

Mostafa Barigou

List of Publications by Citations

Source: <https://exaly.com/author-pdf/7588225/mostafa-barigou-publications-by-citations.pdf>

Version: 2024-04-19

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.

74
papers

1,815
citations

26
h-index

39
g-index

78
ext. papers

2,191
ext. citations

4.4
avg, IF

5.51
L-index

| # | Paper | IF | Citations |
|----|---|-------|-----------|
| 74 | X-ray micro-computed tomography of cellular food products. <i>Food Research International</i> , 2004 , 37, 1001-1012 | 11.82 | 182 |
| 73 | On the Existence and Stability of Bulk Nanobubbles. <i>Langmuir</i> , 2018 , 34, 10964-10973 | 4 | 130 |
| 72 | Interpreting the interfacial and colloidal stability of bulk nanobubbles. <i>Soft Matter</i> , 2018 , 14, 9643-9656 | 3.6 | 76 |
| 71 | Bulk Nanobubbles or Not Nanobubbles: That is the Question. <i>Langmuir</i> , 2020 , 36, 1699-1708 | 4 | 68 |
| 70 | Particle Tracking in Opaque Mixing Systems: An Overview of the Capabilities of PET and PEPT. <i>Chemical Engineering Research and Design</i> , 2004 , 82, 1258-1267 | 5.5 | 58 |
| 69 | Fluid trajectories in a stirred vessel of non-newtonian liquid using positron emission particle tracking. <i>Chemical Engineering Science</i> , 2000 , 55, 5969-5979 | 4.4 | 58 |
| 68 | CFD Analysis of Caverns and Pseudo-Caverns Developed During Mixing of Non-Newtonian Fluids. <i>Chemical Engineering Research and Design</i> , 2007 , 85, 598-604 | 5.5 | 52 |
| 67 | Foam Destabilization by Mechanical and Ultrasonic Vibrations. <i>Journal of Colloid and Interface Science</i> , 1999 , 219, 90-98 | 9.3 | 50 |
| 66 | The flow of gas-liquid foams in vertical pipes. <i>Chemical Engineering Science</i> , 2000 , 55, 4297-4309 | 4.4 | 46 |
| 65 | Positron emission particle tracking (PEPT) compared to particle image velocimetry (PIV) for studying the flow generated by a pitched-blade turbine in single phase and multi-phase systems. <i>Chemical Engineering Science</i> , 2009 , 64, 4955-4968 | 4.4 | 42 |
| 64 | Positron emission particle tracking in a mechanically agitated solid-liquid suspension of coarse particles. <i>Chemical Engineering Research and Design</i> , 2009 , 87, 421-429 | 5.5 | 42 |
| 63 | PEPT measurements of solid-liquid flow field and spatial phase distribution in concentrated monodisperse stirred suspensions. <i>Chemical Engineering Science</i> , 2010 , 65, 1905-1914 | 4.4 | 42 |
| 62 | Bulk Nanobubbles from Acoustically Cavitated Aqueous Organic Solvent Mixtures. <i>Langmuir</i> , 2019 , 35, 2188-2195 | 4 | 37 |
| 61 | Comparative study of different mixing strategies in small high throughput experimentation reactors. <i>Chemical Engineering Science</i> , 2005 , 60, 2355-2368 | 4.4 | 36 |
| 60 | Using positron emission particle tracking (PEPT) to study nearly neutrally buoyant particles in high solid fraction pipe flow. <i>International Journal of Multiphase Flow</i> , 2001 , 27, 1881-1901 | 3.6 | 36 |
| 59 | Which Parameters Affect Biofilm Removal with Acoustic Cavitation? A Review. <i>Ultrasound in Medicine and Biology</i> , 2019 , 45, 1044-1055 | 3.5 | 36 |
| 58 | CFD investigation of the pipe transport of coarse solids in laminar power law fluids. <i>Chemical Engineering Science</i> , 2009 , 64, 322-333 | 4.4 | 35 |

| | | | |
|----|--|-----|----|
| 57 | Vibrational flow of non-Newtonian fluids. <i>Chemical Engineering Science</i> , 2001 , 56, 3845-3853 | 4.4 | 35 |
| 56 | Reconstruction of 3-D Flow Field Inside Miniature Stirred Vessels Using a 2-D PIV Technique. <i>Chemical Engineering Research and Design</i> , 2007 , 85, 560-567 | 5.5 | 31 |
| 55 | The Fluid Mechanics of Two-Phase Solid-Liquid Food Flows: A Review. <i>Food and Bioprocess Processing</i> , 1997 , 75, 73-105 | 4.9 | 30 |
| 54 | Horizontal laminar flow of coarse nearly-neutrally buoyant particles in non-Newtonian conveying fluids: CFD and PEPT experiments compared. <i>International Journal of Multiphase Flow</i> , 2008 , 34, 997-1007 | 3.6 | 29 |
| 53 | Foam flow phenomena in sudden expansions and contractions. <i>International Journal of Multiphase Flow</i> , 2001 , 27, 1463-1477 | 3.6 | 29 |
| 52 | Discrete multi-physics: A mesh-free model of blood flow in flexible biological valve including solid aggregate formation. <i>PLoS ONE</i> , 2017 , 12, e0174795 | 3.7 | 28 |
| 51 | Modelling and simulation of flow and agglomeration in deep veins valves using discrete multi physics. <i>Computers in Biology and Medicine</i> , 2017 , 89, 96-103 | 7 | 27 |
| 50 | Shannon entropy for local and global description of mixing by Lagrangian particle tracking. <i>Chemical Engineering Science</i> , 2010 , 65, 2865-2883 | 4.4 | 27 |
| 49 | Concentric flow regime of solid-liquid food suspensions: theory and experiment. <i>Chemical Engineering Science</i> , 2003 , 58, 1671-1686 | 4.4 | 27 |
| 48 | Numerical modelling of velocity field and phase distribution in dense monodisperse solid-liquid suspensions under different regimes of agitation: CFD and PEPT experiments. <i>Chemical Engineering Science</i> , 2013 , 101, 837-850 | 4.4 | 25 |
| 47 | A Lagrangian Study of Solids Suspension in a Stirred Vessel by Positron Emission Particle Tracking (PEPT). <i>Chemical Engineering and Technology</i> , 2002 , 25, 521-528 | 2 | 25 |
| 46 | Deformation and rupture of compound cells under shear: A discrete multiphysics study. <i>Physics of Fluids</i> , 2019 , 31, 051903 | 4.4 | 23 |
| 45 | A Henry's law method for generating bulk nanobubbles. <i>Nanoscale</i> , 2020 , 12, 15869-15879 | 7.7 | 23 |
| 44 | Enhancing radial temperature uniformity and boundary layer development in viscous Newtonian and non-Newtonian flow by transverse oscillations: A CFD study. <i>Chemical Engineering Science</i> , 2010 , 65, 2199-2212 | 4.4 | 22 |
| 43 | Using discrete multi-physics for detailed exploration of hydrodynamics in an in vitro colon system. <i>Computers in Biology and Medicine</i> , 2017 , 81, 188-198 | 7 | 21 |
| 42 | Heat Transfer in Two-Phase Solid-Liquid Food Flows: A Review. <i>Food and Bioprocess Processing</i> , 1998 , 76, 3-29 | 4.9 | 21 |
| 41 | Combined Use of PEPT and ERT in the Study of Aluminum Hydroxide Precipitation. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 1019-1028 | 3.9 | 20 |
| 40 | An enhanced electrical resistance technique for foam drainage measurement. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2001 , 189, 237-246 | 5.1 | 20 |

| | | | |
|----|---|-----|----|
| 39 | The effects of the azimuthal position of the measurement plane on the flow parameters determined by PIV within a stirred vessel. <i>Chemical Engineering Science</i> , 2010 , 65, 2454-2463 | 4.4 | 19 |
| 38 | Proving and interpreting the spontaneous formation of bulk nanobubbles in aqueous organic solvent solutions: effects of solvent type and content. <i>Soft Matter</i> , 2020 , 16, 4502-4511 | 3.6 | 18 |
| 37 | An improved vibration technique for enhancing temperature uniformity and heat transfer in viscous fluid flow. <i>Chemical Engineering Science</i> , 2015 , 123, 609-619 | 4.4 | 18 |
| 36 | Soap film drainage: theory of experiment. <i>Chemical Engineering Science</i> , 1994 , 49, 1807-1819 | 4.4 | 18 |
| 35 | Using Positron Emission Particle Tracking (PEPT) to Study Mixing in Stirred Vessels: Validation and Tackling Unsolved Problems in Opaque Systems. <i>Journal of Chemical Engineering of Japan</i> , 2009 , 42, 839-846 | 3.8 | 16 |
| 34 | The flow of gas-liquid foams through pipe fittings. <i>International Journal of Heat and Fluid Flow</i> , 2001 , 22, 94-101 | 2.4 | 16 |
| 33 | Angle-Resolved Particle Image Velocimetry Measurements of Flow and Turbulence Fields in Small-Scale Stirred Vessels of Different Mixer Configurations. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 1008-1018 | 3.9 | 15 |
| 32 | CFD analysis of viscous non-Newtonian flow under the influence of a superimposed rotational vibration. <i>Computers and Fluids</i> , 2008 , 37, 24-34 | 2.8 | 14 |
| 31 | Mechanical suppression of the dynamic foam head in bubble column reactors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2000 , 39, 207-217 | 3.7 | 14 |
| 30 | Lagrangian tools for the analysis of mixing in single-phase and multiphase flow systems. <i>AICHE Journal</i> , 2012 , 58, 31-45 | 3.6 | 13 |
| 29 | CFD simulation of transverse vibration effects on radial temperature profile and thermal entrance length in laminar flow. <i>AICHE Journal</i> , 2011 , 57, 51-56 | 3.6 | 12 |
| 28 | Visualisation of foam microstructure when subject to pressure change. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007 , 311, 112-123 | 5.1 | 11 |
| 27 | Ultrasound-Assisted Generation of Foam. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 3313-3320 | 3.9 | 11 |
| 26 | The fluid mechanics of the soap film meter. <i>Chemical Engineering Science</i> , 1993 , 48, 2587-2597 | 4.4 | 11 |
| 25 | Local description of foam flow, deformation and pressure drop in narrow constricted channels. <i>International Journal of Multiphase Flow</i> , 2020 , 128, 103279 | 3.6 | 9 |
| 24 | Mixing of dense binary suspensions: Multi-component hydrodynamics and spatial phase distribution by PEPT. <i>AICHE Journal</i> , 2011 , 57, 2302-2315 | 3.6 | 9 |
| 23 | Just Because It's Small Doesn't Mean It's Well Mixed: Ensuring Good Mixing in Mesoscale Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 9695-9704 | 3.9 | 9 |
| 22 | On the clustering of bulk nanobubbles and their colloidal stability. <i>Journal of Colloid and Interface Science</i> , 2021 , 601, 816-824 | 9.3 | 9 |

| | | | |
|----|---|-----|---|
| 21 | Pneumatic foam generation in the presence of a high-intensity ultrasound field. <i>Ultrasonics Sonochemistry</i> , 2005 , 12, 385-93 | 8.9 | 8 |
| 20 | Foams generated from viscous non-Newtonian shear-thinning liquids in a continuous multi rotor-stator device. <i>Innovative Food Science and Emerging Technologies</i> , 2020 , 59, 102231 | 6.8 | 8 |
| 19 | Assessing the potential of using chaotic advection flow for thermal food processing in heating tubes. <i>Journal of Food Engineering</i> , 2016 , 177, 9-20 | 6 | 7 |
| 18 | X-ray micro-computed tomography for resolving food microstructures 2013 , 246-272 | | 7 |
| 17 | Rheological properties of wet foams generated from viscous pseudoplastic fluids. <i>Innovative Food Science and Emerging Technologies</i> , 2020 , 64, 102304 | 6.8 | 6 |
| 16 | Lagrangian particle tracking in mechanically agitated polydisperse suspensions: Multi-component hydrodynamics and spatial distribution. <i>International Journal of Multiphase Flow</i> , 2015 , 73, 80-89 | 3.6 | 5 |
| 15 | Experimentally Validated Computational Fluid Dynamics Simulations of Multicomponent Hydrodynamics and Phase Distribution in Agitated High Solid Fraction Binary Suspensions. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 895-908 | 3.9 | 5 |
| 14 | Response to "Comment on Bulk Nanobubbles or Not Nanobubbles: That is the Question". <i>Langmuir</i> , 2021 , 37, 596-601 | 4 | 4 |
| 13 | Electrochemically Induced Bulk Nanobubbles. <i>Industrial & Engineering Chemistry Research</i> , | 3.9 | 3 |
| 12 | Modeling the agglomeration of settling particles in a dewatering process. <i>Physics of Fluids</i> , 2020 , 32, 123314 | 4.4 | 3 |
| 11 | Using chaotic advection to enhance the continuous heat-hold-cool sterilisation process. <i>Innovative Food Science and Emerging Technologies</i> , 2016 , 34, 352-366 | 6.8 | 3 |
| 10 | A practical approach for extracting mechanical properties of microcapsules using a hybrid numerical model. <i>Microfluidics and Nanofluidics</i> , 2021 , 25, 1 | 2.8 | 3 |
| 9 | Particle Passage Time Distributions in Vertical Pipe Flow of Solid-Liquid Food Mixtures. <i>Food and Bioproducts Processing</i> , 1999 , 77, 293-301 | 4.9 | 2 |
| 8 | Lagrangian Stochastic Modelling of Liquid Flow in a Mechanically Agitated Vessel. <i>Chemical Engineering Science</i> , 2021 , 249, 117318 | 4.4 | 1 |
| 7 | Generation of Bulk Nanobubbles Using a High-Shear Rotor-Stator Device. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 8597-8606 | 3.9 | 1 |
| 6 | Computation of Lagrangian coherent structures from experimental fluid trajectory measurements in a mechanically agitated vessel. <i>Chemical Engineering Science</i> , 2022 , 254, 117598 | 4.4 | 1 |
| 5 | Lagrangian Recurrence Tracking: A Novel Approach for Description of Mixing in Liquid and Particle-Liquid Flows. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 18501-18512 | 3.9 | 0 |
| 4 | Mixing of Pharmaceutical Solid-Liquid Suspensions 2015 , 233-285 | | |

3 Solid-Liquid Mixing 199-229

2 Numerical Simulations of Red-Blood Cells in Fluid Flow: A Discrete Multiphysics Study.
ChemEngineering, **2021**, 5, 33 2.6

1 Effects of flow constriction on foamed viscous shear-thinning fluids downstream of a continuous
multi rotor-stator foaming device. *Journal of Food Engineering*, **2021**, 292, 110341 6