

T. Staffan Lundström

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2889664/publications.pdf>

Version: 2024-02-01

110
papers

1,891
citations

304368

22
h-index

344852

36
g-index

110
all docs

110
docs citations

110
times ranked

1280
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Influence from process parameters on void formation in resin transfer molding. <i>Polymer Composites</i> , 1994, 15, 25-33. | 2.3 | 164 |
| 2 | Effects of the inlet angle on the flow pattern and pressure drop of a cyclone with helical-roof inlet. <i>Chemical Engineering Research and Design</i> , 2015, 102, 307-321. | 2.7 | 77 |
| 3 | Effect of Perturbation of Fibre Architecture on Permeability Inside Fibre Tows. <i>Journal of Composite Materials</i> , 1995, 29, 424-443. | 1.2 | 70 |
| 4 | 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 |
| 5 | 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 |
| 6 | 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 |
| 7 | Computational Investigation of an Industrial Cyclone Separator with Helical-Roof Inlet. <i>Chemical Engineering and Technology</i> , 2015, 38, 1425-1434. | 0.9 | 48 |
| 8 | Bubble transport through constricted capillary tubes with application to resin transfer molding. <i>Polymer Composites</i> , 1996, 17, 770-779. | 2.3 | 46 |
| 9 | A Statistical Approach to Permeability of Clustered Fibre Reinforcements. <i>Journal of Composite Materials</i> , 2004, 38, 1137-1149. | 1.2 | 43 |
| 10 | 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 |
| 11 | Numerical Study of the Local Permeability of Noncrimp Fabrics. <i>Journal of Composite Materials</i> , 2005, 39, 929-947. | 1.2 | 42 |
| 12 | 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 |
| 13 | Computational Fluid Dynamics Modeling and Validating Experiments of Airflow in a Data Center. <i>Energies</i> , 2018, 11, 644. | 1.6 | 41 |
| 14 | 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 |
| 15 | 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 |
| 16 | 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 |
| 17 | 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 |
| 18 | Wetting dynamics in multiscale porous media. Porous pore-doublet model, experiment and theory. <i>AIChE Journal</i> , 2008, 54, 372-380. | 1.8 | 28 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | CFD-Modelling and Validation of Free Surface Flow During Spilling of Reservoir in Down-Scale Model. Engineering Applications of Computational Fluid Mechanics, 2013, 7, 159-167. | 1.5 | 28 |
| 20 | Numerical model for vacuum infusion manufacturing of polymer composites. International Journal of Numerical Methods for Heat and Fluid Flow, 2003, 13, 383-394. | 1.6 | 27 |
| 21 | An experimental study of temperature distribution in an autoclave. Journal of Reinforced Plastics and Composites, 2016, 35, 566-578. | 1.6 | 25 |
| 22 | LAMINAR AND TURBULENT FLOWTHROUGH AN ARRAY OF CYLINDERS. Journal of Porous Media, 2010, 13, 1073-1085. | 1.0 | 25 |
| 23 | Effects of deswirlor position and its centre body shape as well as vortex finder extension downstream on cyclone performance. Powder Technology, 2018, 336, 45-56. | 2.1 | 24 |
| 24 | Respiratory Deposition of Fibers in the Non-Inertial Regime—Development and Application of a Semi-Analytical Model. Aerosol Science and Technology, 2010, 44, 847-860. | 1.5 | 22 |
| 25 | A stochastic two-scale model for pressure-driven flow between rough surfaces. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160069. | 1.0 | 22 |
| 26 | Darcy's Law for Flow in a Periodic Thin Porous Medium Confined Between Two Parallel Plates. Transport in Porous Media, 2016, 115, 473-493. | 1.2 | 21 |
| 27 | Computational fluid dynamics applied to the vacuum infusion process. Polymer Composites, 2005, 26, 231-239. | 2.3 | 20 |
| 28 | CFD-modelling of Selective Non-Catalytic Reduction of NO _x in grate-kiln plants. Progress in Computational Fluid Dynamics, 2010, 10, 284. | 0.1 | 20 |
| 29 | Smoothed Particle Hydrodynamic simulation of hydraulic jump using periodic open boundaries. Applied Mathematical Modelling, 2016, 40, 8391-8405. | 2.2 | 20 |
| 30 | Soot reduction in an entrained flow gasifier of biomass by active dispersion of fuel particles. Fuel, 2017, 201, 111-117. | 3.4 | 20 |
| 31 | PIV analysis of merging flow in a simplified model of a rotary kiln. Experiments in Fluids, 2012, 53, 545-560. | 1.1 | 19 |
| 32 | Longitudinal Dispersion Coefficient: Effects of Particle-Size Distribution. Transport in Porous Media, 2013, 99, 1-16. | 1.2 | 19 |
| 33 | Methods for locating the proper position of a planned fishway entrance near a hydropower tailrace. Limnologica, 2013, 43, 339-347. | 0.7 | 19 |
| 34 | Large Eddy Simulation Investigation of an Industrial Cyclone Separator Fitted with a Pressure Recovery Deswirlor. Chemical Engineering and Technology, 2017, 40, 709-718. | 0.9 | 19 |
| 35 | Tomographic PIV of flow through ordered thin porous media. Experiments in Fluids, 2018, 59, 1. | 1.1 | 19 |
| 36 | Calculation of Kiln Aerodynamics with two RANS Turbulence Models and by DDES. Flow, Turbulence and Combustion, 2015, 94, 859-878. | 1.4 | 18 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Influence of Air Humidity on Drying of Individual Iron Ore Pellets. <i>Drying Technology</i> , 2011, 29, 1101-1111. | 1.7 | 16 |
| 38 | 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 |
| 39 | Numerical derivation of dispersion coefficients for flow through three-dimensional randomly packed beds of monodisperse spheres. <i>AIChE Journal</i> , 2014, 60, 749-761. | 1.8 | 16 |
| 40 | 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 |
| 41 | Understanding Morphodynamic Changes of a Tidal River Confluence through Field Measurements and Numerical Modeling. <i>Water (Switzerland)</i> , 2018, 10, 1424. | 1.2 | 15 |
| 42 | 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 |
| 43 | 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 |
| 44 | 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 |
| 45 | Experimental Investigation of Transitional Flow in Porous Media with Usage of a Pore Doublet Model. <i>Transport in Porous Media</i> , 2014, 101, 333-348. | 1.2 | 13 |
| 46 | 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 |
| 47 | 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 |
| 48 | Modelling of particle deposition during impregnation of dual scale fabrics. <i>Plastics, Rubber and Composites</i> , 2011, 40, 65-69. | 0.9 | 12 |
| 49 | PIV/PLIF experiments of jet mixing in a model of a rotary kiln. <i>Experiments in Fluids</i> , 2015, 56, 1. | 1.1 | 12 |
| 50 | 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 |
| 51 | Lubricating Grease Flow in a Double Restriction Seal Geometry: A Computational Fluid Dynamics Approach. <i>Tribology Letters</i> , 2017, 65, 1. | 1.2 | 12 |
| 52 | Evaporation of a sessile water droplet subjected to forced convection in humid environment. <i>Drying Technology</i> , 2019, 37, 129-138. | 1.7 | 12 |
| 53 | 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 |
| 54 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Challenges and Opportunities within Simulation-driven Functional Product Development and Operation. <i>Procedia CIRP</i> , 2014, 22, 169-174. | 1.0 | 11 |
| 56 | 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 |
| 57 | Study the Flow behind a Semi-Circular Step Cylinder (Laser Doppler Velocimetry (LDV) and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T | 1.6 | 11 |
| 58 | 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 |
| 59 | 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 |
| 60 | The calculations of dispersion coefficients inside two-dimensional randomly packed beds of circular particles. <i>AIChE Journal</i> , 2013, 59, 1002-1011. | 1.8 | 10 |
| 61 | A CFD-based evaluation of selective non-catalytic reduction of nitric oxide in iron ore grate-kiln plants. <i>Progress in Computational Fluid Dynamics</i> , 2015, 15, 32. | 0.1 | 10 |
| 62 | Modelling the dynamics of the flow within freezing water droplets. <i>Heat and Mass Transfer</i> , 2018, 54, 3761-3769. | 1.2 | 10 |
| 63 | Experimental study of confined coaxial jets in a non-axisymmetric co-flow. <i>Experiments in Fluids</i> , 2020, 61, 1. | 1.1 | 10 |
| 64 | Review of the Numerical Modeling of Compression Molding of Sheet Molding Compound. <i>Processes</i> , 2020, 8, 179. | 1.3 | 10 |
| 65 | Liquid Permeability of an Anisotropic Fiber Web. <i>Textile Research Journal</i> , 2005, 75, 304-311. | 1.1 | 9 |
| 66 | Modeling of Power-law Fluid Flow Through Fiber Beds. <i>Journal of Composite Materials</i> , 2006, 40, 283-296. | 1.2 | 9 |
| 67 | 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 |
| 68 | Digital speckle photography: visualization of mesoflow through clustered fiber networks. <i>Applied Optics</i> , 2002, 41, 1368. | 2.1 | 8 |
| 69 | 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 |
| 70 | Compression moulding of sheet moulding compound: Modelling with computational fluid dynamics and validation. <i>Journal of Reinforced Plastics and Composites</i> , 2015, 34, 479-492. | 1.6 | 8 |
| 71 | 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 |
| 72 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | A New Technical Concept for Water Management and Possible Uses in Future Water Systems. Water (Switzerland), 2019, 11, 2528. | 1.2 | 8 |
| 74 | Investigation of thermal dispersion and intra-pore turbulent heat flux in porous media. International Journal of Heat and Fluid Flow, 2020, 81, 108523. | 1.1 | 8 |
| 75 | Sediment and morphological changes along Yangtze River's 500 km between Datong and Xuliujing before and after Three Gorges Dam commissioning. Scientific Reports, 2021, 11, 13662. | 1.6 | 8 |
| 76 | Time-Dependent Deposition of Micro- and Nanofibers in Straight Model Airways. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, . | 0.8 | 7 |
| 77 | Phosphorus binding to <i>Filter P</i> in batch tests. Environmental Technology (United Kingdom), 2012, 33, 1013-1019. | 1.2 | 7 |
| 78 | 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 |
| 79 | Influence of Plate Size on the Evaporation Rate of a Heated Droplet. Drying Technology, 2015, 33, 1963-1970. | 1.7 | 7 |
| 80 | 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 |
| 81 | 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 |
| 82 | Modeling Transport and Deposition Efficiency of Oblate and Prolate Nano- and Micro-particles in a Virtual Model of the Human Airway. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, . | 0.8 | 7 |
| 83 | Investigation of Post-Darcy Flow in Thin Porous Media. Transport in Porous Media, 2021, 138, 157-184. | 1.2 | 7 |
| 84 | The Effect of Reynolds Number on Jet in Asymmetric Co-Flows: A CFD Study. International Journal of Chemical Engineering, 2018, 2018, 1-11. | 1.4 | 6 |
| 85 | Non-Stokesian flow through ordered thin porous media imaged by tomographic-PIV. Experiments in Fluids, 2021, 62, 1. | 1.1 | 6 |
| 86 | A Review of Particle Image Velocimetry for Fish Migration. World Journal of Mechanics, 2016, 06, 131-149. | 0.1 | 6 |
| 87 | Permeability of Sinter Bronze Friction Material for Wet Clutches. Tribology Transactions, 2008, 51, 303-309. | 1.1 | 5 |
| 88 | Flow design of guiding device for downstream fish migration. River Research and Applications, 2010, 26, 166-182. | 0.7 | 5 |
| 89 | Experimental and simulation validation of ABHE for disinfection of Legionella in hot water systems. Applied Thermal Engineering, 2017, 116, 253-265. | 3.0 | 5 |
| 90 | An investigation of particle deposition mechanisms during impregnation of dual-scale fabrics with micro particle image velocimetry. Polymer Composites, 2010, 31, 1232-1240. | 2.3 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Enhancing the Reliability of Laboratory Phosphorus Filter Tests: Effect of Influent Properties and Interpretation of Effluent Parameters. <i>Water, Air, and Soil Pollution</i> , 2014, 225, 1. | 1.1 | 4 |
| 92 | 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 |
| 93 | Comparing Internal Flow in Freezing and Evaporating Water Droplets Using PIV. <i>Water (Switzerland)</i> , 2020, 12, 1489. | 1.2 | 4 |
| 94 | Flow through a Two-Scale Porosity Material. <i>Research Letters in Materials Science</i> , 2009, 2009, 1-4. | 0.2 | 3 |
| 95 | Burner Backflow Reduction in Regeneration Furnace. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2011, 5, 372-383. | 1.5 | 3 |
| 96 | 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 |
| 97 | 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 |
| 98 | A Subgrid-Scale Model for Turbulent Flow in Porous Media. <i>Transport in Porous Media</i> , 2019, 129, 619-632. | 1.2 | 3 |
| 99 | Dynamic Distributed Storage of Stormwater in Sponge-Like Porous Bodies: Modelling Water Uptake. <i>Water (Switzerland)</i> , 2020, 12, 2080. | 1.2 | 3 |
| 100 | Flow and sediment behaviours and morphoá€ dynamics of a difffluenceá€ Confluence unit. <i>River Research and Applications</i> , 2020, 36, 1515-1528. | 0.7 | 3 |
| 101 | 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 |
| 102 | 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 |
| 103 | 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 |
| 104 | Modeling the Swelling of Hydrogels with Application to Storage of Stormwater. <i>Water (Switzerland)</i> , 2021, 13, 34. | 1.2 | 2 |
| 105 | Simulation Driven Processing Function Development, Offering and Operation. , 2012, , . | | 1 |
| 106 | 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 |
| 107 | Flow in thin domains with a microstructure: Lubrication and thin porous media. <i>AIP Conference Proceedings</i> , 2017, , . | 0.3 | 1 |
| 108 | Comparison of Hard Floor and Raised Floor Cooling of Servers with Regards to Local Effects. , 2018, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Experimental investigation of face mask filtration in the 15–150 µm range for stationary flows. Journal of Applied Physics, 2022, 131, 044702. | 1.1 | 1 |
| 110 | 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. Applied Thermal Engineering, 2018, 141, 435-443. | 3.0 | 0 |