Nils Erland L Haugen

List of Publications by Year
in descending order

63	1,965	304743	254184
papers	citations	22 h-index	43 g-index

64	64	64	1444
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A numerical study on the combustion of a resolved carbon particle. Combustion and Flame, 2022, 238, 111880.	5.2	2
2	Spectral characterisation of inertial particle clustering in turbulence. Journal of Fluid Mechanics, 2022, 934, .	3.4	8
3	Numerical approaches for thermochemical conversion of char. Progress in Energy and Combustion Science, 2022, 91, 100993.	31.2	11
4	Bed Model for Grate-Fired Furnaces: Computational Fluid Dynamics Modeling and Comparison to Experiments. Energy & Fuels, 2022, 36, 5852-5867.	5.1	1
5	The Pencil Code, a modular MPI code for partial differential equations and particles: multipurpose and multiuser-maintained. Journal of Open Source Software, 2021, 6, 2807.	4.6	92
6	The effect of turbulence on mass transfer in solid fuel combustion: RANS model. Combustion and Flame, 2021, 227, 65-78.	5.2	7
7	The effect of Stefan flow on Nusselt number and drag coefficient of spherical particles in non-isothermal gas flow. International Journal of Multiphase Flow, 2021, 140, 103650.	3.4	18
8	Kinetic parameters of petroleum coke gasification for modelling chemical-looping combustion systems. Energy, 2021, 232, 120935.	8.8	11
9	Thermophoresis and its effect on particle impaction on a cylinder for low and moderate Reynolds numbers. International Journal of Heat and Mass Transfer, 2021, 181, 121996.	4.8	2
10	Drag force for a burning particle. Combustion and Flame, 2020, 217, 188-199.	5.2	22
11	The effect of turbulence on mass transfer rates between inertial polydisperse particles and fluid. Journal of Fluid Mechanics, 2019, 874, 1147-1168.	3.4	14
12	Cloud-droplet growth due to supersaturation fluctuations in stratiform clouds. Atmospheric Chemistry and Physics, 2019, 19, 639-648.	4.9	15
13	The effect of Stefan flow on the drag coefficient of spherical particles in a gas flow. International Journal of Multiphase Flow, 2019, 117, 130-137.	3.4	34
14	A Two-Dimensional Study on the Effect of Anisotropy on the Devolatilization of a Large Wood Log. Energies, 2019, 12, 4430.	3.1	1
15	Inertial particle impaction on a cylinder in turbulent cross-flow at modest Reynolds numbers. International Journal of Multiphase Flow, 2019, 111, 53-61.	3.4	10
16	Fully resolved simulations of single char particle combustion using a ghostâ€cell immersed boundary method. AICHE Journal, 2018, 64, 2851-2863.	3.6	19
17	Numerical investigation of free-stream turbulence effects on the transition-in-wake state of flow past a circular cylinder. Journal of Turbulence, 2018, 19, 252-273.	1.4	7
18	A method for retrieving char oxidation kinetic data from reacting particle trajectories in a novel test facility. Fuel, 2018, 212, 240-255.	6.4	10

#	Article	IF	Citations
19	The effect of turbulence on mass transfer rates of small inertial particles with surface reactions. Journal of Fluid Mechanics, 2018, 836, 932-951.	3.4	17
20	Simulating Thermal Wood Particle Conversion: Ash-Layer Modeling and Parametric Studies. Energy & Fuels, 2018, 32, 10668-10682.	5.1	4
21	NOX formation in oxy-fuel combustion of lignite in a bubbling fluidized bed â€“ Modelling and experimental verification. International Journal of Greenhouse Gas Control, 2018, 76, 208-214.	4.6	18
22	Varying the forcing scale in low Prandtl number dynamos. Monthly Notices of the Royal Astronomical Society, 2018, 479, 2827-2833.	4.4	15
23	Turbophoresis in forced inhomogeneous turbulence. European Physical Journal Plus, 2018, 133, 1.	2.6	13
24	Multipoint radiation induced ignition of dust explosions: turbulent clustering of particles and increased transparency. Combustion Theory and Modelling, 2018, 22, 1084-1102.	1.9	8
25	Combustion of Thermally Thick Wood Particles: A Study on the Influence of Wood Particle Size on the Combustion Behavior. Energy & Fuels, 2018, 32, 6847-6862.	5.1	15
26	Eulerian and L agrangian approaches to multidimensional condensation and collection. Journal of Advances in Modeling Earth Systems, 2017, 9, 1116-1137.	3.8	22
27	CFD modeling and thermodynamic analysis of a concept of a MILD-OXY combustion large scale pulverized coal boiler. Energy, 2017, 140, 1305-1315.	8.8	52
28	Comprehensive Char Particle Gasification Model Adequate for Entrained-Flow and Fluidized-Bed Gasifiers. Energy & Fuels, 2017, 31, 2164-2174.	5.1	11
29	Oxy-fuel burner investigations for CO2 capture in cement plants. Energy Procedia, 2017, 120, 120-125.	1.8	8
30	Chemical Looping Combustion of Methane Using a Copper-based Oxygen Carrier in a 150 kW Reactor System. Energy Procedia, 2017, 114, 352-360.	1.8	32
31	Numerical models for thermochemical degradation of thermally thick woody biomass, and their application in domestic wood heating appliances and grate furnaces. Progress in Energy and Combustion Science, 2017, 63, 204-252.	31.2	85
32	Correlation effects between turbulence and the conversion rate of pulverized char particles. Combustion and Flame, 2017, 185, 160-172.	5.2	23
33	Design of the experimental rig for retrieving kinetic data of char particles. Fuel Processing Technology, 2017, 156, 178-184.	7.2	9
34	A ghost-cell immersed boundary method for the simulations of heat transfer in compressible flows under different boundary conditions Part-II: Complex geometries. International Journal of Heat and Mass Transfer, 2017, 104, 98-111.	4.8	29
35	The effect of turbulent clustering on particle reactivity. Proceedings of the Combustion Institute, 2017, 36, 2333-2340.	3.9	23
36	Drying of Thermally Thick Wood Particles: A Study of the Numerical Efficiency, Accuracy, and Stability of Common Drying Models. Energy & Fuels, 2017, 31, 13743-13760.	5.1	15

#	Article	IF	Citations
37	Numerical Study of Hydrogen Inhibition of Char Gasification Using Detailed Hetero- and Homogeneous Chemical Kinetics. Energy & Fuels, 2016, 30, 4411-4418.	5.1	3
38	Visualization system for the measurement of size and sphericity of char particles under combustion conditions. Powder Technology, 2016, 301, 141-152.	4.2	12
39	A ghost-cell immersed boundary method for simulations of heat transfer in compressible flows under different boundary conditions. International Journal of Heat and Mass Transfer, 2016, 92, 708-717.	4.8	54
40	Coupling constants and the generalized Riemann problem for isothermal junction flow. Journal of Hyperbolic Differential Equations, 2015, 12, 37-59.	0.5	11
41	Modeling radiation in particle clouds: on the importance of inter-particle radiation for pulverized solid fuel combustion. Heat and Mass Transfer, 2015, 51, 991-999.	2.1	5
42	Numerical Simulations of Staged Biomass Grate Fired Combustion with an Emphasis on NOx Emissions. Energy Procedia, 2015, 75, 156-161.	1.8	27
43	Predicting NOx Emissions from Wood Stoves using Detailed Chemistry and Computational Fluid Dynamics. Energy Procedia, 2015, 75, 1740-1745.	1.8	8
44	A comprehensive model for char particle conversion in environments containing O2 and CO2. Combustion and Flame, 2015, 162, 1455-1463.	5.2	27
45	The conversion mode of a porous carbon particle during oxidation and gasification. Combustion and Flame, 2014, 161, 612-619.	5.2	40
46	An experimental study of the reactivity of cellulosic-based chars from wastes. Fuel, 2014, 130, 306-314.	6.4	7
47	Influence of long pulse duration on time-resolved laser-induced incandescence. Applied Physics B: Lasers and Optics, 2013, 112, 359-367.	2.2	4
48	MSWI super heater tube bundle: Particle impaction efficiency and size distribution. Fuel Processing Technology, 2013, 106, 416-422.	7.2	9
49	Detection of turbulent thermal diffusion of particles in numerical simulations. Physics of Fluids, 2012, 24, .	4.0	18
50	Hydrogen fuel supply system and re-heat gas turbine combustion. Energy Procedia, 2012, 23, 151-160.	1.8	6
51	Nonlinear simulations of combustion instabilities with a quasi-1D Navierâ€“Stokes code. Journal of Sound and Vibration, 2011, 330, 5644-5659.	3.9	4
52	Assessment of existing H2/O2 chemical reaction mechanisms at reheat gas turbine conditions. International Journal of Hydrogen Energy, 2011, 36, 12025-12034.	7.1	30
53	Particle impaction on a cylinder in a crossflow as function of Stokes and Reynolds numbers. Journal of Fluid Mechanics, 2010, 661, 239-261.	3.4	91
54	Evolving turbulence and magnetic fields in galaxy clusters. Monthly Notices of the Royal Astronomical Society, 2006, 366, 1437-1454.	4.4	217

#	Article	IF	Citations
55	The origin and evolution of cluster magnetism. Astronomische Nachrichten, 2006, 327, 583-586.	1.2	3
56	Hydrodynamic and hydromagnetic energy spectra from large eddy simulations. Physics of Fluids, 2006, 18, 075106.	4.0	30
57	The Onset of a Small-Scale Turbulent Dynamo at Low Magnetic Prandtl Numbers. Astrophysical Journal, 2005, 625, L115-L118.	4.5	106
58	The problem of small and large scale fields in the solar dynamo. Astronomische Nachrichten, 2005, 326, 174-185.	1.2	13
59	Inertial range scaling in numerical turbulence with hyperviscosity. Physical Review E, 2004, 70, 026405.	2.1	72
60	Simulations of nonhelical hydromagnetic turbulence. Physical Review E, 2004, 70, 016308.	2.1	261
61	Suppression of small scale dynamo action by an imposed magnetic field. Physical Review E, 2004, 70, 036408.	2.1	34
62	Mach number dependence of the onset of dynamo action. Monthly Notices of the Royal Astronomical Society, 2004, 353, 947-952.	4.4	79
63	Is Nonhelical Hydromagnetic Turbulence Peaked at Small Scales?. Astrophysical Journal, 2003, 597, L141-L144.	4.5	110