.	1.5	34
58	Leidenfrost Evaporation of Liquid Nitrogen Droplets. Journal of Heat Transfer, 1994, 116, 999-1006.	1.2	33
59	Splat formation in plasma-spray coating process. Pure and Applied Chemistry, 2002, 74, 441-445.	0.9	33
60	Numerical Studies on the Effects of Stagnation Pressure and Temperature on Supersonic Flow Characteristics in Cold Spray Applications. Journal of Thermal Spray Technology, 2011, 20, 1085-1097.	1.6	32
61	Heat Transfer During Deposition of Molten Aluminum Alloy Droplets to Build Vertical Columns. Journal of Heat Transfer, 2009, 131, .	1.2	29
62	Capillary rise of liquids in thermally sprayed porous copper wicks. Experimental Thermal and Fluid Science, 2018, 98, 206-216.	1.5	29
63	Thermal spray deposition of aluminum and zinc coatings on thermoplastics. Surface and Coatings Technology, 2020, 399, 126114.	2.2	29
64	Effect of Droplet Characteristics and Substrate Surface Topography on the Final Morphology of Plasma-Sprayed Zirconia Single Splats. Journal of Thermal Spray Technology, 2007, 16, 291-299.	1.6	28
65	Maximum Spread of Droplet on Solid Surface: Low Reynolds and Weber Numbers. Journal of Fluids Engineering, Transactions of the ASME, 2010, 132, .	0.8	28
66	Coalescence of sessile droplets of varying viscosities for line printing. International Journal of Multiphase Flow, 2013, 56, 138-148.	1.6	27
67	Boiling during high-velocity impact of water droplets on a hot stainless steel surface. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 3115-3131.	1.0	26
68	Effect of Substrate Temperature on Splashing of Molten Tin Droplets. Journal of Heat Transfer, 2004, 126, 445-452.	1.2	25
69	Photographing impact of plasma-sprayed particles on rough substrates. Journal of Materials Science, 2008, 43, 4631-4643.	1.7	25
70	Hot wire ignition of hydrogen-oxygen mixtures. International Journal of Hydrogen Energy, 1996, 21, 39-44.	3.8	24
71	Measuring Substrate Temperature Variation During Application of Plasma-Sprayed Zirconia Coatings. Journal of Thermal Spray Technology, 2007, 16, 580-587.	1.6	24
72	Small droplet formation in a pneumatic drop-on-demand generator: Experiments and analysis. Experimental Thermal and Fluid Science, 2010, 34, 1488-1497.	1.5	23

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73	Formation of Pores in Thermal Spray Coatings due to Incomplete Filling of Crevices in Patterned Surfaces. Plasma Chemistry and Plasma Processing, 2007, 27, 647-657.	1.1	22
74	A novel ultra-large flat plate heat pipe manufactured by thermal spray. Applied Thermal Engineering, 2020, 171, 115030.	3.0	22
75	Drop impact onto attached metallic meshes: liquid penetration and spreading. Experiments in Fluids, 2018, 59, 1.	1.1	21
76	Drawback During Deposition of Overlapping Molten Wax Droplets. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2008, 130, .	1.3	20
77	Rupture of radially spreading liquid films. Physics of Fluids, 2008, 20, .	1.6	20
78	Rupture and dewetting of water films on solid surfaces. Journal of Colloid and Interface Science, 2010, 352, 194-201.	5.0	20
79	Formation of liquid sheets by deposition of droplets on a surface. Journal of Colloid and Interface Science, 2014, 418, 292-299.	5.0	20
80	An Evaluation of the Underlying Mechanisms of Bloodstain Pattern Analysis Error. Journal of Forensic Sciences, 2011, 56, 1136-1142.	0.9	19
81	Experimental Testing of a Curvilinear Gas Shroud Nozzle for Improved Plasma Spraying. Plasma Chemistry and Plasma Processing, 2001, 21, 65-82.	1.1	18
82	Impact of molten metal droplets on the tip of a pin projecting from a flat surface. International Journal of Heat and Fluid Flow, 2005, 26, 334-347.	1.1	17
83	Modeling fragmentation of plasma-sprayed particles impacting on a solid surface at room temperature. Comptes Rendus - Mecanique, 2007, 335, 351-356.	2.1	17
84	Spray-Formed, Metal-Foam Heat Exchangers for High Temperature Applications. Journal of Thermal Science and Engineering Applications, 2009, 1, .	0.8	17
85	Adhesion of tin droplets impinging on a stainless steel plate: effect of substrate temperature and roughness. Science and Technology of Advanced Materials, 2003, 4, 173-181.	2.8	16
86	Tuning Hydrophobicity with Honeycomb Surface Structure and Hydrophilicity with <scp><scp>CF</scp></scp> 4 Plasma Etching for Aerosolâ€Deposited Titania Films. Journal of the American Ceramic Society, 2012, 95, 3955-3961.	1.9	16
87	Rupture of thin liquid films sprayed on solid surfaces. Experiments in Fluids, 2013, 54, 1.	1.1	16
88	Solidification contact angles of molten droplets deposited on solid surfaces. Journal of Materials Science, 2007, 42, 9511-9523.	1.7	15
89	Shape and surface texture of molten droplets deposited on cold surfaces. Surface and Coatings Technology, 2008, 202, 3960-3966.	2.2	15
90	A stochastic coating model to predict the microstructure of plasma sprayed zirconia coatings. Modelling and Simulation in Materials Science and Engineering, 2008, 16, 065006.	0.8	15

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91	Evaporation of ethanol films wicking on structured, porous coatings deposited on copper plates. International Journal of Heat and Mass Transfer, 2019, 136, 821-831.	2.5	14
92	Forced Convection Heat Transfer in Spray Formed Copper and Nickel Foam Heat Exchanger Tubes. Journal of Heat Transfer, 2012, 134, .	1.2	13
93	Modelling heat transfer in two-fluid interfacial flows. International Journal for Numerical Methods in Engineering, 2004, 61, 1028-1048.	1.5	12
94	Thermal conductivity and oxidation behavior of porous Inconel 625 coating interface prepared by dual-injection plasma spraying. Surface and Coatings Technology, 2021, 411, 126990.	2.2	12
95	Orange peel formation due to surface tension-driven flows within drying paint films. Journal of Coatings Technology Research, 2016, 13, 413-426.	1.2	11
96	Droplet impact and flow into a gap between parallel plates. Physics of Fluids, 2019, 31, 062104.	1.6	11
97	Fabrication of Composite Heat Sinks Consisting of a Thin Metallic Skin and a Polymer Core Using Wire-Arc Spraying. Journal of Thermal Spray Technology, 2019, 28, 974-985.	1.6	11
98	Contraction of free liquid ligaments. AICHE Journal, 2008, 54, 3084-3091.	1.8	10
99	An Investigation of Metal and Ceramic Thermal Barrier Coatings in a Spark-Ignition Engine. SAE International Journal of Engines, 0, 3, 115-125.	0.4	10
100	On surface area coverage by an electrostatic rotating bell atomizer. Journal of Coatings Technology Research, 2021, 18, 649-663.	1.2	10
101	Use of thermal emission signals to characterize the impact of fully and partially molten plasma-sprayed zirconia particles on glass surfaces. Surface and Coatings Technology, 2010, 204, 2323-2330.	2.2	9
102	Infiltration of impacting droplets into porous substrates. Experiments in Fluids, 2020, 61, 1.	1.1	9
103	Analysis of a Wide Range of Commercial Exterior Wood Coatings. Coatings, 2020, 10, 1013.	1.2	9
104	Cooling of porous metal surfaces by droplet impact. International Journal of Heat and Mass Transfer, 2020, 152, 119494.	2.5	9
105	Numerical Study of Impact and Solidification of a Droplet Over a Deposited Frozen Splat. International Journal of Computational Fluid Dynamics, 2004, 18, 133-138.	0.5	8
106	Metallization of Porous Polyethylene Using a Wire-Arc Spray Process for Heat Transfer Applications. Journal of Thermal Spray Technology, 2021, 30, 145-156.	1.6	8
107	A gauge to measure the mass flow rate of water in trees. Plant, Cell and Environment, 1994, 17, 867-874.	2.8	7
108	Heat Transfer in Plasma Spray Coating Processes. Advances in Heat Transfer, 2007, 40, 143-204.	0.4	7

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109	Deposition of Molten Ink Droplets on a Solid Surface. Journal of Imaging Science and Technology, 2008, 52, 20502-1-20502-10.	0.3	7
110	Bubble entrapment and escape from sprayed paint films. Progress in Organic Coatings, 2016, 97, 153-165.	1.9	7
111	Preliminary Testing of Metal-Based Thermal Barrier Coating in a Spark-Ignition Engine. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	0.5	6
112	Droplet Impact on a Solid Surface. , 2011, , 183-211.		6
113	Bubble growth and movement in drying paint films. Chemical Engineering Science, 2016, 145, 149-161.	1.9	6
114	Colour variation in drying paint films. Progress in Organic Coatings, 2019, 136, 105173.	1.9	6
115	Miniature Liquid Cold-plate Enabled by Metal Spraying: A Thermal Management Solution for a Modular 1 kW Bi-directional GaN-based dc-ac Converter. , 2022, , .		6
116	Modeling interfacial heat transfer from single or multiple deforming droplets. International Journal of Computational Fluid Dynamics, 2005, 19, 105-113.	0.5	5
117	Effect of moisture condensation on vapour transmission through porous membranes. Journal of Industrial Textiles, 2022, 51, 1931S-1951S.	1.1	5
118	COALESCENCE AND AGGLOMERATION OF DROPLETS SPRAYED ON A SUBSTRATE. Atomization and Sprays, 2017, 27, 81-94.	0.3	5
119	A Gas Shroud Nozzle for HVOF Spray Deposition. , 1998, , .		5
120	Adhesion of Wax Droplets to Porous Polymer Surfaces. Journal of Adhesion, 2015, 91, 538-555.	1.8	4
121	Nucleation of bubbles during drying of sprayed paint films. Progress in Organic Coatings, 2016, 99, 452-462.	1.9	4
122	Droplet Impact and Solidification in Plasma Spraying. , 2018, , 2967-3008.		4
123	IMPACT OF N-HEPTANE DROPLETS ON A HOT SURFACE IN LOW GRAVITY. Transactions of the Canadian Society for Mechanical Engineering, 1995, 19, 271-284.	0.3	3
124	Kinematic Viscosities of High-Temperature Materials Used in Plasma Spraying. Journal of the American Ceramic Society, 2011, 94, 1865-1871.	1.9	3
125	Heat Transfer Through Metal-Foam Heat Exchanger at Higher Temperature. , 2013, , .		3
126	Fabrication of Wire Mesh Heat Exchangers for Waste Heat Recovery Using Wire-Arc Spraying. Journal of Thermal Spray Technology, 2014, 23, 609-615.	1.6	3

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127	Fabrication of High-Temperature Heat Exchangers by Plasma Spraying Exterior Skins on Nickel Foams. Journal of Thermal Spray Technology, 2016, 25, 1056-1067.	1.6	3
128	Heat Transfer During High Temperature Gas Flow Through Metal Foam Heat Exchangers. Journal of Heat Transfer, 2017, 139, .	1.2	3
129	Surface coverage by impact of droplets from a monodisperse spray. Journal of Coatings Technology Research, 2020, 17, 207-217.	1.2	3
130	Preliminary Testing of Metal-Based Thermal Barrier Coating in a Spark-Ignition Engine. , 2009, , .		3
131	DYNAMICS OF PARTICLE DEFORMATION DURING PLASMA SPRAY COATING. High Temperature Material Processes, 2009, 13, 247-265.	0.2	3
132	Penetration characteristics of a liquid droplet impacting on a narrow gap: Experimental and numerical analysis. Physics of Fluids, 2022, 34, 057111.	1.6	3
133	Electrodes for thin metal films. Journal of Scientific Instruments, 1958, 35, 349-350.	0.5	2
134	Remelting and Coalescence of Molten Metal Droplets Deposited on a Plate. , 2004, , 939.		2
135	3D model of the impact and solidification of a droplet on a solid surface. , 2001, , .		1
136	Effect of Substrate Temperature on Splashing of Molten Metal Droplets. , 2004, , 71.		1
137	Building Vertical Walls by Deposition of Molten Metal Droplets. , 2005, , 325.		1
138	Experiments on Remelting and Solidification of Molten Metal Droplets Deposited in Vertical Columns. , 2005, , 461.		1
139	Analytical and Numerical Modeling of Conductive and Convective Heat Transfer Through Open-Cell Metal Foams. , 2012, , .		1
140	Droplet Impact on Solid Surfaces. Energy, Environment, and Sustainability, 2018, , 299-310.	0.6	1
141	Producing Steam by Spraying Water on a Heated Bed of Steel Spheres. Journal of Thermal Science and Engineering Applications, 2022, 14, .	0.8	1
142	Bell-cup serrations and their effect on atomization in electrostatic rotating bell atomizers. Experiments in Fluids, 2021, 62, 1.	1.1	1
143	Composite Heat Sink LED Cooling. , 2018, , .		1
144	Analyitcal heat conduction model of annular composite fins. , 2018, , .		1

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145	3D Modelling of Thermal Spray Droplet Splashing. , 1998, , .		1
146	Droplet Impact and Solidification in Plasma Spraying. , 2017, , 1-42.		1
147	Effect of Impact Velocity and Substrate Temperature on Boiling of Water Droplets Impinging on a Hot Stainless Steel Surface. , 2004, , 461.		0
148	Experimental Study on Micro-Droplets of Molten Wax Impacting on Solid Surfaces. , 2005, , .		0
149	Coating the inner surfaces of pipes with high-viscosity epoxy in annular flow. Journal of Coatings Technology Research, 2011, 8, 697-706.	1.2	0
150	Interactions Between High-Viscosity Droplets Deposited on a Surface: Experiments and Simulations. , 2012, , .		0
151	Adhesion of Wax Droplets to Porous Substrates. , 2012, , .		0
152	Surface Tension-Driven Flows within Thin Drying Paint Films. Journal of Heat Transfer, 2014, 136, .	1.2	0
153	Leveling of a Line of Paint Droplets on a Surface. , 2014, , .		0
154	Bubble Entrapment in Sprayed Films. , 2014, , .		0
155	Bubble Clustering in Drying Paint Films. Industrial & Engineering Chemistry Research, 2016, 55, 12825-12835.	1.8	0
156	Spray Impingement Fundamentals. , 2017, , 177-220.		0
157	A Three-Dimensional Numerical Study of Tin Droplets Landing Sequentially on a Solid Surface. , 2002, ,		0
158	Effect of Interfacial Heat Transfer on Molten Tin Jet Breakup in an Oil Tank. , 2004, , .		0
159	High Temperature Metal Foam Heat Exchanger. , 2014, , .		0
160	Surface Tension-Driven Flows within Drying Paint Films. , 2014, , .		0
161	EVAPORATION OF WATER AND N-HEPTANE DROPLETS ON HOT, POROUS, STAINLESS STEEL SURFACES. , 2018, ,		0