Cees W M Van Der Geld

List of Publications by Year
in descending order

52 papers	1,102 citations	361413 20 h-index	434195 31 g-index
57 all docs	57 docs citations	57 times ranked	913 citing authors

#	Article	IF	Citations
1	Turbulence modification and heat transfer enhancement by inertial particles in turbulent channel flow. Physics of Fluids, 2011, 23, .	4.0	80
2	Mass flow rate measurements in gasâ€“liquid flows by means of a venturi or orifice plate coupled to a void fraction sensor. Experimental Thermal and Fluid Science, 2009, 33, 253-260.	2.7	76
3	Particle image velocimetry measurements of a steam-driven confined turbulent water jet. Journal of Fluid Mechanics, 2005, 530, 353-368.	3.4	48
4	Some controversies in endovenous laser ablation of varicose veins addressed by opticalâ€“thermal mathematical modeling. Lasers in Medical Science, 2014, 29, 441-452.	2.1	48
5	The Influence of a Metal Stent on the Distribution of Thermal Energy during Irreversible Electroporation. PLoS ONE, 2016, 11, e0148457.	2.5	43
6	Mathematical modeling of the thermal effects of irreversible electroporation for inÂvitro, inÂvivo, and clinical use: a systematic review. International Journal of Hyperthermia, 2020, 37, 486-505.	2.5	42
7	Water droplet condensation and evaporation in turbulent channel flow. Journal of Fluid Mechanics, 2014, 749, 666-700.	3.4	41
8	The heat-pipe resembling action of boiling bubbles in endovenous laser ablation. Lasers in Medical Science, 2010, 25, 907-909.	2.1	40
9	Experimental Study of Heat Transfer and Pressure Drop Characteristics of Air/Water and Air-Steam/Water Heat Exchange in a Polymer Compact Heat Exchanger. Heat Transfer Engineering, 2005, 26, 18-27.	1.9	38
10	Numerical simulation of the drying of inkjet-printed droplets. Journal of Colloid and Interface Science, 2013, 392, 388-395.	9.4	37
11	Irreversible electroporation: Just another form of thermal therapy?. Prostate, 2015, 75, 332-335.	2.3	34
12	Surface property effects on dropwise condensation heat transfer from flowing air-steam mixtures to promote drainage. International Journal of Thermal Sciences, 2012, 54, 220-229.	4.9	31
13	Dropwise condensation from flowing airâ€“steam mixtures: Diffusion resistance assessed by controlled drainage. International Journal of Heat and Mass Transfer, 2011, 54, 4507-4517.	4.8	29
14	Optical-thermal mathematical model for endovenous laser ablation of varicose veins. Lasers in Medical Science, 2014, 29, 431-439.	2.1	28
15	Determination of the coefficients of Langevin models for inhomogeneous turbulent flows by three-dimensional particle tracking velocimetry and direct numerical simulation. Physics of Fluids, 2007, 19, 045102.	4.0	27
16	On the motion of a spherical bubble deforming near a plane wall. Journal of Engineering Mathematics, 2002, 42, 91-118.	1.2	25
17	Rewetting and boiling in jet impingement on high temperature steel surface. Physics of Fluids, 2018, 30, .	4.0	23
18	Quench cooling of fast moving steel plates by water jet impingement. International Journal of Heat and Mass Transfer, 2020, 163, 120545.	4.8	22

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19	Temperatures and the condensate heat resistance in dropwise condensation of multicomponent mixtures with inert gases. International Journal of Heat and Mass Transfer, 2002, 45, 3233-3243.	4.8	21
20	Extension of local front reconstruction method with controlled coalescence model. Physics of Fluids, 2018, 30, .	4.0	21
21	The dynamics of a boiling bubble before and after detachment. Heat and Mass Transfer, 2009, 45, 831-846.	2.1	20
22	Heat transfer mechanisms of a vapour bubble growing at a wall in saturated upward flow. Journal of Fluid Mechanics, 2015, 771, 264-302.	3.4	20
23	Modeling of droplet impact on a heated solid surface with a diffuse interface model. International Journal of Multiphase Flow, 2020, 123, 103173.	3.4	20
24	A critical comparison of smooth and sharp interface methods for phase transition. International Journal of Multiphase Flow, 2019, 120, 103093.	3.4	19
25	Temperature fields induced by direct contact condensation of steam in a cross-flow in a channel. Heat and Mass Transfer, 2011, 47, 981-990.	2.1	18
26	Non-isothermal two-phase flow with a diffuse-interface model. International Journal of Multiphase Flow, 2011, 37, 149-165.	3.4	18
27	Lagrangian velocity and acceleration statistics of fluid and inertial particles measured in pipe flow with 3D particle tracking velocimetry. International Journal of Multiphase Flow, 2015, 73, 97-107.	3.4	18
28	Experimental condensation study of vertical superhydrophobic surfaces assisted by hydrophilic constructal-like patterns. International Journal of Thermal Sciences, 2019, 135, 319-330.	4.9	18
29	Axisymmetric dynamics of a bubble near a plane wall. Journal of Fluid Mechanics, 2009, 640, 265-303.	3.4	15
30	A diffuse-interface approach to two-phase isothermal flow of a Van der Waals fluid near the critical point. International Journal of Multiphase Flow, 2010, 36, 558-569.	3.4	14
31	Lagrangian and Eulerian Statistics of Pipe Flows Measured with 3D-PTV at Moderate and High Reynolds Numbers. Flow, Turbulence and Combustion, 2013, 91, 105-137.	2.6	14
32	Concentration and velocity statistics of inertial particles in upward and downward pipe flow. Journal of Fluid Mechanics, 2017, 822, 640-663.	3.4	14
33	The mean condensate heat resistance of dropwise condensation with flowing, inert gases. Heat and Mass Transfer, 1995, 30, 435-445.	2.1	13
34	Experiments on the effect of acceleration on the drag of tapwater bubbles. Experiments in Fluids, 2001, 31, 708-722.	2.4	12
35	Forces on a boiling bubble in a developing boundary layer, in microgravity with g-jitter and in terrestrial conditions. Physics of Fluids, 2012, 24, .	4.0	12
36	Film boiling in quench cooling with high-temperature jets. International Journal of Heat and Mass Transfer, 2021, 164, 120578.	4.8	12

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37	Experimental Determination of Lagrangian Velocity Statistics in Turbulent Pipe Flow. Flow, Turbulence and Combustion, 2006, 76, 163-175.	2.6	11
38	Simulations of droplet collisions with a Diffuse Interface Model near the critical point. International Journal of Multiphase Flow, 2018, 107, 208-220.	3.4	11
39	Measurement and prediction of solid sphere trajectories in accelerated gas flow. International Journal of Multiphase Flow, 1997, 23, 357-376.	3.4	10
40	The nature of boiling during rewetting of surfaces at temperatures exceeding the thermodynamic limit for water superheat. Journal of Fluid Mechanics, 2020, 895, .	3.4	9
41	Effects of contact angle on condensate topology, drainage and efficiency of a condenser with minichannels. Experimental Thermal and Fluid Science, 2007, 31, 1033-1042.	2.7	8
42	On the prediction of condenser plate temperatures in a cross-flow condenser. Experimental Thermal and Fluid Science, 2002, 26, 139-145.	2.7	7
43	Flow statistics in plate and shell heat exchangers measured with PTV. International Journal of Heat and Fluid Flow, 2019, 79, 108461.	2.4	7
44	The effect of the angle of inclination of a condenser on the gas-to-plate heat resistance in dropwise condensation. Experimental Thermal and Fluid Science, 2004, 28, 237-241.	2.7	5
45	Inaccuracies in the inverse heat conduction problem solution and their effect on the estimation of heat fluxes during quenching. International Journal of Heat and Mass Transfer, 2022, 194, 122953.	4.8	5
46	Comparison of the local front reconstruction method with a diffuse interface model for the modeling of droplet collisions. Chemical Engineering Science: X, 2020, 7, 100066.	1.5	4
47	Experimental investigation of the thermal interactions of nucleation sites in flow boiling. International Journal of Heat and Mass Transfer, 2014, 78, 1208-1218.	4.8	3
48	Forces on rapidly growing vapor bubbles on a wall in forced convection with varying angle of inclination. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 505, 29-36.	4.7	3
49	SHAPE OSCILLATIONS OF A BOILING BUBBLE. Multiphase Science and Technology, 2010, 22, 157-175.	0.5	3
50	Why does second trimester demise of a monochorionic twin not result in acardiac twinning?. Birth Defects Research, 2021, 113, 1103-1111.	1.5	2
51	A numerical study of flow boiling in a microchannel using the local front reconstruction method. AICHE Journal, 2022, 68, .	3.6	2
52	A New Spectral-like Method to Model Surface Tension Driven Convection Near a Deforming Interface. International Journal of Computational Fluid Dynamics, 1999, 13, 1-24.	1.2	1