

Jyeshtharaj Joshi

List of Publications by Year in Descending Order

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

524 papers	15,353 citations	58 h-index	95 g-index
542 ext. papers	16,882 ext. citations	4.6 avg, IF	6.83 L-index

#	Paper	IF	Citations
524	Dynamics of a single bubble rising in a quiescent medium. <i>Experimental Thermal and Fluid Science</i> , 2022 , 132, 110546	3	1
523	Valorisation of End-of-Life tyres for generating valuable resources under circular economy. <i>Fuel</i> , 2022 , 314, 123138	7.1	0
522	Boron doped carbon nanotubes: Synthesis, characterization and emerging applications □ A review. <i>Chemical Engineering Journal</i> , 2022 , 427, 131616	14.7	14
521	Multiphase Flows: Flow Regimes, Lower Order Models, and Correlations 2022 , 23-94		
520	Exfoliated graphene and its derivatives from liquid phase and their role in performance enhancement of epoxy matrix composite. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022 , 156, 106886	8.4	1
519	Valorization of plastic wastes for production of fuels and value-added chemicals through pyrolysis □ A review. <i>Thermal Science and Engineering Progress</i> , 2022 , 32, 101316	3.6	3
518	Thermal performance analysis of novel receiver for parabolic trough solar collector. <i>Energy</i> , 2022 , 124343.9	7.9	
517	Conversion of refuse derived fuel from municipal solid waste into valuable chemicals using advanced thermo-chemical process. <i>Journal of Cleaner Production</i> , 2021 , 329, 129653	10.3	2
516	Hydrogen storage in boron-doped carbon nanotubes: Effect of dopant concentration. <i>International Journal of Hydrogen Energy</i> , 2021 ,	6.7	2
515	Mechanistic and kinetic study of thermolysis reaction with hydrolysis step products in Cu□□ thermochemical cycle. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 12672-12681	6.7	3
514	Influence of the concentration of nitric acid on the composition of NOX gas evolved during the dissolution of nuclear fuel and its implications on the PUREX process. <i>Progress in Nuclear Energy</i> , 2021 , 135, 103704	2.3	0
513	Chronological development of innovations in reflector systems of parabolic trough solar collector (PTC) - A review. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 145, 111002	16.2	7
512	Dynamics of bubbles rising in pseudo-2D bubble column: Effect of confinement and inertia. <i>Chemical Engineering Journal</i> , 2021 , 405, 126615	14.7	5
511	Instabilities of a freely moving spherical particle in a Newtonian fluid: Direct Numerical Simulation. <i>International Journal of Chemical Reactor Engineering</i> , 2021 , 19, 699-715	1.2	
510	Development of inexpensive, simple and environment-friendly solar selective absorber using copper nanoparticle. <i>International Journal of Chemical Reactor Engineering</i> , 2021 , 19, 727-737	1.2	1
509	Numerical simulations of jacket side thermal-hydraulic performance for large stirred vessels. <i>Numerical Heat Transfer; Part A: Applications</i> , 2021 , 79, 513-536	2.3	
508	Valorization of solid waste using advanced thermo-chemical process: A review. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 105434	6.8	13

507	Temperature-induced pH changes govern hydrate transformation during cooling crystallization of potassium acid phthalate. <i>Chemical Engineering Research and Design</i> , 2021 , 174, 463-470	5.5	0
506	Design Modification in the Stationary Bowl of Annular Centrifugal Extractors to Handle Adverse Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 11757-11766	3.9	2
505	Experimental Study on the Mechanism and Kinetics of CuCl ₂ Hydrolysis Reaction of the CuCl Thermochemical Cycle in a Fluidized Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 12028-12037	3.9	5
504	Analysis of kinetic data for the dissolution of UO ₂ fuel pellets in nitric acid. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2020 , 324, 211-218	1.5	4
503	Synthesis of boron and nitrogen co-doped carbon nanotubes and their application in hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 13406-13413	6.7	15
502	Behavior of particle swarms at low and moderate Reynolds numbers using computational fluid dynamicsDiscrete element model. <i>Physics of Fluids</i> , 2020 , 32, 073304	4.4	6
501	3D CFD simulation of turbulent flow distribution and pressure drop in a dividing manifold system using openfoam. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 151, 119420	4.9	5
500	A review of granular flow in screw feeders and conveyors. <i>Powder Technology</i> , 2020 , 366, 369-381	5.2	19
499	A techno-economic comparison between piston steam engines as dispatchable power generation systems for renewable energy with concentrated solar harvesting and thermal storage against solar photovoltaics with battery storage. <i>Energy</i> , 2020 , 213, 118732	7.9	3
498	Estimation of dispersion coefficient in a solid-liquid fluidised bed system. <i>Powder Technology</i> , 2020 , 374, 560-576	5.2	4
497	Computational Fluid Dynamic Study of Biomass Cook StovePart 2: Devolatilization and Heterogeneous Combustion. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 14507-14521	3.9	2
496	Elucidation of Thermal Degradation Model for Low and High Density Polyethylene by Statistical Parameters. <i>ChemistrySelect</i> , 2020 , 5, 14153-14160	1.8	2
495	Effect of crystallizer design and operational parameters on the batch crystallization of ibuprofen I: experimental. <i>Indian Chemical Engineer</i> , 2020 , 1-13	1	
494	Flow past a single stationary sphere, 1. Experimental and numerical techniques. <i>Powder Technology</i> , 2020 , 365, 115-148	5.2	17
493	Valorisation of biomass pellets to renewable fuel and chemicals using pyrolysis: characterisation of pyrolysis products and its application. <i>Indian Chemical Engineer</i> , 2020 , 62, 78-91	1	4
492	Scale-up of a downflow bubble column: Experimental investigations. <i>Chemical Engineering Journal</i> , 2020 , 386, 121447	14.7	5
491	Flow past a single stationary sphere, 2. Regime mapping and effect of external disturbances. <i>Powder Technology</i> , 2020 , 365, 215-243	5.2	16
490	Computational Fluid Dynamics Study of Biomass Cook StovePart 1: Hydrodynamics and Homogeneous Combustion. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 4161-4176	3.9	6

489	Study of granular self-organization inside a cylinder driven by an orbital-shaker using discrete element method. <i>Chemical Engineering Science</i> , 2019 , 209, 115194	4.4	1
488	Controlling the carbon nanotube type with processing parameters synthesized by floating catalyst chemical vapour deposition. <i>Materials Today: Proceedings</i> , 2019 , 18, 1039-1043	1.4	1
487	Selective synthesis of metallic and semi-conducting single-walled carbon nanotube by floating catalyst chemical vapour deposition. <i>Diamond and Related Materials</i> , 2019 , 97, 107432	3.5	7
486	Kinetic study of boron doped carbon nanotubes synthesized using chemical vapour deposition. <i>Chemical Engineering Science</i> , 2019 , 207, 1341-1352	4.4	6
485	Effect of in-situ boron doping on hydrogen adsorption properties of carbon nanotubes. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 18193-18204	6.7	21
484	Experimental Investigations on Carryover in a Gravity Separation-Based Steam Drum. <i>Journal of Nuclear Engineering and Radiation Science</i> , 2019 , 5,	1.1	2
483	Lowering greenhouse gas (GHG) emissions: techno-economic analysis of biomass conversion to biofuels and value-added chemicals 2019 , 9, 454-473		9
482	Insights into the physics of dominating frequency modes for flow past a stationary sphere: Direct numerical simulations. <i>Physics of Fluids</i> , 2019 , 31, 045108	4.4	11
481	Computational Fluid Dynamics (CFD) Simulations and Experimental Measurements in an Inductively-Coupled Plasma Generator Operating at Atmospheric Pressure: Performance Analysis and Parametric Study. <i>Processes</i> , 2019 , 7, 133	2.9	2
480	Dissolution behaviour of simulated MOX nuclear fuel pellets in nitric acid medium. <i>Progress in Nuclear Energy</i> , 2019 , 116, 1-9	2.3	3
479	Kinetics of Ozonation of Phenol and Substituted Phenols. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 7461-7466	3.9	3
478	Dissolution of nuclear materials in aqueous acid solutions. <i>Reviews in Chemical Engineering</i> , 2019 , 35, 707-734	5	4
477	Computational fluid dynamics 2019 , 21-238		7
476	CFD model development for two-phase flows 2019 , 239-335		
475	Conclusions and future recommendation 2019 , 835-849		
474	Design of passive safety systems for advanced reactors using CFD 2019 , 387-485		
473	Experimental and numerical study to optimize a design of passive moderator cooling system of an advanced nuclear reactor. <i>Nuclear Engineering and Design</i> , 2019 , 352, 110127	1.8	2
472	Effect of Schmidt number and D/d ratio on mass transfer through gas-solid and liquid-solid packed beds: Direct numerical simulations. <i>Powder Technology</i> , 2019 , 354, 529-539	5.2	10

471	Characteristics of energy production and dissipation around a bubble rising in water. <i>Chemical Engineering Science</i> , 2019 , 193, 38-52	4.4	12
470	Kinetic study of multi-walled carbon nanotube synthesis by thermocatalytic decomposition of methane using floating catalyst chemical vapour deposition. <i>Chemical Engineering Journal</i> , 2019 , 377, 119895	14.7	12
469	Kinetic study of single-walled carbon nanotube synthesis by thermocatalytic decomposition of methane using floating catalyst chemical vapour deposition. <i>Chemical Engineering Science</i> , 2019 , 196, 91-103	4.4	22
468	A micro-jet array for economic intensification of gas transfer in bioreactors. <i>Biotechnology Progress</i> , 2019 , 35, e2710	2.8	5
467	Transition metal compounds as solar selective material. <i>Reviews in Chemical Engineering</i> , 2019 ,	5	1
466	Mixing in a co-current upflow bubble column reactors with and without internals. <i>Canadian Journal of Chemical Engineering</i> , 2018 , 96, 1957-1971	2.3	15
465	Study on the Kinetics of Catalytic Hydrogenation of U(VI) in Nitric Acid Solution Using a Bubble Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 3482-3488	3.9	4
464	Comparison of void fraction measurements using different techniques in two-phase flow bubble column reactors. <i>International Journal of Multiphase Flow</i> , 2018 , 102, 119-129	3.6	26
463	Modulation of turbulent flow field in an oscillating grid system owing to single bubble rise. <i>Chemical Engineering Science</i> , 2018 , 185, 26-49	4.4	7
462	Light-weight thermal insulating fly ash cenosphere ceramics. <i>International Journal of Applied Ceramic Technology</i> , 2018 , 15, 1467-1477	2	3
461	Air Water Loop for investigation of flow dynamics in a steam drum: Steady state two-phase natural circulation experiments and validation. <i>Nuclear Engineering and Design</i> , 2018 , 328, 266-282	1.8	2
460	Bubble departure characteristics in a horizontal tube bundle under cross flow conditions. <i>International Journal of Multiphase Flow</i> , 2018 , 100, 143-154	3.6	6
459	Experimental study and CFD simulation of the multiphase flow conditions encountered in a Novel Down-flow bubble column. <i>Chemical Engineering Journal</i> , 2018 , 350, 507-522	14.7	18
458	Air Water Loop for investigation of flow dynamics in a steam drum: Carryover experiments and CFD simulation. <i>Nuclear Engineering and Design</i> , 2018 , 333, 145-160	1.8	2
457	Reform of the drift-flux model of multiphase flow in pipes, wellbores, and reactor vessels. <i>Chemical Engineering Science</i> , 2018 , 184, 251-258	4.4	8
456	Development of helical coil based fluidic diode pump for liquid pumping. <i>Canadian Journal of Chemical Engineering</i> , 2018 , 96, 62-67	2.3	
455	Chemical hydrodynamics of a downward microbubble flow for intensification of gas-fed bioreactors. <i>AIChE Journal</i> , 2018 , 64, 1399-1411	3.6	11
454	Hydrodynamics under the jet-array of a downflow microbubble column: Performance intensification. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018 , 130, 326-331	3.7	4

453	Thermal hydraulics of natural circulation loop in beam-down solar power tower. <i>Energy</i> , 2018 , 159, 1088-1101	4.1	4
452	Direct numerical simulation study of end effects and D/d ratio on mass transfer in packed beds. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 127, 234-244	4.9	27
451	Alternative designs of evacuated receiver for parabolic trough collector. <i>Energy</i> , 2018 , 155, 66-76	7.9	10
450	A review of CFD modelling studies on the flotation process. <i>Minerals Engineering</i> , 2018 , 127, 153-177	4.9	54
449	Evaporation of a sessile binary droplet on a heated spherical particle. <i>Experimental Thermal and Fluid Science</i> , 2018 , 99, 558-571	3	8
448	Effect of drag models on CFDDDEM predictions of bubbling fluidized beds with Geldart D particles. <i>Advanced Powder Technology</i> , 2018 , 29, 2658-2669	4.6	25
447	Experimental study of bubble departure characteristics in forced convective subcooled nucleate boiling. <i>Experimental Heat Transfer</i> , 2018 , 31, 194-218	2.4	14
446	Evaporation of a suspended binary mixture droplet in a heated flowing gas stream. <i>Experimental Thermal and Fluid Science</i> , 2018 , 91, 329-344	3	11
445	Impact of Dense Internals on Fluid Dynamic Parameters in Bubble Column. <i>International Journal of Chemical Reactor Engineering</i> , 2018 , 16,	1.2	5
444	CFD simulation of boiling flows inside fuel rod bundle of a natural circulation BWR during SBO. <i>Nuclear Engineering and Design</i> , 2018 , 338, 300-329	1.8	7
443	Estimation of Bubble Properties in Bubbling Fluidized Bed Using ECVT Measurements. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 8319-8333	3.9	15
442	Effect of bubble on the pressure spectra of oscillating grid turbulent flow at low Taylor-Reynolds number. <i>Chemical Engineering Science</i> , 2018 , 190, 28-39	4.4	4
441	Instabilities due to turbulence through inlet jet in plunging jet bubble column. <i>Chemical Engineering Science</i> , 2017 , 157, 76-87	4.4	2
440	Bubble generated turbulence and direct numerical simulations. <i>Chemical Engineering Science</i> , 2017 , 157, 26-75	4.4	32
439	Study of the Changes in Composition of Ammonium Diuranate with Progress of Precipitation, and Study of the Properties of Ammonium Diuranate and its Subsequent Products Produced from both Uranyl Nitrate and Uranyl Fluoride Solutions. <i>Nuclear Engineering and Technology</i> , 2017 , 49, 541-548	2.6	8
438	Segregation and dispersion studies in binary solid-liquid fluidised beds: A theoretical and computational study. <i>Powder Technology</i> , 2017 , 314, 400-411	5.2	16
437	CFD simulations of a bubble column with and without internals by using OpenFOAM. <i>Chemical Engineering Journal</i> , 2017 , 317, 157-174	14.7	58
436	Comparative analysis of liquid hydrodynamics in a co-current flow-through bubble column with densely packed internals via radiotracing and Radioactive Particle Tracking (RPT). <i>Chemical Engineering Science</i> , 2017 , 170, 332-346	4.4	35

435	A comparison of thermal-hydraulic performance of various fin patterns using 3D CFD simulations. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 109, 336-356	4.9	35
434	In-situ nitrogen doping in carbon nanotubes using a fluidized bed reactor and hydrogen storage behavior of the doped nanotubes. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 10047-10056	6.7	16
433	Settling/rising of a foreign particle in solid-liquid fluidized beds: Application of dynamic mesh technique. <i>Chemical Engineering Science</i> , 2017 , 170, 139-153	4.4	10
432	Kinetics of cooking of unsoaked and presoaked split peas (Cajanus cajan). <i>Journal of Food Process Engineering</i> , 2017 , 40, e12527	2.4	3
431	Comparison of turbulence models for bubble column reactors. <i>Chemical Engineering Science</i> , 2017 , 164, 34-52	4.4	32
430	Few layered graphene by floating catalyst chemical vapour deposition and its extraordinary H ₂ O ₂ sensing property. <i>Materials Letters</i> , 2017 , 199, 180-183	3.3	7
429	Void fraction, bubble size and interfacial area measurements in co-current downflow bubble column reactor with microbubble dispersion. <i>Chemical Engineering Science</i> , 2017 , 168, 403-413	4.4	38
428	Image analysis based validation and kinetic parameter estimation of rice cooking. <i>Journal of Food Process Engineering</i> , 2017 , 40, e12552	2.4	4
427	Mechanism of dissolution of nuclear fuel in nitric acid relevant to nuclear fuel reprocessing. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017 , 312, 141-149	1.5	17
426	Separation Characteristics of Liquid-Liquid Dispersions: Gravity and Centrifugal Settlers. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 7814-7823	3.9	2
425	Design, optimization and optical performance study of tripod heliostat for solar power tower plant. <i>Energy</i> , 2017 , 135, 610-624	7.9	8
424	Investigation of hydrodynamics in bubble column with internals using radioactive particle tracking (RPT). <i>AIChE Journal</i> , 2017 , 63, 4881-4894	3.6	25
423	Interactions in droplet and particle system of near unity size ratio. <i>Chemical Engineering Science</i> , 2017 , 170, 154-175	4.4	20
422	Kinetic study of nitrogen doped carbon nanotubes in a fixed bed. <i>Chemical Engineering Science</i> , 2017 , 170, 756-766	4.4	7
421	Spatially resolved mass transfer coefficient for moderate Reynolds number flows in packed beds: Wall effects. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 110, 406-415	4.9	27
420	Interaction of bubbles rising inline in quiescent liquid. <i>Chemical Engineering Science</i> , 2017 , 166, 1-10	4.4	31
419	Controlling the Flow Structure in Fluidized Bed: A CFD-DEM Approach. <i>Springer Proceedings in Physics</i> , 2017 , 619-626	0.2	
418	Expansion behaviour of a binary solid-liquid fluidised bed with different solid mass ratio. <i>Advanced Powder Technology</i> , 2017 , 28, 3111-3129	4.6	14

417	High Performance Fibers from Carbon Nanotubes: Synthesis, Characterization, and Applications in Composites: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 12407-12437	3.9	52
416	Deformation and optics based structural design and cost optimization of cylindrical reflector system. <i>Solar Energy</i> , 2017 , 158, 687-700	6.8	5
415	Kinetics of interphase transfer of zirconium between nitric acid and tributyl phosphate solutions. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017 , 314, 1991-2001	1.5	5
414	Investigations of natural convection and circulation in Passive Moderator Cooling System of an advanced reactor in a scaled test facility. <i>Nuclear Engineering and Design</i> , 2017 , 322, 55-67	1.8	3
413	Poison injection in AHWR calandria: Flow pattern and mixing characteristics. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 105, 359-375	4.9	2
412	Experimental study on bubble departure characteristics in subcooled nucleate pool boiling. <i>International Journal of Multiphase Flow</i> , 2017 , 89, 163-176	3.6	34
411	Experimental investigation on modulation of homogeneous and isotropic turbulence in the presence of single particle using time-resolved PIV. <i>Chemical Engineering Science</i> , 2016 , 153, 308-329	4.4	10
410	Development and validation of a new drag law using mechanical energy balance approach for DEM-CFD simulation of gas-solid fluidized bed. <i>Chemical Engineering Journal</i> , 2016 , 302, 395-405	14.7	41
409	Study of crystal growth and effect of temperature and mixing on properties of sodium diuranate. <i>Progress in Nuclear Energy</i> , 2016 , 91, 132-139	2.3	4
408	Study on effect of process parameters and mixing on morphology of ammonium diuranate. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2016 , 310, 287-299	1.5	4
407	Computational fluid dynamic modelling of FCC riser: A review. <i>Chemical Engineering Research and Design</i> , 2016 , 111, 403-448	5.5	35
406	Kinetics of extraction of nitric acid into binary mixture of tri-n-butyl phosphate and normal paraffin hydrocarbon. <i>Chemical Engineering Research and Design</i> , 2016 , 111, 492-503	5.5	13
405	CFD simulations of shell-side flow in a shell-and-tube type heat exchanger with and without baffles. <i>Chemical Engineering Science</i> , 2016 , 143, 314-340	4.4	51
404	Multiscale flow in an electro-hydrodynamically driven oil-in-oil emulsion. <i>Soft Matter</i> , 2016 , 12, 1759-64	3.6	11
403	3D CFD simulations of air cooled condenser-III: Thermal-Hydraulic characteristics and design optimization under forced convection conditions. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 93, 1227-1247	4.9	38
402	3D CFD simulation of passive decay heat removal system under boiling conditions: Role of bubble sliding motion on inclined heated tubes. <i>Chemical Engineering Science</i> , 2016 , 145, 245-265	4.4	15
401	Bubbles in viscous liquids: Time dependent behaviour and wake characteristics. <i>Chemical Engineering Science</i> , 2016 , 144, 298-309	4.4	26
400	Design and development of energy efficient continuous cooking system. <i>Journal of Food Engineering</i> , 2016 , 168, 231-239	6	8

399	3D CFD simulations of air cooled condenser-II: Natural draft around a single finned tube kept in a small chimney. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 92, 507-522	4.9	23
398	Extraction kinetics of ruthenium in the mixture of tri-n-butyl phosphate and n-dodecane. <i>Progress in Nuclear Energy</i> , 2016 , 86, 50-62	2.3	12
397	A review of the mechanisms and models of bubble-particle detachment in froth flotation. <i>Separation and Purification Technology</i> , 2016 , 170, 155-172	8.3	77
396	3D CFD simulations to study the effect of inclination of condenser tube on natural convection and thermal stratification in a passive decay heat removal system. <i>Nuclear Engineering and Design</i> , 2016 , 305, 582-603	1.8	9
395	Kinetics of reverse water-gas shift reaction over Pt/Al ₂ O ₃ catalyst. <i>Canadian Journal of Chemical Engineering</i> , 2016 , 94, 101-106	2.3	7
394	Interaction dynamics of a spherical particle with a suspended liquid film. <i>AIChE Journal</i> , 2016 , 62, 295-314	4.6	8
393	Segregation and dispersion of binary solids in liquid fluidised beds: A CFD-DEM study. <i>Chemical Engineering Science</i> , 2016 , 152, 65-83	4.4	39
392	On wetting characteristics of droplet on a spherical particle in film boiling regime. <i>Chemical Engineering Science</i> , 2016 , 149, 181-203	4.4	36
391	Steady state flow analysis of two-phase natural circulation in multiple parallel channel loop. <i>Nuclear Engineering and Design</i> , 2016 , 305, 706-716	1.8	1
390	Experimental and CFD simulations of fluid flow and temperature distribution in a natural circulation driven Passive Moderator Cooling System of an advanced nuclear reactor. <i>Chemical Engineering Science</i> , 2016 , 155, 45-64	4.4	8
389	Comparison of vaporization models for feed droplet in fluid catalytic cracking risers. <i>Chemical Engineering Research and Design</i> , 2015 , 101, 82-97	5.5	11
388	Solar thermal technologies as a bridge from fossil fuels to renewables. <i>Nature Climate Change</i> , 2015 , 5, 1007-1013	21.4	49
387	Computational Modeling of Multiphase Reactors. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2015 , 6, 347-78	8.9	36
386	Comparison of specific energy dissipation rate calculation methodologies utilising 2D PIV velocity measurement. <i>Chemical Engineering Science</i> , 2015 , 137, 752-767	4.4	16
385	CFD simulations of moderator flow inside Calandria of the Passive Moderator Cooling System of an advanced reactor. <i>Nuclear Engineering and Design</i> , 2015 , 292, 193-203	1.8	3
384	A discrete element method study of granular segregation in non-circular rotating drums. <i>Powder Technology</i> , 2015 , 283, 549-560	5.2	20
383	Nature of the Pd/CNT interaction in Pd nanoparticles dispersed on multi-walled carbon nanotubes and its implications in hydrogen storage properties. <i>RSC Advances</i> , 2015 , 5, 41468-41474	3.7	28
382	Process intensification in manufacture of nitric acid: NO _x absorption using enriched and pure oxygen. <i>Chemical Engineering Journal</i> , 2015 , 278, 430-446	14.7	8

381	CFD analysis of moderator flow and temperature fields inside a vertical calandria vessel of nuclear reactor. <i>Nuclear Engineering and Design</i> , 2015 , 287, 95-107	1.8	2
380	Process Intensification: A Case Study. <i>Indian Chemical Engineer</i> , 2015 , 57, 202-218	1	2
379	A review on the thermal hydraulic characteristics of the air-cooled heat exchangers in forced convection. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2015 , 40, 673-755	1	12
378	Numerical investigation of three-dimensional natural circulation phenomenon in passive safety systems for decay heat removal in large pools. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 81, 659-680	4.9	18
377	Bubble Detachment from a Steel Ball in Turbulent Field: Application to Mineral Flotation Systems. <i>Procedia Engineering</i> , 2015 , 102, 1046-1055		3
376	Dissolution kinetics of Indian PHWR natural UO ₂ fuel pellets in nitric acid [Effect of initial acidity and temperature. <i>Progress in Nuclear Energy</i> , 2015 , 83, 52-58	2.3	13
375	Collision behaviour of a smaller particle into a larger stationary droplet. <i>Advanced Powder Technology</i> , 2015 , 26, 280-295	4.6	31
374	Comparative evaluation of hydrogen storage behavior of Pd doped carbon nanotubes prepared by wet impregnation and polyol methods. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 3268-3276	6.7	49
373	Comparison of k- ϵ RSM and LES models for the prediction of flow pattern in jet loop reactor. <i>Chemical Engineering Science</i> , 2015 , 127, 323-333	4.4	27
372	A method for calculating the surface area of numerically simulated aggregates. <i>Advanced Powder Technology</i> , 2015 , 26, 56-65	4.6	6
371	Catalytic carbon dioxide hydrogenation to methanol: A review of recent studies. <i>Chemical Engineering Research and Design</i> , 2014 , 92, 2557-2567	5.5	381
370	Kinetics of cooking of rice: A review. <i>Journal of Food Engineering</i> , 2014 , 123, 113-129	6	36
369	Fluidized bed synthesis of carbon nanotubes: Reaction mechanism, rate controlling step and overall rate of reaction. <i>AIChE Journal</i> , 2014 , 60, 2882-2892	3.6	26
368	Performance of annular centrifugal extractors: CFD simulation of flow pattern, axial mixing and extraction with chemical reaction. <i>Chemical Engineering Science</i> , 2014 , 110, 134-143	4.4	13
367	Forces acting on a single introduced particle in a solid-liquid fluidised bed. <i>Chemical Engineering Science</i> , 2014 , 116, 49-70	4.4	28
366	Numerical study of heat loss from a non-evacuated receiver of a solar collector. <i>Energy Conversion and Management</i> , 2014 , 78, 617-626	10.6	16
365	Stability analysis in solid-liquid fluidized beds: Experimental and computational. <i>Chemical Engineering Journal</i> , 2014 , 256, 169-186	14.7	29
364	3D CFD simulation of air cooled condenser-I: Natural convection over a circular cylinder. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 78, 1265-1283	4.9	22

363	Flow and temperature patterns in an inductively coupled plasma reactor: Experimental measurements and CFD simulations. <i>AIChE Journal</i> , 2014 , 60, 3647-3664	3.6	6
362	Kinetics of extraction of uranium from phosphoric acid by D2EHPA/TP and D2EHPA/PO systems using constant interfacial area stirred cell. <i>Chemical Engineering Science</i> , 2014 , 110, 169-184	4.4	22
361	Particle-liquid mass transfer in solid-liquid fluidized beds. <i>Chemical Engineering Journal</i> , 2014 , 245, 323-341	4.7	16
360	Prediction of regime transition in three-phase sparged reactors using linear stability analysis. <i>Chemical Engineering Journal</i> , 2014 , 235, 307-330	14.7	10
359	Analysis of Turbulence Energy Spectrum by Using Particle Image Velocimetry. <i>Procedia Engineering</i> , 2014 , 90, 320-326		5
358	Optimization of non-evacuated receiver of solar collector having non-uniform temperature distribution for minimum heat loss. <i>Energy Conversion and Management</i> , 2014 , 85, 70-84	10.6	27
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