

T. Staffan Lundström

List of Publications by Year in descending order

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110
papers

1,891
citations

304368

22
h-index

344852

36
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110
all docs

110
docs citations

110
times ranked

1280
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental investigation of face mask filtration in the 15–150 µm range for stationary flows. <i>Journal of Applied Physics</i> , 2022, 131, 044702.	1.1	1
2	Investigation of a thin permeable layer effect on turbulent flow and passive scalar transport in a channel. <i>Powder Technology</i> , 2021, 377, 115-127.	2.1	2
3	Non-Stokesian flow through ordered thin porous media imaged by tomographic-PIV. <i>Experiments in Fluids</i> , 2021, 62, 1.	1.1	6
4	Investigation of Post-Darcy Flow in Thin Porous Media. <i>Transport in Porous Media</i> , 2021, 138, 157-184.	1.2	7
5	Sediment and morphological changes along Yangtze River's 500 km between Datong and Xuliujing before and after Three Gorges Dam commissioning. <i>Scientific Reports</i> , 2021, 11, 13662.	1.6	8
6	Modeling the Swelling of Hydrogels with Application to Storage of Stormwater. <i>Water (Switzerland)</i> , 2021, 13, 34.	1.2	2
7	Investigation of thermal dispersion and intra-pore turbulent heat flux in porous media. <i>International Journal of Heat and Fluid Flow</i> , 2020, 81, 108523.	1.1	8
8	Investigation of Hydrodynamic Dispersion and Intra-pore Turbulence Effects in Porous Media. <i>Transport in Porous Media</i> , 2020, 131, 739-765.	1.2	2
9	Dynamic Distributed Storage of Stormwater in Sponge-Like Porous Bodies: Modelling Water Uptake. <i>Water (Switzerland)</i> , 2020, 12, 2080.	1.2	3
10	Flow and sediment behaviours and morphodynamics of a diffuence~Confluence unit. <i>River Research and Applications</i> , 2020, 36, 1515-1528.	0.7	3
11	Experimental study of confined coaxial jets in a non-axisymmetric co-flow. <i>Experiments in Fluids</i> , 2020, 61, 1.	1.1	10
12	Comparing Internal Flow in Freezing and Evaporating Water Droplets Using PIV. <i>Water (Switzerland)</i> , 2020, 12, 1489.	1.2	4
13	Review of the Numerical Modeling of Compression Molding of Sheet Molding Compound. <i>Processes</i> , 2020, 8, 179.	1.3	10
14	Wall Shear Stress Measurement on Curve Objects with PIV in Connection to Benthic Fauna in Regulated Rivers. <i>Water (Switzerland)</i> , 2019, 11, 650.	1.2	8
15	Experimental study of the internal flow in freezing water droplets on a cold surface. <i>Experiments in Fluids</i> , 2019, 60, 1.	1.1	14
16	A Subgrid-Scale Model for Turbulent Flow in Porous Media. <i>Transport in Porous Media</i> , 2019, 129, 619-632.	1.2	3
17	Comparing Performance Metrics of Partial Aisle Containments in Hard Floor and Raised Floor Data Centers Using CFD. <i>Energies</i> , 2019, 12, 1473.	1.6	14
18	A New Technical Concept for Water Management and Possible Uses in Future Water Systems. <i>Water (Switzerland)</i> , 2019, 11, 2528.	1.2	8

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19	Evaporation of a sessile water droplet subjected to forced convection in humid environment. <i>Drying Technology</i> , 2019, 37, 129-138.	1.7	12
20	Modelling heat transfer during flow through a random packed bed of spheres. <i>Heat and Mass Transfer</i> , 2018, 54, 1225-1245.	1.2	11
21	Modelling transport and deposition of non-spherical micro- and nano-particles in composites manufacturing. <i>Journal of Reinforced Plastics and Composites</i> , 2018, 37, 507-519.	1.6	3
22	Numerical Simulations of Lubricating Grease Flow in a Rectangular Channel with and without Restrictions. <i>Tribology Transactions</i> , 2018, 61, 144-156.	1.1	8
23	A General Macroscopic Model for Turbulent Flow in Porous Media. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018, 140, .	0.8	4
24	Understanding Morphodynamic Changes of a Tidal River Confluence through Field Measurements and Numerical Modeling. <i>Water (Switzerland)</i> , 2018, 10, 1424.	1.2	15
25	The Effect of Reynolds Number on Jet in Asymmetric Co-Flows: A CFD Study. <i>International Journal of Chemical Engineering</i> , 2018, 2018, 1-11.	1.4	6
26	Modelling the dynamics of the flow within freezing water droplets. <i>Heat and Mass Transfer</i> , 2018, 54, 3761-3769.	1.2	10
27	Tomographic PIV of flow through ordered thin porous media. <i>Experiments in Fluids</i> , 2018, 59, 1.	1.1	19
28	Comparison of Hard Floor and Raised Floor Cooling of Servers with Regards to Local Effects. , 2018, , .		1
29	Effects of deswirlor position and its centre body shape as well as vortex finder extension downstream on cyclone performance. <i>Powder Technology</i> , 2018, 336, 45-56.	2.1	24
30	Computational Fluid Dynamics Modeling and Validating Experiments of Airflow in a Data Center. <i>Energies</i> , 2018, 11, 644.	1.6	41
31	Effect of working parameters of the plate heat exchanger on the thermal performance of the anti-bact heat exchanger system to disinfect Legionella hot water systems. <i>Applied Thermal Engineering</i> , 2018, 141, 435-443.	3.0	0
32	Discrete and continuous modelling of convective heat transport in a thin porous layer of mono sized spheres. <i>Heat and Mass Transfer</i> , 2017, 53, 151-160.	1.2	2
33	Flow in thin domains with a microstructure: Lubrication and thin porous media. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	1
34	Experimental and simulation validation of ABHE for disinfection of Legionella in hot water systems. <i>Applied Thermal Engineering</i> , 2017, 116, 253-265.	3.0	5
35	Transitional and Turbulent Flow in a Bed of Spheres as Measured with Stereoscopic Particle Image Velocimetry. <i>Transport in Porous Media</i> , 2017, 117, 45-67.	1.2	30
36	Large Eddy Simulation Investigation of an Industrial Cyclone Separator Fitted with a Pressure Recovery Deswirlor. <i>Chemical Engineering and Technology</i> , 2017, 40, 709-718.	0.9	19

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37	Measurements of Transitional and Turbulent Flow in a Randomly Packed Bed of Spheres with Particle Image Velocimetry. <i>Transport in Porous Media</i> , 2017, 116, 413-431.	1.2	29
38	Heat and mass transfer boundary conditions at the surface of a heated sessile droplet. <i>Heat and Mass Transfer</i> , 2017, 53, 3581-3591.	1.2	13
39	Lubricating Grease Flow in a Double Restriction Seal Geometry: A Computational Fluid Dynamics Approach. <i>Tribology Letters</i> , 2017, 65, 1.	1.2	12
40	Soot reduction in an entrained flow gasifier of biomass by active dispersion of fuel particles. <i>Fuel</i> , 2017, 201, 111-117.	3.4	20
41	Effects of the inlet angle on the collection efficiency of a cyclone with helical-roof inlet. <i>Powder Technology</i> , 2017, 305, 48-55.	2.1	67
42	Study the Flow behind a Semi-Circular Step Cylinder (Laser Doppler Velocimetry (LDV) and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 To	1.6	11
43	Modelling the Evaporation Rate in an Impingement Jet Dryer with Multiple Nozzles. <i>International Journal of Chemical Engineering</i> , 2017, 2017, 1-9.	1.4	3
44	NUMERICAL COMPUTATION OF MACROSCOPIC TURBULENT QUANTITIES IN A POROUS MEDIUM: AN EXTENSION TO A MACROSCOPIC TURBULENCE MODEL. <i>Journal of Porous Media</i> , 2016, 19, 497-513.	1.0	9
45	Modeling Transport and Deposition Efficiency of Oblate and Prolate Nano- and Micro-particles in a Virtual Model of the Human Airway. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2016, 138, .	0.8	7
46	Influence of Inertial Particles on Turbulence Characteristics in Outer and Near Wall Flow as Revealed With High Resolution Particle Image Velocimetry. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2016, 138, .	0.8	12
47	Smoothed Particle Hydrodynamic simulation of hydraulic jump using periodic open boundaries. <i>Applied Mathematical Modelling</i> , 2016, 40, 8391-8405.	2.2	20
48	An experimental study of temperature distribution in an autoclave. <i>Journal of Reinforced Plastics and Composites</i> , 2016, 35, 566-578.	1.6	25
49	Active fuel particles dispersion by synthetic jet in an entrained flow gasifier of biomass: Cold flow. <i>Powder Technology</i> , 2016, 302, 275-282.	2.1	11
50	Cold flow experiments in an entrained flow gasification reactor with a swirl-stabilized pulverized biofuel burner. <i>International Journal of Multiphase Flow</i> , 2016, 85, 267-277.	1.6	14
51	Darcy's Law for Flow in a Periodic Thin Porous Medium Confined Between Two Parallel Plates. <i>Transport in Porous Media</i> , 2016, 115, 473-493.	1.2	21
52	A stochastic two-scale model for pressure-driven flow between rough surfaces. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20160069.	1.0	22
53	Vacuum infusion of cellulose nanofibre network composites: Influence of porosity on permeability and impregnation. <i>Materials and Design</i> , 2016, 95, 204-211.	3.3	29
54	A validated CFD model for prediction of selective non-catalytic reduction of nitric oxide by cyanuric acid. <i>Progress in Computational Fluid Dynamics</i> , 2016, 16, 108.	0.1	1

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55	A Review of Particle Image Velocimetry for Fish Migration. World Journal of Mechanics, 2016, 06, 131-149.	0.1	6
56	Influence of Plate Size on the Evaporation Rate of a Heated Droplet. Drying Technology, 2015, 33, 1963-1970.	1.7	7
57	A CFD-based evaluation of selective non-catalytic reduction of nitric oxide in iron ore grate-kiln plants. Progress in Computational Fluid Dynamics, 2015, 15, 32.	0.1	10
58	Computational Investigation of an Industrial Cyclone Separator with Helical Roof Inlet. Chemical Engineering and Technology, 2015, 38, 1425-1434.	0.9	48
59	The Flow Field in a Virtual Model of a Rotary Kiln as a Function of Inlet Geometry and Momentum Flux Ratio. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	0.8	7
60	Modeling of a Groundwater Mound in a Two-Dimensional Heterogeneous Unconfined Aquifer in Response to Precipitation Recharge. Journal of Hydrologic Engineering - ASCE, 2015, 20, .	0.8	7
61	Calculation of Kiln Aerodynamics with two RANS Turbulence Models and by DDES. Flow, Turbulence and Combustion, 2015, 94, 859-878.	1.4	18
62	Compression moulding of sheet moulding compound: Modelling with computational fluid dynamics and validation. Journal of Reinforced Plastics and Composites, 2015, 34, 479-492.	1.6	8
63	Effects of the inlet angle on the flow pattern and pressure drop of a cyclone with helical-roof inlet. Chemical Engineering Research and Design, 2015, 102, 307-321.	2.7	77
64	PIV/PLIF experiments of jet mixing in a model of a rotary kiln. Experiments in Fluids, 2015, 56, 1.	1.1	12
65	Challenges and Opportunities within Simulation-driven Functional Product Development and Operation. Procedia CIRP, 2014, 22, 169-174.	1.0	11
66	Effect of Spatial Resolution of Rough Surfaces on Numerically Computed Flow Fields with Application to Hydraulic Engineering. Engineering Applications of Computational Fluid Mechanics, 2014, 8, 373-381.	1.5	7
67	Enhancing the Reliability of Laboratory Phosphorus Filter Tests: Effect of Influent Properties and Interpretation of Effluent Parameters. Water, Air, and Soil Pollution, 2014, 225, 1.	1.1	4
68	Experimental Investigation of Transitional Flow in Porous Media with Usage of a Pore Doublet Model. Transport in Porous Media, 2014, 101, 333-348.	1.2	13
69	Numerical derivation of dispersion coefficients for flow through three-dimensional randomly packed beds of monodisperse spheres. AIChE Journal, 2014, 60, 749-761.	1.8	16
70	The calculations of dispersion coefficients inside two-dimensional randomly packed beds of circular particles. AIChE Journal, 2013, 59, 1002-1011.	1.8	10
71	Longitudinal Dispersion Coefficient: Effects of Particle-Size Distribution. Transport in Porous Media, 2013, 99, 1-16.	1.2	19
72	Methods for locating the proper position of a planned fishway entrance near a hydropower tailrace. Limnologica, 2013, 43, 339-347.	0.7	19

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73	Modeling phosphate transport and removal in a compact bed filled with a mineral-based sorbent for domestic wastewater treatment. <i>Journal of Contaminant Hydrology</i> , 2013, 154, 70-77.	1.6	8
74	CFD-Modelling and Validation of Free Surface Flow During Spilling of Reservoir in Down-Scale Model. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2013, 7, 159-167.	1.5	28
75	The Effect of Hydraulic Loading Rate and Influent Source on the Binding Capacity of Phosphorus Filters. <i>PLoS ONE</i> , 2013, 8, e69017.	1.1	16
76	A Study of the Location of the Entrance of a Fishway in a Regulated River with CFD and ADCP. <i>Modelling and Simulation in Engineering</i> , 2012, 2012, 1-12.	0.4	15
77	Time-Dependent Deposition of Micro- and Nanofibers in Straight Model Airways. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2012, 134, .	0.8	7
78	Simulation Driven Processing Function Development, Offering and Operation. , 2012, , .		1
79	Phosphorus binding to <i>Filter P</i> in batch tests. <i>Environmental Technology (United Kingdom)</i> , 2012, 33, 1013-1019.	1.2	7
80	PIV analysis of merging flow in a simplified model of a rotary kiln. <i>Experiments in Fluids</i> , 2012, 53, 545-560.	1.1	19
81	Discrete and Continuous Modeling of Heat and Mass Transport in Drying of a Bed of Iron Ore Pellets. <i>Drying Technology</i> , 2012, 30, 760-773.	1.7	32
82	The effect of inertia and angular momentum of a fluid annulus on lateral transversal rotor vibrations. <i>Journal of Fluids and Structures</i> , 2012, 28, 328-342.	1.5	11
83	Simulation of convective drying of a cylindrical iron ore pellet. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2011, 21, 703-716.	1.6	12
84	Influence of Air Humidity on Drying of Individual Iron Ore Pellets. <i>Drying Technology</i> , 2011, 29, 1101-1111.	1.7	16
85	Burner Backflow Reduction in Regeneration Furnace. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2011, 5, 372-383.	1.5	3
86	Convective drying of an individual iron ore pellet – Analysis with CFD. <i>International Journal of Heat and Mass Transfer</i> , 2011, 54, 3882-3890.	2.5	43
87	Modelling of particle deposition during impregnation of dual scale fabrics. <i>Plastics, Rubber and Composites</i> , 2011, 40, 65-69.	0.9	12
88	Flow design of guiding device for downstream fish migration. <i>River Research and Applications</i> , 2010, 26, 166-182.	0.7	5
89	An investigation of particle deposition mechanisms during impregnation of dual-scale fabrics with micro particle image velocimetry. <i>Polymer Composites</i> , 2010, 31, 1232-1240.	2.3	4
90	CFD-modelling of Selective Non-Catalytic Reduction of NO _x in grate-kiln plants. <i>Progress in Computational Fluid Dynamics</i> , 2010, 10, 284.	0.1	20

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91	Respiratory Deposition of Fibers in the Non-Inertial Regime—Development and Application of a Semi-Analytical Model. <i>Aerosol Science and Technology</i> , 2010, 44, 847-860.	1.5	22
92	Bubble formation and motion in non-crimp fabrics with perturbed bundle geometry. <i>Composites Part A: Applied Science and Manufacturing</i> , 2010, 41, 83-92.	3.8	41
93	LAMINAR AND TURBULENT FLOWTHROUGH AN ARRAY OF CYLINDERS. <i>Journal of Porous Media</i> , 2010, 13, 1073-1085.	1.0	25
94	Flow through a Two-Scale Porosity Material. <i>Research Letters in Materials Science</i> , 2009, 2009, 1-4.	0.2	3
95	Compression moulding simulations of SMC using a multiobjective surrogate-based inverse modeling approach. <i>Mechanics of Composite Materials</i> , 2009, 45, 503-514.	0.9	10
96	Wetting dynamics in multiscale porous media. Porous pore—doublet model, experiment and theory. <i>AIChE Journal</i> , 2008, 54, 372-380.	1.8	28
97	Bubble motion through non-crimp fabrics during composites manufacturing. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 243-251.	3.8	48
98	Permeability of Sinter Bronze Friction Material for Wet Clutches. <i>Tribology Transactions</i> , 2008, 51, 303-309.	1.1	5
99	Hydraulic Turbine Diffuser Shape Optimization by Multiple Surrogate Model Approximations of Pareto Fronts. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2007, 129, 1228-1240.	0.8	52
100	Response surface—based shape optimization of a Francis draft tube. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2007, 17, 34-45.	1.6	11
101	Modeling of Power-law Fluid Flow Through Fiber Beds. <i>Journal of Composite Materials</i> , 2006, 40, 283-296.	1.2	9
102	Computational fluid dynamics applied to the vacuum infusion process. <i>Polymer Composites</i> , 2005, 26, 231-239.	2.3	20
103	Liquid Permeability of an Anisotropic Fiber Web. <i>Textile Research Journal</i> , 2005, 75, 304-311.	1.1	9
104	Numerical Study of the Local Permeability of Noncrimp Fabrics. <i>Journal of Composite Materials</i> , 2005, 39, 929-947.	1.2	42
105	A Statistical Approach to Permeability of Clustered Fibre Reinforcements. <i>Journal of Composite Materials</i> , 2004, 38, 1137-1149.	1.2	43
106	Numerical model for vacuum infusion manufacturing of polymer composites. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2003, 13, 383-394.	1.6	27
107	Digital speckle photography: visualization of mesoflow through clustered fiber networks. <i>Applied Optics</i> , 2002, 41, 1368.	2.1	8
108	Bubble transport through constricted capillary tubes with application to resin transfer molding. <i>Polymer Composites</i> , 1996, 17, 770-779.	2.3	46

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109	Effect of Perturbation of Fibre Architecture on Permeability Inside Fibre Tows. Journal of Composite Materials, 1995, 29, 424-443.	1.2	70
110	Influence from process parameters on void formation in resin transfer molding. Polymer Composites, 1994, 15, 25-33.	2.3	164