

David F Fletcher

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8244633/david-f-fletcher-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

283
papers

8,596
citations

50
h-index

77
g-index

297
ext. papers

9,818
ext. citations

4.3
avg, IF

6.29
L-index

#	Paper	IF	Citations
283	Spiral wound modules and spacers. <i>Journal of Membrane Science</i> , 2004 , 242, 129-153	9.6	265
282	Flow boiling heat transfer of Freon R11 and HCFC123 in narrow passages. <i>International Journal of Heat and Mass Transfer</i> , 2000 , 43, 3347-3358	4.9	224
281	On the CFD modelling of Taylor flow in microchannels. <i>Chemical Engineering Science</i> , 2009 , 64, 2941-2950.	4.4	210
280	Modeling turbulent flow in stirred tanks with CFD: the influence of the modeling approach, turbulence model and numerical scheme. <i>Experimental Thermal and Fluid Science</i> , 2004 , 28, 431-445	3	170
279	Flow and mixing fields of turbulent bluff-body jets and flames. <i>Combustion Theory and Modelling</i> , 1998 , 2, 193-219	1.5	143
278	Design of micromixers using CFD modelling. <i>Chemical Engineering Science</i> , 2005 , 60, 2503-2516	4.4	140
277	Techniques for computational fluid dynamics modelling of flow in membrane channels. <i>Journal of Membrane Science</i> , 2003 , 211, 127-137	9.6	137
276	Effect of design on the performance of a dry powder inhaler using computational fluid dynamics. Part 1: Grid structure and mouthpiece length. <i>Journal of Pharmaceutical Sciences</i> , 2004 , 93, 2863-76	3.9	132
275	Influence of air flow on the performance of a dry powder inhaler using computational and experimental analyses. <i>Pharmaceutical Research</i> , 2005 , 22, 1445-53	4.5	131
274	A New Volume of Fluid Advection Algorithm: The Stream Scheme. <i>Journal of Computational Physics</i> , 2000 , 162, 1-32	4.1	124
273	Physical and numerical modelling of thunderstorm downbursts. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2001 , 89, 535-552	3.7	120
272	A CFD based combustion model of an entrained flow biomass gasifier. <i>Applied Mathematical Modelling</i> , 2000 , 24, 165-182	4.5	109
271	Arterial pulsation-driven cerebrospinal fluid flow in the perivascular space: a computational model. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2003 , 6, 235-41	2.1	104
270	Simulation of the Flow around Spacer Filaments between Channel Walls. 2. Mass-Transfer Enhancement. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 4879-4888	3.9	104
269	Characterization of the Mixing Quality in Micromixers. <i>Chemical Engineering and Technology</i> , 2003 , 26, 1262-1270	2	100
268	Taylor Flow in Microchannels: A Review of Experimental and Computational Work. <i>Journal of Computational Multiphase Flows</i> , 2010 , 2, 1-31		99
267	Spray drying of food ingredients and applications of CFD in spray drying. <i>Chemical Engineering and Processing: Process Intensification</i> , 2001 , 40, 345-354	3.7	99

266	CFD modelling of flow and heat transfer in the Taylor flow regime. <i>Chemical Engineering Science</i> , 2010 , 65, 2094-2107	4.4	97
265	Effect of design on the performance of a dry powder inhaler using computational fluid dynamics. Part 2: Air inlet size. <i>Journal of Pharmaceutical Sciences</i> , 2006 , 95, 1382-92	3.9	93
264	Simulation of the Flow around Spacer Filaments between Narrow Channel Walls. 1. Hydrodynamics. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 2977-2987	3.9	93
263	A CFD study of unsteady flow in narrow spacer-filled channels for spiral-wound membrane modules. <i>Desalination</i> , 2002 , 146, 195-201	10.3	92
262	What is important in the simulation of spray dryer performance and how do current CFD models perform?. <i>Applied Mathematical Modelling</i> , 2006 , 30, 1281-1292	4.5	89
261	The role of capsule on the performance of a dry powder inhaler using computational and experimental analyses. <i>Pharmaceutical Research</i> , 2005 , 22, 923-32	4.5	87
260	The influence of the relative timing of arterial and subarachnoid space pulse waves on spinal perivascular cerebrospinal fluid flow as a possible factor in syrinx development. <i>Journal of Neurosurgery</i> , 2010 , 112, 808-13	3.2	84
259	Effect of Axial Agitator Configuration (Up-Pumping, Down-Pumping, Reverse Rotation) on Flow Patterns Generated in Stirred Vessels. <i>Chemical Engineering Research and Design</i> , 2001 , 79, 845-856	5.5	84
258	Influence of mouthpiece geometry on the aerosol delivery performance of a dry powder inhaler. <i>Pharmaceutical Research</i> , 2007 , 24, 1450-6	4.5	81
257	PIV measurements of flow in an aerated tank stirred by a down- and an up-pumping axial flow impeller. <i>Experimental Thermal and Fluid Science</i> , 2004 , 28, 447-456	3	79
256	A new volume of fluid advection algorithm: the defined donating region scheme. <i>International Journal for Numerical Methods in Fluids</i> , 2001 , 35, 151-172	1.9	79
255	An assessment of different turbulence models for predicting flow in a baffled tank stirred with a Rushton turbine. <i>Chemical Engineering Science</i> , 2011 , 66, 5976-5988	4.4	75
254	Local condensation heat transfer rates in fine passages. <i>International Journal of Heat and Mass Transfer</i> , 2003 , 46, 4453-4466	4.9	73
253	Fouling Control in a Submerged Flat Sheet Membrane System: Part II Two-Phase Flow Characterization and CFD Simulations. <i>Separation Science and Technology</i> , 2006 , 41, 1411-1445	2.5	72
252	Laminar flow and heat transfer in a periodic serpentine channel with semi-circular cross-section. <i>International Journal of Heat and Mass Transfer</i> , 2006 , 49, 2912-2923	4.9	72
251	A computational fluids dynamics study of buoyancy effects in reverse osmosis. <i>Journal of Membrane Science</i> , 2004 , 245, 175-181	9.6	71
250	Hydrodynamics of liquid-liquid Taylor flow in microchannels. <i>Chemical Engineering Science</i> , 2013 , 92, 180-189	4.4	67
249	CFD approaches for the simulation of hydrodynamics and heat transfer in Taylor flow. <i>Chemical Engineering Science</i> , 2011 , 66, 5575-5584	4.4	66

248	Numerical simulation of downburst winds. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2009 , 97, 523-539	3.7	66
247	Computational fluid dynamics modelling of flow and permeation for pressure-driven membrane processes. <i>Desalination</i> , 2002 , 145, 183-186	10.3	66
246	A hydrodynamic and thermodynamic simulation of droplet impacts on hot surfaces, Part I: theoretical model. <i>International Journal of Heat and Mass Transfer</i> , 2001 , 44, 2633-2642	4.9	65
245	Simulation of Turbulent Swirl Flow in an Axisymmetric Sudden Expansion. <i>AIAA Journal</i> , 2001 , 39, 96-102.1	2.1	63
244	Mixing in bubble column reactors: Experimental study and CFD modeling. <i>Chemical Engineering Journal</i> , 2015 , 264, 291-301	14.7	62
243	Unsteady Flows with Mass Transfer in Narrow Zigzag Spacer-Filled Channels: A Numerical Study. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 6594-6603	3.9	61
242	Fluid dynamics of the cerebral aqueduct. <i>Pediatric Neurosurgery</i> , 1996 , 24, 229-36	0.9	60
241	Simulation of Unsteady Flow and Vortex Shedding for Narrow Spacer-Filled Channels. <i>Industrial & Engineering Chemistry Research</i> , 2003 , 42, 4962-4977	3.9	60
240	Lagrangian and Eulerian models for simulating turbulent dispersion and coalescence of droplets within a spray. <i>Applied Mathematical Modelling</i> , 2006 , 30, 1196-1211	4.5	58
239	An integral model for the transient pyrolysis of solid materials. <i>Fire and Materials</i> , 1997 , 21, 7-16	1.8	57
238	A hydrodynamic and thermodynamic simulation of droplet impacts on hot surfaces, Part II: validation and applications. <i>International Journal of Heat and Mass Transfer</i> , 2001 , 44, 2643-2659	4.9	56
237	Impact of tortuous geometry on laminar flow heat transfer in microchannels. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 83, 382-398	4.9	54
236	The use of computational approaches in inhaler development. <i>Advanced Drug Delivery Reviews</i> , 2012 , 64, 312-22	18.5	54
235	Numerical simulations of smoke movement from a pool fire in a ventilated tunnel. <i>Fire Safety Journal</i> , 1994 , 23, 305-325	3.3	54
234	Low-Reynolds number heat transfer enhancement in sinusoidal channels. <i>Chemical Engineering Science</i> , 2007 , 62, 694-702	4.4	52
233	Validation of a CFD model of Taylor flow hydrodynamics and heat transfer. <i>Chemical Engineering Science</i> , 2012 , 69, 541-552	4.4	50
232	Laminar Flow and Heat Transfer in a Periodic Serpentine Channel. <i>Chemical Engineering and Technology</i> , 2005 , 28, 353-361	2	50
231	Prospects for the Modelling and Design of Spray Dryers in the 21st Century. <i>Drying Technology</i> , 2003 , 21, 197-215	2.6	48

230	Steam explosion triggering: a review of theoretical and experimental investigations. <i>Nuclear Engineering and Design</i> , 1995 , 155, 27-36	1.8	48
229	A new correlation for bench-scale piloted ignition data of wood. <i>Fire Safety Journal</i> , 1997 , 29, 41-59	3.3	47
228	Simulation of the agglomeration in a spray using Lagrangian particle tracking. <i>Applied Mathematical Modelling</i> , 2004 , 28, 273-290	4.5	47
227	A review of pressure-induced propagation models of the vapour explosion process. <i>Progress in Nuclear Energy</i> , 1990 , 23, 137-179	2.3	47
226	Computational Fluid Dynamics Simulations of Taylor Bubbles in Tubular Membranes. <i>Chemical Engineering Research and Design</i> , 2005 , 83, 40-49	5.5	46
225	Heat transfer in well-characterised Taylor flow. <i>Chemical Engineering Science</i> , 2010 , 65, 6379-6388	4.4	45
224	Simulation of the Effects of Inlet Swirl on Gas Flow Patterns in a Pilot-Scale Spray Dryer. <i>Chemical Engineering Research and Design</i> , 2004 , 82, 821-833	5.5	45
223	Challenges of Simulating Droplet Coalescence within a Spray. <i>Drying Technology</i> , 2004 , 22, 1463-1488	2.6	44
222	Numerical Simulation of Unsteady Turbulent Flow in Axisymmetric Sudden Expansions. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2001 , 123, 574-587	2.1	44
221	Single and multiphase CFD approaches for modelling partially baffled stirred vessels: Comparison of experimental data with numerical predictions. <i>Chemical Engineering Science</i> , 2007 , 62, 6246-6262	4.4	43
220	Focal spinal arachnoiditis increases subarachnoid space pressure: a computational study. <i>Clinical Biomechanics</i> , 2006 , 21, 579-84	2.2	43
219	Taylor flow heat transfer in microchannels—Unification of liquid–liquid and gas–liquid results. <i>Chemical Engineering Science</i> , 2015 , 138, 140-152	4.4	42
218	Development of a CFD Model of Bubble Column Bioreactors: Part Two [Comparison of Experimental Data and CFD Predictions]. <i>Chemical Engineering and Technology</i> , 2014 , 37, 131-140	2	42
217	Laminar flow and heat transfer in a periodic trapezoidal channel with semi-circular cross-section. <i>International Journal of Heat and Mass Transfer</i> , 2007 , 50, 3471-3480	4.9	42
216	Particle aerosolisation and break-up in dry powder inhalers 1: evaluation and modelling of venturi effects for agglomerated systems. <i>Pharmaceutical Research</i> , 2010 , 27, 1367-76	4.5	41
215	An experimental study of gas–liquid flow in a narrow conduit. <i>International Journal of Heat and Mass Transfer</i> , 2000 , 43, 2313-2324	4.9	40
214	Validation of a Computationally Efficient Computational Fluid Dynamics (CFD) Model for Industrial Bubble Column Bioreactors. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 14526-14543	3.9	39
213	The presence of arachnoiditis affects the characteristics of CSF flow in the spinal subarachnoid space: a modelling study. <i>Journal of Biomechanics</i> , 2012 , 45, 1186-91	2.9	39

212	Film and slug behaviour in intermittent slug annular microchannel flows. <i>Chemical Engineering Science</i> , 2010 , 65, 5344-5355	4.4	39
211	Computer modelling of the cerebrospinal fluid flow dynamics of aqueduct stenosis. <i>Medical and Biological Engineering and Computing</i> , 1999 , 37, 59-63	3.1	39
210	Computational fluid dynamics modelling of cerebrospinal fluid pressure in Chiari malformation and syringomyelia. <i>Journal of Biomechanics</i> , 2013 , 46, 1801-9	2.9	38
209	An experimental and computational study of the vortex shape in a partially baffled agitated vessel. <i>Chemical Engineering Science</i> , 2007 , 62, 1915-1926	4.4	38
208	Computational fluid dynamics modelling of wood combustion. <i>Fire Safety Journal</i> , 1996 , 27, 69-84	3.3	38
207	CFD simulation of industrial bubble columns: Numerical challenges and model validation successes. <i>Applied Mathematical Modelling</i> , 2017 , 44, 25-42	4.5	37
206	A Computational Fluid Dynamics Study of a Tall-Form Spray Dryer. <i>Food and Bioprocesses Processing</i> , 2002 , 80, 163-175	4.9	37
205	Heat transfer and pressure drop characteristics of gas-liquid Taylor flow in mini ducts of square and rectangular cross-sections. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 103, 45-56	4.9	37
204	Utilizing cavity flow within double skin façade for wind energy harvesting in buildings. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2017 , 167, 114-127	3.7	36
203	Thermohydraulic performance of a periodic trapezoidal channel with a triangular cross-section. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 2925-2929	4.9	36
202	Hydrodynamic control of the interface between two liquids flowing through a horizontal or vertical microchannel. <i>Lab on A Chip</i> , 2004 , 4, 121-4	7.2	36
201	CFD modelling of reverse osmosis membrane flow and validation with experimental results. <i>Desalination</i> , 2007 , 217, 242-250	10.3	35
200	Thermohydraulics of square-section microchannels following a serpentine path. <i>Microfluidics and Nanofluidics</i> , 2006 , 2, 195-204	2.8	35
199	Subcooled flow boiling heat transfer in narrow passages. <i>International Journal of Heat and Mass Transfer</i> , 2003 , 46, 3673-3682	4.9	35
198	Experimental investigation into the impact of sparger design on bubble columns at high superficial velocities. <i>Chemical Engineering Research and Design</i> , 2016 , 106, 205-213	5.5	34
197	Effect of Flow Characteristics on Taylor Flow Heat Transfer. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 2010-2020	3.9	34
196	Laminar heat transfer simulations for periodic zigzag semicircular channels: Chaotic advection and geometric effects. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 62, 391-401	4.9	34
195	CFD simulation of precession in sudden pipe expansion flows with low inlet swirl. <i>Applied Mathematical Modelling</i> , 2002 , 26, 1-15	4.5	34

194	Chaotic advection in steady laminar heat transfer simulations: Periodic zigzag channels with square cross-sections. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 57, 274-284	4.9	33
193	Tough and Processable Hydrogels Based on Lignin and Hydrophilic Polyurethane.. <i>ACS Applied Bio Materials</i> , 2018 , 1, 2073-2081	4.1	33
192	Transient laminar heat transfer simulations in periodic zigzag channels. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 71, 758-768	4.9	32
191	Numerical simulation of solid suspension via mechanical agitation: effect of the modelling approach, turbulence model and hindered settling drag law. <i>International Journal of Computational Fluid Dynamics</i> , 2009 , 23, 173-187	1.2	32
190	Development of a CFD Model of Bubble Column Bioreactors: Part One [A Detailed Experimental Study. <i>Chemical Engineering and Technology</i> , 2013 , 36, 2065-2070	2	31
189	Numerical Simulations of Gas Flow Patterns Within a Tall-Form Spray Dryer. <i>Chemical Engineering Research and Design</i> , 2001 , 79, 235-248	5.5	31
188	The influence of inclined plates on expansion behaviour of solid suspensions in a liquid fluidised bed – computational fluid dynamics study. <i>Powder Technology</i> , 2005 , 156, 1-7	5.2	30
187	Computational fluid dynamic analysis of intracranial aneurysmal bleb formation. <i>Neurosurgery</i> , 2013 , 73, 1061-8; discussion 1068-9	3.2	29
186	Alternate Operating Methods for Improving the Performance of Continuous Stirred Tank Reactors. <i>Chemical Engineering Research and Design</i> , 2006 , 84, 569-582	5.5	29
185	An assessment of turbulence models applied to the simulation of a two-dimensional submerged jet. <i>Applied Mathematical Modelling</i> , 2001 , 25, 635-653	4.5	29
184	Implementation of a height function method to alleviate spurious currents in CFD modelling of annular flow in microchannels. <i>Applied Mathematical Modelling</i> , 2015 , 39, 4665-4686	4.5	28
183	Numerical simulation of idealised three-dimensional downburst wind fields. <i>Engineering Structures</i> , 2010 , 32, 3558-3570	4.7	28
182	Simulation of Gas Flow Instability in a Spray Dryer. <i>Chemical Engineering Research and Design</i> , 2003 , 81, 631-638	5.5	28
181	Cobra probe measurements of mean velocities, Reynolds stresses and higher-order velocity correlations in pipe flow. <i>Experimental Thermal and Fluid Science</i> , 2000 , 21, 206-217	3	28
180	Characterizing bubble column bioreactor performance using computational fluid dynamics. <i>Chemical Engineering Science</i> , 2016 , 144, 58-74	4.4	27
179	Gravitational effect on Taylor flow in horizontal microchannels. <i>Chemical Engineering Science</i> , 2012 , 69, 553-564	4.4	27
178	Particle size classification in a fluidized bed containing parallel inclined plates. <i>Minerals Engineering</i> , 2006 , 19, 162-171	4.9	27
177	Influence of inclined plates on the expansion behaviour of particulate suspensions in a liquid fluidised bed. <i>Chemical Engineering Science</i> , 2004 , 59, 3559-3567	4.4	27

176	Oxygen transfer in bubble columns at industrially relevant superficial velocities: Experimental work and CFD modelling. <i>Chemical Engineering Journal</i> , 2015 , 280, 138-146	14.7	26
175	Scale-adaptive simulation (SAS) modelling of a pilot-scale spray dryer. <i>Chemical Engineering Research and Design</i> , 2009 , 87, 1371-1378	5.5	25
174	Turbulent Shear Stress Effects on Plant Cell Suspension Cultures. <i>Chemical Engineering Research and Design</i> , 2001 , 79, 867-875	5.5	25
173	An improved mathematical model of melt/water detonationsII Model formulation and example results. <i>International Journal of Heat and Mass Transfer</i> , 1991 , 34, 2435-2448	4.9	25
172	Heat and mass transfer computations for laminar flow in an axisymmetric sudden expansion. <i>Computers and Fluids</i> , 1985 , 13, 207-221	2.8	25
171	Impact of Surfactant Chemistry on Bubble Column Systems. <i>Chemical Engineering and Technology</i> , 2014 , 37, 652-658	2	24
170	A Review of Computational Modelling of Flow Boiling in Microchannels. <i>Journal of Computational Multiphase Flows</i> , 2014 , 6, 79-110		24
169	Computational fluid dynamics modelling of an entrained flow biomass gasifier. <i>Applied Mathematical Modelling</i> , 1998 , 22, 747-757	4.5	24
168	USE OF COMPUTATIONAL FLUID DYNAMICS TECHNIQUES TO ASSESS DESIGN ALTERNATIVES FOR THE PLENUM CHAMBER OF A SMALL SPRAY DRYER. <i>Drying Technology</i> , 2001 , 19, 257-268	2.6	24
167	Solid fire extinguishment by a water spray. <i>Fire Safety Journal</i> , 1999 , 32, 119-135	3.3	24
166	Measurements of no in turbulent non-premixed flames stabilized on a bluff body. <i>Proceedings of the Combustion Institute</i> , 1996 , 26, 2191-2197		24
165	Numerical simulation of colloidal dispersion filtration: description of critical flux and comparison with experimental results. <i>Desalination</i> , 2006 , 192, 74-81	10.3	23
164	Experimental study of transient behaviour of laminar flow in zigzag semi-circular microchannels. <i>Experimental Thermal and Fluid Science</i> , 2015 , 68, 644-651	3	22
163	Wind engineering analysis of parabolic trough solar collectors: The effects of varying the trough depth. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2014 , 135, 118-128	3.7	22
162	Numerical investigation of the influence of topography on simulated downburst wind fields. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2010 , 98, 21-33	3.7	22
161	Simple and cost-effective powder disperser for aerosol particle size measurement. <i>Powder Technology</i> , 2008 , 187, 27-36	5.2	22
160	Numerical simulation of colloid dead-end filtration: Effect of membrane characteristics and operating conditions on matter accumulation. <i>Journal of Membrane Science</i> , 2008 , 313, 52-59	9.6	22
159	Experimental Measurement and Numerical Simulation of the Effect of Swirl on Flow Stability in Spray Dryers. <i>Chemical Engineering Research and Design</i> , 2001 , 79, 260-268	5.5	22

158	Wind Engineering Analysis of Parabolic Trough Collectors to Optimise Wind Loads and Heat Loss. <i>Energy Procedia</i> , 2015 , 69, 168-177	2.3	21
157	On the importance of upstream compressibility in microchannel boiling heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 58, 503-512	4.9	21
156	Particle aerosolisation and break-up in dry powder inhalers: evaluation and modelling of the influence of grid structures for agglomerated systems. <i>Journal of Pharmaceutical Sciences</i> , 2011 , 100, 4710-21	3.9	21
155	Mass Transfer Analysis of Spinning Cone Columns Using CFD. <i>Chemical Engineering Research and Design</i> , 2004 , 82, 752-761	5.5	21
154	A Simple Kinetic Theory Treatment of Volatile Liquid-Gas Interfaces. <i>Journal of Heat Transfer</i> , 2001 , 123, 486-491	1.8	21
153	The CHYMES coarse mixing model. <i>Progress in Nuclear Energy</i> , 1991 , 26, 31-61	2.3	21
152	Hydrodynamics and mixing in continuous oscillatory flow reactors Part I: Effect of baffle geometry. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016 , 108, 78-92	3.7	21
151	A CFD study on the effect of membrane permeance on permeate flux enhancement generated by unsteady slip velocity. <i>Journal of Membrane Science</i> , 2018 , 556, 138-145	9.6	20
150	Effects of fluid structure interaction in a three dimensional model of the spinal subarachnoid space. <i>Journal of Biomechanics</i> , 2014 , 47, 2826-30	2.9	20
149	Towards a CFD model of bubble columns containing significant surfactant levels. <i>Chemical Engineering Science</i> , 2015 , 127, 189-201	4.4	20
148	Potential application of double skin façade incorporating aerodynamic modifications for wind energy harvesting. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2018 , 174, 269-280	3.7	19
147	Particle aerosolisation and break-up in dry powder inhalers: evaluation and modelling of impaction effects for agglomerated systems. <i>Journal of Pharmaceutical Sciences</i> , 2011 , 100, 2744-54	3.9	19
146	Scale-resolving simulation to predict the updraught regions over buildings for MAV orographic lift soaring. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2015 , 140, 34-48	3.7	18
145	Simulation of the ignition of lean methane mixtures using CFD modelling and a reduced chemistry mechanism. <i>Applied Mathematical Modelling</i> , 2000 , 24, 689-696	4.5	18
144	Process Intensification in Spray Dryers by Turbulence Enhancement. <i>Chemical Engineering Research and Design</i> , 1999 , 77, 189-205	5.5	18
143	A mathematical model of melt/water detonations. <i>Applied Mathematical Modelling</i> , 1989 , 13, 339-347	4.5	18
142	Experimental investigation into the drag volume fraction correction term for gas-liquid bubbly flows. <i>Chemical Engineering Science</i> , 2017 , 170, 91-97	4.4	17
141	Assessment of the impact of bubble size modelling in CFD simulations of alternative bubble column configurations operating in the heterogeneous regime. <i>Chemical Engineering Science</i> , 2018 , 186, 88-101	4.4	17

140	Hydrodynamics and mixing in continuous oscillatory flow reactorsPart II: Characterisation methods. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016 , 102, 102-116	3.7	17
139	CFD simulation of Taylor flow: Should the liquid film be captured or not?. <i>Chemical Engineering Science</i> , 2017 , 167, 334-335	4.4	17
138	Heat Transfer and Fluid Dynamic Aspects of Explosive Melt-Water Interactions. <i>Advances in Heat Transfer</i> , 1997 , 129-213	1.9	17
137	Impact of Surfactant Addition on Oxygen Mass Transfer in a Bubble Column. <i>Chemical Engineering and Technology</i> , 2015 , 38, 44-52	2	16
136	Impact of thixotropy on flow patterns induced in a stirred tank: Numerical and experimental studies. <i>Chemical Engineering Research and Design</i> , 2008 , 86, 545-553	5.5	16
135	Analysis of shear-induced coagulation in an emulsion polymerisation reactor using computational fluid dynamics. <i>Chemical Engineering Science</i> , 2005 , 60, 2005-2015	4.4	16
134	Buoyancy-driven, transient, two-dimensional thermo-hydrodynamics of a melt-water-steam mixture. <i>Computers and Fluids</i> , 1988 , 16, 59-80	2.8	16
133	The particle size distribution of solidified melt debris from molten fuel-coolant interaction experiments. <i>Nuclear Engineering and Design</i> , 1988 , 105, 313-319	1.8	16
132	Laminar Flow and Heat Transfer in Periodic Serpentine Mini-Channels. <i>Journal of Enhanced Heat Transfer</i> , 2006 , 13, 309-320	1.7	16
131	Chiari malformation may increase perivascular cerebrospinal fluid flow into the spinal cord: A subject-specific computational modelling study. <i>Journal of Biomechanics</i> , 2017 , 65, 185-193	2.9	15
130	Thoracic aortic aneurysm: 4D flow MRI and computational fluid dynamics model. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015 , 18 Suppl 1, 1894-5	2.1	15
129	CFD study of the effect of unsteady slip velocity waveform on shear stress in membrane systems. <i>Chemical Engineering Science</i> , 2018 , 192, 16-24	4.4	15
128	Towards Autonomous MAV Soaring in Cities: CFD Simulation, EFD Measurement and Flight Trials. <i>International Journal of Micro Air Vehicles</i> , 2015 , 7, 441-448	0.8	15
127	Laminar Flow Transitions in a 2D Channel with Circular Spacers. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 5387-5396	3.9	15
126	An experimental and CFD study of liquid jet injection into a partially baffled mixing vessel: A contribution to process safety by improving the quenching of runaway reactions. <i>Chemical Engineering Science</i> , 2008 , 63, 924-942	4.4	15
125	Analysis of the Dynamic Response of a Reverse Osmosis Membrane to Time-Dependent Transmembrane Pressure Variation. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 7823-7834	3.9	15
124	Numerical studies of multiphase mixing with application to some small-scale experiments. <i>Nuclear Engineering and Design</i> , 1996 , 166, 135-145	1.8	14
123	Numerical simulation of annular flow hydrodynamics in microchannels. <i>Computers and Fluids</i> , 2016 , 133, 90-102	2.8	14

122	Tough hydrophilic polyurethane-based hydrogels with mechanical properties similar to human soft tissues. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 3512-3519	7.3	13
121	Design and evaluation of a porous burner for the mitigation of anthropogenic methane emissions. <i>Environmental Science & Technology</i> , 2009 , 43, 9329-34	10.3	13
120	Impinging jet simulation of stationary downburst flow over topography. <i>Wind and Structures, an International Journal</i> , 2007 , 10, 437-462		13
119	Numerical simulation of annular flow boiling in microchannels. <i>Journal of Computational Multiphase Flows</i> , 2016 , 8, 61-82		12
118	Effects of the structural properties of solid fuels on their re-ignition characteristics. <i>Fire and Materials</i> , 1998 , 22, 155-165	1.8	12
117	Assessment of an Eulerian CFD model for prediction of dilute droplet dispersion in a turbulent jet. <i>Applied Mathematical Modelling</i> , 2008 , 32, 2686-2705	4.5	12
116	Progress in Understanding the Physical Processes Inside Spinning Cone Columns. <i>Chemical Engineering Research and Design</i> , 2003 , 81, 122-130	5.5	12
115	High-Speed Laser Image Analysis of Plume Angles for Pressurised Metered Dose Inhalers: The Effect of Nozzle Geometry. <i>AAPS PharmSciTech</i> , 2017 , 18, 782-789	3.9	11
114	CFD Prediction of Odour Dispersion and Plume Visibility for Alumina Refinery Calciner Stacks. <i>Chemical Engineering Research and Design</i> , 2005 , 83, 231-241	5.5	11
113	An improved mathematical model of melt/water detonationsII. A study of escalation. <i>International Journal of Heat and Mass Transfer</i> , 1991 , 34, 2449-2459	4.9	11
112	A comparison of coarse mixing predictions obtained from the CHYMES and PM-ALPHA models. <i>Nuclear Engineering and Design</i> , 1992 , 135, 419-425	1.8	11
111	Numerical Simulation of Enclosed Gas Fire Extinguishment by a Water Spray. <i>Journal of Applied Fire Science</i> , 1995 , 5, 135-146		11
110	Hydrodynamics and mixing in airlift contactors: Experimental work and CFD modelling. <i>Chemical Engineering Research and Design</i> , 2017 , 127, 154-169	5.5	10
109	Numerical study of heat transfer in square millimetric zigzag channels in the laminar flow regime. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019 , 144, 107624	3.7	10
108	Transient Hydrodynamics and Free Surface Capture of an Under-Baffled Stirred Tank During Stopping. <i>Chemical Engineering Research and Design</i> , 2007 , 85, 626-636	5.5	10
107	The influence of inclined plates on expansion behaviour of solid suspensions in a liquid fluidised bed I A computational fluid dynamics study. <i>Powder Technology</i> , 2005 , 160, 20-26	5.2	10
106	Mathematical Modelling of the Piloted Ignition of Wet Wood Using the Heat-Balance Integral Method. <i>Journal of Applied Fire Science</i> , 1996 , 6, 91-107		10
105	Application of hybrid RANS-LES models to the prediction of flow behaviour in an industrial crystalliser. <i>Applied Mathematical Modelling</i> , 2020 , 77, 1797-1819	4.5	10

104	Understanding gradients in industrial bioreactors. <i>Biotechnology Advances</i> , 2021 , 46, 107660	17.8	10
103	Polypeptide-affined interpenetrating hydrogels with tunable physical and mechanical properties. <i>Biomaterials Science</i> , 2019 , 7, 926-937	7.4	9
102	Dynamic flow modelling in precipitator vessels [A study of turbulence modelling approaches. <i>Applied Mathematical Modelling</i> , 2014 , 38, 4163-4174	4.5	9
101	Validation of the Lagrangian Approach for Predicting Turbulent Dispersion and Evaporation of Droplets within a Spray. <i>Drying Technology</i> , 2006 , 24, 1373-1379	2.6	9
100	Exploration of Spinning Cone Column Capacity and Mass Transfer Performance Using CFD. <i>Chemical Engineering Research and Design</i> , 2005 , 83, 1372-1380	5.5	9
99	Validation of Chymes: simulant studies. <i>Nuclear Engineering and Design</i> , 1995 , 155, 97-114	1.8	9
98	LOCAL FLOW BOILING HEAT TRANSFER COEFFICIENTS IN NARROW CONDUITS. <i>Multiphase Science and Technology</i> , 2000 , 12, 16	1	9
97	Effect of Tube Size on Flame and Pressure Wave Propagation in a Tube Closed at One End: A Numerical Study. <i>Combustion Science and Technology</i> , 2020 , 192, 1731-1753	1.5	9
96	CFD study of the effect of perforated spacer on pressure loss and mass transfer in spacer-filled membrane channels. <i>Chemical Engineering Science</i> , 2020 , 222, 115704	4.4	9
95	Pressure distribution and flow dynamics in a nasal airway using a scale resolving simulation. <i>Physics of Fluids</i> , 2021 , 33, 011907	4.4	9
94	N95 respirator mask breathing leads to excessive carbon dioxide inhalation and reduced heat transfer in a human nasal cavity. <i>Physics of Fluids</i> , 2021 , 33, 081913	4.4	9
93	Simulation of particle transport and deposition in the modified chemical vapor deposition process. <i>Journal of Non-Crystalline Solids</i> , 2009 , 355, 327-334	3.9	8
92	Experiments on the mixing of molten uranium dioxide with water and initial comparisons with CHYMES code calculations. <i>Nuclear Engineering and Design</i> , 1994 , 146, 97-108	1.8	8
91	Some calculations of shocks and detonations for gas mixtures. <i>Computers and Fluids</i> , 1989 , 17, 333-350	2.8	8
90	The health digital twin: advancing precision cardiovascular medicine. <i>Nature Reviews Cardiology</i> , 2021 , 18, 803-804	14.8	8
89	Proper Orthogonal Decomposition (POD) analysis of CFD data for flow in an axisymmetric sudden expansion. <i>Chemical Engineering Research and Design</i> , 2017 , 123, 333-346	5.5	8
88	Current Challenges and Emergent Technologies for Manufacturing Artificial Right Ventricle to Pulmonary Artery (RV-PA) Cardiac Conduits. <i>Cardiovascular Engineering and Technology</i> , 2019 , 10, 205-215 ²	2.2	7
87	Oxygen transfer in pilot-scale contactors: An experimental and computational investigation into the effect of contactor design. <i>Chemical Engineering Journal</i> , 2018 , 344, 173-183	14.7	7

86	The influence of actuator materials and nozzle designs on electrostatic charge of pressurised metered dose inhaler (pMDI) formulations. <i>Pharmaceutical Research</i> , 2014 , 31, 1325-37	4.5	7
85	A general implementation of the H1 boundary condition in CFD simulations of heat transfer in swept passages. <i>International Journal of Heat and Mass Transfer</i> , 2007 , 50, 1833-1842	4.9	7
84	Simulation of particle-vortex interactions in the modified chemical vapor deposition process. <i>Journal of Non-Crystalline Solids</i> , 2007 , 353, 4066-4075	3.9	7
83	Dynamic response of a high-pressure reverse osmosis membrane simulation to time dependent disturbances. <i>Desalination</i> , 2006 , 191, 397-403	10.3	7
82	CFD analysis of spinning cone columns: prediction of unsteady gas flow and pressure drop in a dry column. <i>Chemical Engineering Journal</i> , 2002 , 87, 301-311	14.7	7
81	Tough hydrogels for soft artificial muscles. <i>Materials and Design</i> , 2021 , 203, 109609	8.1	7
80	Predicting power consumption in continuous oscillatory baffled reactors. <i>Chemical Engineering Science</i> , 2020 , 212, 115310	4.4	7
79	In-vitro and particle image velocimetry studies of dry powder inhalers. <i>International Journal of Pharmaceutics</i> , 2021 , 592, 119966	6.5	7
78	CFD Investigation of Flame and Pressure Wave Propagation through Variable Concentration Methane-Air Mixtures in a Tube Closed at One End. <i>Combustion Science and Technology</i> , 2021 , 193, 1203-1230	15.7	7
77	Heat exchanger specification: Coupling design and surface performance evaluation. <i>Chemical Engineering Research and Design</i> , 2015 , 93, 392-401	5.5	6
76	Mixing performance in continuous oscillatory baffled reactors. <i>Chemical Engineering Science</i> , 2020 , 219, 115600	4.4	6
75	Impact of Surfactant Addition on Oxygen Mass Transfer in a Bubble Column. <i>Chemical Engineering and Technology</i> , 2015 , 38, 571-573	2	6
74	Formation of tip-vortices on triangular prismatic-shaped cliffs. Part 2: A computational fluid dynamics study. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2012 , 109, 21-30	3.7	6
73	MATHEMATICAL MODELLING OF A ROTARY SWIRL CYCLONE SCRUBBER. <i>Chemical Engineering Communications</i> , 1997 , 161, 65-87	2.2	6
72	A framework for modeling particle size effects in emulsion polymerization systems using computational fluid dynamics linked to a detailed population balance model. <i>Computer Aided Chemical Engineering</i> , 2006 , 21, 551-556	0.6	6
71	Effects of gravity on the steady state of a reaction in a liquid-state microreactor—deviations from Poiseuille flow. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 1219-1224	3.6	6
70	Radiation absorption during premixing. <i>Nuclear Engineering and Design</i> , 1999 , 189, 435-440	1.8	6
69	Validation of the Chymes mixing model. <i>Nuclear Engineering and Design</i> , 1995 , 155, 85-96	1.8	6

68	Recent progress in the understanding of steam explosions. <i>Journal of Loss Prevention in the Process Industries</i> , 1994 , 7, 457-462	3.5	6
67	Numerical simulation of a laminar jet flow: a comparison of three CFD models. <i>Computer Physics Communications</i> , 1993 , 78, 113-120	4.2	6
66	Calculations of the wind-induced pressure distribution on a model building. <i>Fire Safety Journal</i> , 1993 , 21, 189-205	3.3	6
65	The nonhyperbolicity of multiphase flow equations: A nonlinear nonproblem?. <i>Computer Physics Communications</i> , 1989 , 56, 115-127	4.2	6
64	One-dimensional calculations of two-phase mixing flows. <i>International Journal for Numerical Methods in Engineering</i> , 1987 , 24, 459-469	2.4	6
63	ASSESSMENT OF THE SST AND OMEGA-BASED REYNOLDS STRESS MODELS FOR THE PREDICTION OF FLOW AND HEAT TRANSFER IN A SQUARE-SECTION U-BEND. <i>Computational Thermal Sciences</i> , 2009 , 1, 385-403	1.9	6
62	Investigation of turbulence model selection on the predicted flow behaviour in an industrial crystalliser [RANS and URANS approaches]. <i>Chemical Engineering Research and Design</i> , 2018 , 140, 205-220	5.5	6
61	An Investigation into the Powder Release Behavior from Capsule-Based Dry Powder Inhalers. <i>Aerosol Science and Technology</i> , 2015 , 49, 902-911	3.4	5
60	An automated segmentation framework for nasal computational fluid dynamics analysis in computed tomography. <i>Computers in Biology and Medicine</i> , 2019 , 115, 103505	7	5
59	Influence of Tortuous Geometry on the Hydrodynamic Characteristics of Laminar Flow in Microchannels. <i>Chemical Engineering and Technology</i> , 2015 , 38, 1406-1415	2	5
58	Experimental Investigation of Taylor and Intermittent Slug-annular/Annular Flow in Microchannels. <i>Experimental Heat Transfer</i> , 2014 , 27, 360-375	2.4	5
57	A numerical treatment of crystallization in tube flow. <i>Polymer Engineering and Science</i> , 2012 , 52, 1356-1366	3.6	5
56	Three Dimensional Effects in Taylor Flow in Circular Microchannels. <i>Houille Blanche</i> , 2013 , 99, 60-67	0.3	5
55	Vapour explosions: multiphase detonations or deflagrations?. <i>Shock Waves</i> , 1994 , 3, 181-192	1.6	5
54	Effects of head tilt on squeeze-bottle nasal irrigation - A computational fluid dynamics study. <i>Journal of Biomechanics</i> , 2021 , 123, 110490	2.9	5
53	The Effect of Active Pharmaceutical Ingredients on Aerosol Electrostatic Charges from Pressurized Metered Dose Inhalers. <i>Pharmaceutical Research</i> , 2015 , 32, 2928-36	4.5	4
52	Simulation of microchannel flows using a 3D height function formulation for surface tension modelling. <i>International Communications in Heat and Mass Transfer</i> , 2017 , 89, 122-133	5.8	4
51	Development of a slurry abrasion model using an Eulerian-Eulerian two-fluid approach. <i>Applied Mathematical Modelling</i> , 2017 , 44, 107-123	4.5	4

50	Computational Fluid Dynamics modelling of ultra-lean porous burners. <i>Progress in Computational Fluid Dynamics</i> , 2010 , 10, 352	0.7	4
49	Using CFD to identify means of reducing power consumption for mixing and suspension in paper pulp stock chests. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2008 , 3, 144-150	1.3	4
48	Jet injection studies for partially baffled mixing reactors: A general correlation for the jet trajectory and jet penetration depth. <i>Chemical Engineering Research and Design</i> , 2008 , 86, 1117-1127	5.5	4
47	The solution of coupled flow and chemistry problems. <i>Progress in Computational Fluid Dynamics</i> , 2001 , 1, 43	0.7	4
46	The effect of gravity on the rate of a simple liquid-state reaction in a small, unstirred cylindrical vessel. <i>Physical Chemistry Chemical Physics</i> , 2001 , 3, 1617-1621	3.6	4
45	The effect of coolant viscosity on natural convection film boiling. <i>Nuclear Engineering and Design</i> , 1999 , 189, 239-250	1.8	4
44	Propagation investigations using the CULDESAC model. <i>Nuclear Engineering and Design</i> , 1995 , 155, 271-287		4
43	A finite difference error arising from the use of a staggered grid. <i>Applied Mathematical Modelling</i> , 1991 , 15, 496-498	4.5	4
42	Predicting flow and residence time in alumina digestion vessels. <i>Chemical Engineering Science</i> , 2017 , 169, 212-224	4.4	3
41	The effects of variation in the arterial pulse waveform on perivascular flow. <i>Journal of Biomechanics</i> , 2019 , 90, 65-70	2.9	3
40	The effect of actuator nozzle designs on the electrostatic charge generated in pressurised metered dose inhaler aerosols. <i>Pharmaceutical Research</i> , 2015 , 32, 1237-48	4.5	3
39	Sustained high-pressure in the spinal subarachnoid space while arterial expansion is low may be linked to syrinx development. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017 , 20, 457-467	2.1	3
38	DETERMINATION OF THE INFLUENCE OF UNCERTAIN MODEL PARAMETERS IN PRESSURIZED GASIFICATION OF BLACK LIQUOR USING A FACTORIAL DESIGN. <i>Combustion Science and Technology</i> , 2005 , 177, 435-453	1.5	3
37	CFD Analysis of Scale Effects in Spinning Cone Columns. <i>Chemical Engineering Research and Design</i> , 2005 , 83, 951-958	5.5	3
36	FTIR spectroscopy measurements and CFD simulations of the pollutants arising from unflued combustion in a room. <i>Building and Environment</i> , 2001 , 36, 597-603	6.5	3
35	The effect of gravity on the rates of simple liquid-state reactions in a small, unstirred cylindrical vessel. Part II.. <i>Physical Chemistry Chemical Physics</i> , 2001 , 3, 3651-3655	3.6	3
34	Computational aspects of premixing modelling. <i>Nuclear Engineering and Design</i> , 1999 , 189, 179-189	1.8	3
33	Computer modelling of CSF flow in the subarachnoid space. <i>Journal of Clinical Neuroscience</i> , 1999 , 6, 498-500	2.2	3

32	Quantification of the probability of containment failure caused by an in-vessel steam explosion for the Sizewell B PWR. <i>Nuclear Engineering and Design</i> , 1995 , 155, 445-458	1.8	3
31	Hydrodynamics in a stirred tank in the transitional flow regime. <i>Chemical Engineering Research and Design</i> , 2018 , 132, 865-880	5.5	3
30	Development of dynamic compartment models for industrial aerobic fed-batch fermentation processes. <i>Chemical Engineering Journal</i> , 2021 , 420, 130402	14.7	3
29	A computational fluid dynamics model for co-deposition of silica and germania in the MCVD process. <i>Journal of Non-Crystalline Solids</i> , 2010 , 356, 24-31	3.9	2
28	Flow Patterns in Sudden Expansions and Their Relevance to Understanding the Behaviour of Spray Dryers. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2008 , 10, 305-322		2
27	The effect of gravity on the rate of a simple neutralisation reaction in a small, open cylindrical vessel. <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 1587-1591	3.6	2
26	Low Mach number instability of an explicit numerical scheme. <i>Applied Mathematical Modelling</i> , 1991 , 15, 40-45	4.5	2
25	Comments on Fuel-Coolant Premixing Modeling. <i>Nuclear Science and Engineering</i> , 1989 , 103, 101-102	1.2	2
24	Influence of tilt and surface roughness on the outflow wind field of an impinging jet. <i>Wind and Structures, an International Journal</i> , 2009 , 12, 179-204		2
23	Computational Fluid Dynamics modelling of hydrodynamics, mixing and oxygen transfer in industrial bioreactors with Newtonian broths. <i>Biochemical Engineering Journal</i> , 2021 , 177, 108265	4.2	2
22	Wind effects in solar fields with various collector designs 2016 ,		2
21	On the Use of Computational Fluid Dynamics (CFD) Modelling to Design Improved Dry Powder Inhalers. <i>Pharmaceutical Research</i> , 2021 , 38, 277-288	4.5	2
20	Phase offset between arterial pulsations and subarachnoid space pressure fluctuations are unlikely to drive periarterial cerebrospinal fluid flow. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021 , 20, 1751-1766	3.8	2
19	Validation studies to assist in the development of scale and system independent CFD models for industrial bubble columns. <i>Chemical Engineering Research and Design</i> , 2021 , 171, 1-12	5.5	2
18	Towards the design of an intensified coagulator. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017 , 121, 1-14	3.7	1
17	The shear rheology of bread dough: Analysis of local flow behaviour using CFD. <i>Food and Bioproducts Processing</i> , 2012 , 90, 361-369	4.9	1
16	Modeling of Microfluidic Devices 2013 , 117-144		1
15	Impact of chlorine dissociation for modified chemical vapor deposition. <i>Journal of Non-Crystalline Solids</i> , 2009 , 355, 817-820	3.9	1

14	Particle-Fluid Dynamics in Narrow Slit Settler Driven by Asymmetric Feed. <i>Journal of Hydraulic Engineering</i> , 1999 , 125, 1140-1149	1.8	1
13	Comments on the numerical scheme of Richards and Crane. <i>Applied Mathematical Modelling</i> , 1983 , 7, 63-64	4.5	1
12	Liquid volume and squeeze force effects on nasal irrigation using Volume of Fluid modelling. <i>Experimental and Computational Multiphase Flow</i> , 1	4.2	1
11	Combining experimental and computational techniques to understand and improve dry powder inhalers.. <i>Expert Opinion on Drug Delivery</i> , 2022 ,	8	1
10	Design, performance characterization and applications of continuous oscillatory baffled reactors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021 , 108718	3.7	1
9	Effect of breathing profiles on nebuliser drug delivery targeting the paranasal sinuses in a post-operative nasal cavity. <i>Journal of Aerosol Science</i> , 2022 , 161, 105913	4.3	1
8	The Effect of Char Oxidation on the Flaming Combustion Characteristics of Wood Materials. <i>Journal of Applied Fire Science</i> , 1996 , 6, 189-201		1
7	Application of hybrid RANS-LES models to the prediction of mixing time and residence time distribution: Case study of a draft tube reactor. <i>Chemical Engineering Science</i> , 2021 , 240, 116676	4.4	1
6	Experimental and numerical investigation of dry pressure drop of 3D-printed structured packings for gas/liquid contactors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022 , 108912	3.7	0
5	Computational assessment of the nasal air conditioning and paranasal sinus ventilation from nasal assisted breathing therapy. <i>Physics of Fluids</i> , 2022 , 34, 051912	4.4	0
4	Investigation of the flow patterns produced from sudden expansion geometries using pressure difference measurements and flow visualisation techniques. <i>Chemical Engineering Research and Design</i> , 2018 , 138, 280-291	5.5	
3	A novel method to include the free surface in a CFD model of jet injection into partially-baffled mixing vessels. <i>Progress in Computational Fluid Dynamics</i> , 2009 , 9, 368	0.7	
2	Wet surface wall model for latent heat exchange during evaporation.. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2022 , e3581	2.6	
1	Impact of impeller modelling approaches on SBES simulations of flow and residence time in a draft tube reactor. <i>Chemical Engineering Research and Design</i> , 2022 , 178, 157-163	5.5	