D Ian Wilson

List of Publications by Year in descending order

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259 papers 5,799 citations

39 h-index 56 g-index

266 all docs $\begin{array}{c} 266 \\ \\ \text{docs citations} \end{array}$

266 times ranked 3215 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Comparison of models for predicting cleaning of viscoplastic soil layers by impinging coherent turbulent water jets. Chemical Engineering Science, 2022, 248, 117060. | 3.8 | 9 |
| 2 | Stability of the Interface Between Two Immiscible Liquids in a Model Eye Subject to Saccadic Motion. Journal of Biomechanical Engineering, 2022, 144, . | 1.3 | O |
| 3 | Elucidating the cleaning of complex food soil layers by in-situ measurements. Food and Bioproducts Processing, 2022, 132, 52-67. | 3.6 | 2 |
| 4 | Freezing fouling from aqueous solutions of TBAB and TME clathrate hydrates. Chemical Engineering Science, 2022, 263, 117923. | 3.8 | 0 |
| 5 | Assessing bulk emulsification at the silicone oil – saline solution interface in a 3D model of the eye. Acta Ophthalmologica, 2021, 99, e209-e214. | 1.1 | 5 |
| 6 | Life cycle assessment of cleaning-in-place operations in egg yolk powder production. Journal of Cleaner Production, 2021, 278, 123936. | 9.3 | 22 |
| 7 | The growth and shrinkage of water droplets at the oil-solid interface. Journal of Colloid and Interface Science, 2021, 584, 738-748. | 9.4 | 2 |
| 8 | Cleaning viscous soil layers off walls by intermittent impinging jets. Journal of Cleaner Production, 2021, 283, 124660. | 9.3 | 6 |
| 9 | Measurement and modelling of wall friction in the ram extrusion of stiff microcrystalline cellulose-based pastes. Powder Technology, 2021, 377, 780-794. | 4.2 | 1 |
| 10 | The Fluid Mechanics of Cleaning and Decontamination of Surfaces. Annual Review of Fluid Mechanics, 2021, 53, 147-171. | 25.0 | 35 |
| 11 | Modeling the breakage stage in spheronization of cylindrical paste extrudates. AICHE Journal, 2021, 67, e17247. | 3.6 | 1 |
| 12 | Rheological characterisation of full-fat and reduced-fat aerated icings. LWT - Food Science and Technology, 2021, 142, 111014. | 5.2 | 3 |
| 13 | On a toroidal method to solve the sessile-drop oscillation problem. Journal of Fluid Mechanics, 2021, 919, . | 3.4 | 10 |
| 14 | How a sticky fluid facilitates prey retention in a carnivorous pitcher plant (Nepenthes rafflesiana). Acta Biomaterialia, 2021, 128, 357-369. | 8.3 | 7 |
| 15 | In-situ measurement of the critical stress of viscoplastic soil layers. Journal of Food Engineering, 2021, 303, 110568. | 5.2 | 8 |
| 16 | Quantifying Implications of Deposit Aging from Crude Refinery Preheat Train Data. Heat Transfer Engineering, 2020, 41, 115-126. | 1.9 | 7 |
| 17 | Calcium Phosphate Scale Formation in Power Station Condensers Fed by Cooling Towers: A Case of When Not to Use Scaling Indices. Heat Transfer Engineering, 2020, 41, 138-148. | 1.9 | 3 |
| 18 | Modelling the cleaning of viscoplastic layers by impinging coherent turbulent water jets. Journal of Non-Newtonian Fluid Mechanics, 2020, 282, 104314. | 2.4 | 8 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 19 | Incorporating Deposit Ageing into Visualisation of Crude Oil Preheat Train Fouling. Process Integration and Optimization for Sustainability, 2020, 4, 187-200. | 2.6 | 5 |
| 20 | Measurements and modelling of the â€~millimanipulation' device to study the removal of soft solid layers from solid substrates. Journal of Food Engineering, 2020, 285, 110086. | 5.2 | 6 |
| 21 | A microscale model of paste flow in piston-driven extrusion process. , 2020, , 615-618. | | O |
| 22 | Industrial Applications of Yield Stress Fluids. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2019, , 195-259. | 0.6 | 3 |
| 23 | Cleaning insoluble viscoplastic soil layers using static and moving coherent impinging water jets. Chemical Engineering Science, 2019, 207, 752-768. | 3.8 | 9 |
| 24 | Cleaning of toothpaste from vessel walls by impinging liquid jets and their falling films: Quantitative modelling of soaking effects. Chemical Engineering Science, 2019, 208, 115148. | 3.8 | 12 |
| 25 | Quantitative modelling of the erosive removal of a thin soil deposit by impinging liquid jets. Wear, 2019, 422-423, 27-34. | 3.1 | 5 |
| 26 | Fluidâ€dynamic gauging for studying the initial swelling of soft solid layers. AICHE Journal, 2019, 65, e16664. | 3.6 | 6 |
| 27 | Quantifying the convective drying behaviour of cemented carbide paste extrudates. Powder Technology, 2019, 351, 212-221. | 4.2 | 1 |
| 28 | Non-aqueous formulations for ram and screen extrusion-spheronisation. International Journal of Pharmaceutics, 2019, 560, 394-405. | 5.2 | 2 |
| 29 | Integrated Fluid Dynamic Gauge for Measuring the Thickness of Soft Solid Layers Immersed in Opaque, Viscous, and/or Non-Newtonian Liquids in Situ. Industrial & Engineering Chemistry Research, 2019, 58, 23124-23134. | 3.7 | 1 |
| 30 | Quantifying the effect of solution formulation on the removal of soft solid food deposits from stainless steel substrates. Journal of Food Engineering, 2019, 243, 22-32. | 5.2 | 26 |
| 31 | Impinging jet cleaning of tank walls: Effect of jet length, wall curvature and related phenomena. Food and Bioproducts Processing, 2019, 113, 142-153. | 3.6 | 11 |
| 32 | Optimisation of heat exchanger network cleaning schedules: Incorporating uncertainty in fouling and cleaning model parameters. Computers and Chemical Engineering, 2019, 121, 409-421. | 3.8 | 17 |
| 33 | Development of zero discharge net flow fluid dynamic gauging for studying biofilm and spore removal. Food and Bioproducts Processing, 2019, 113, 60-67. | 3.6 | 2 |
| 34 | Comparison of fouling of raw milk and whey protein solution on stainless steel and fluorocarbon coated surfaces: Effects on fouling performance, deposit structure and composition. Chemical Engineering Science, 2019, 195, 423-432. | 3.8 | 9 |
| 35 | Influence of the dimensions of spheroniser plate protuberances on the production of pellets by extrusion-spheronisation. Advanced Powder Technology, 2018, 29, 1128-1141. | 4.1 | 2 |
| 36 | Quantification of the Local Protein Content in Hydrogels Undergoing Swelling and Dissolution at Alkaline pH Using Fluorescence Microscopy. Food and Bioprocess Technology, 2018, 11, 572-584. | 4.7 | 14 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 37 | Laws of physics help explain capillary non-perfusion in diabetic retinopathy. Eye, 2018, 32, 210-212. | 2.1 | 19 |
| 38 | Heat exchanger network cleaning scheduling: From optimal control to mixed-Integer decision making. Computers and Chemical Engineering, 2018, 111, 1-15. | 3.8 | 16 |
| 39 | What is rheology?. Eye, 2018, 32, 179-183. | 2.1 | 15 |
| 40 | Measurement of the wall slip behaviour of a solid granular soap in ram extrusion. Powder Technology, 2018, 323, 76-85. | 4.2 | 6 |
| 41 | Modelling of pastes as viscous soils – Lubricated squeeze flow. Powder Technology, 2018, 323, 250-268. | 4.2 | 8 |
| 42 | Paramagnetism in $\langle i \rangle$ Bacillus $\langle i \rangle$ spores: Opportunities for novel biotechnological applications. Biotechnology and Bioengineering, 2018, 115, 955-964. | 3.3 | 4 |
| 43 | Fouling during food processing – progress in tackling this inconvenient truth. Current Opinion in Food Science, 2018, 23, 105-112. | 8.0 | 27 |
| 44 | Pendant drops shed from a liquid lens formed by liquid draining down the inner wall of a wide vertical tube. Experimental Thermal and Fluid Science, 2018, 97, 364-374. | 2.7 | 1 |
| 45 | On the origin of the circular hydraulic jump in a thin liquid film. Journal of Fluid Mechanics, 2018, 851, | 3.4 | 52 |
| 46 | Mathematical modelling of liquid transport in swelling pharmaceutical immediate release tablets. International Journal of Pharmaceutics, 2017, 526, 1-10. | 5.2 | 45 |
| 47 | Effects of culture conditions on the size, morphology and wet density of spores of <i>Bacillus cereus </i> 569 and <i>Bacillus megaterium </i> QM B1551. Letters in Applied Microbiology, 2017, 65, 50-56. | 2.2 | 18 |
| 48 | Flow pattern and cleaning performance of a stationary liquid jet operating at conditions relevant for industrial tank cleaning. Food and Bioproducts Processing, 2017, 101, 145-156. | 3.6 | 16 |
| 49 | Twenty Years of Ebert and Panchal—What Next?. Heat Transfer Engineering, 2017, 38, 669-680. | 1.9 | 23 |
| 50 | Cleaning vessel walls by moving water jets: Simple models and supporting experiments. Food and Bioproducts Processing, 2017, 102, 31-54. | 3.6 | 26 |
| 51 | Management of Acute Particulate Fouling in a Titanium Dioxide Reactor System. Heat Transfer Engineering, 2017, 38, 796-804. | 1.9 | 1 |
| 52 | Flow visualisation and modelling of solid soap extrusion. Chemical Engineering Science, 2017, 173, 110-120. | 3.8 | 11 |
| 53 | Modelling of paste ram extrusion subject to liquid phase migration and wall friction. Chemical Engineering Science, 2017, 172, 487-502. | 3.8 | 20 |
| 54 | Assessing the Impact of Germination and Sporulation Conditions on the Adhesion of <i>Bacillus</i> Spores to Glass and Stainless Steel by Fluid Dynamic Gauging. Journal of Food Science, 2017, 82, 2614-2625. | 3.1 | 8 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 55 | Critical review: Injectability of calcium phosphate pastes and cements. Acta Biomaterialia, 2017, 50, 1-19. | 8.3 | 192 |
| 56 | Adhesion and cleaning of foods with complex structure: Effect of oil content and fluoropolymer coating characteristics on the detachment of cake from baking surfaces. Journal of Food Engineering, 2017, 197, 48-59. | 5.2 | 24 |
| 57 | A portable and affordable extensional rheometer for field testing. Measurement Science and Technology, 2016, 27, 125302. | 2.6 | 9 |
| 58 | Self-drainage of viscous liquids in vertical and inclined pipes. Food and Bioproducts Processing, 2016, 99, 38-50. | 3.6 | 12 |
| 59 | Extent and mechanism of phase separation during the extrusion of calcium phosphate pastes. Journal of Materials Science: Materials in Medicine, 2016, 27, 29. | 3.6 | 20 |
| 60 | Experimental validation of a dimensional analysis of spheronisation of cylindrical extrudates. Powder Technology, 2016, 298, 73-83. | 4.2 | 8 |
| 61 | Flow in the thin film created by a coherent turbulent water jet impinging on a vertical wall. Chemical Engineering Science, 2016, 152, 606-623. | 3.8 | 32 |
| 62 | Aseptic Zero Discharge Fluid Dynamic Gauging for Measuring the Thickness of Soft Layers on Surfaces. Chemie-Ingenieur-Technik, 2016, 88, 1530-1538. | 0.8 | 3 |
| 63 | Quantifying the â€implementation gap' for antifouling coatings. Applied Thermal Engineering, 2016, 99, 683-689. | 6.0 | 3 |
| 64 | Influence of plate surface protuberance size and shape on the production of pellets by extrusion-spheronisation. Chemical Engineering Research and Design, 2016, 109, 97-107. | 5.6 | 12 |
| 65 | A fluid dynamic gauging device for measuring biofilm thickness on cylindrical surfaces. Biochemical Engineering Journal, 2016, 106, 48-60. | 3.6 | 9 |
| 66 | Cleaning of complex soil layers on vertical walls by fixed and moving impinging liquid jets. Journal of Food Engineering, 2016, 178, 95-109. | 5.2 | 31 |
| 67 | Particle image velocimetry and modelling of horizontal coherent liquid jets impinging on and draining down a vertical wall. Experimental Thermal and Fluid Science, 2016, 74, 429-443. | 2.7 | 17 |
| 68 | Development of a single droplet freezing apparatus for studying crystallisation in cocoa butter droplets. Journal of Food Engineering, 2015, 156, 67-83. | 5.2 | 10 |
| 69 | The Disintegration Process in Microcrystalline Cellulose Based Tablets, Part 1: Influence of Temperature, Porosity and Superdisintegrants. Journal of Pharmaceutical Sciences, 2015, 104, 3440-3450. | 3.3 | 85 |
| 70 | Zero-Discharge Fluid-Dynamic Gauging for Studying the Swelling of Soft Solid Layers. Industrial & Engineering Chemistry Research, 2015, 54, 7859-7870. | 3.7 | 10 |
| 71 | Choosing When to Clean and How to Clean Biofilms in Heat Exchangers. Heat Transfer Engineering, 2015, 36, 676-684. | 1.9 | 4 |
| 72 | Using the Scanning Fluid Dynamic Gauging Device to Understand the Cleaning of Baked Lard Soiling Layers. Journal of Surfactants and Detergents, 2015, 18, 933-947. | 2.1 | 10 |

| # | Article | IF | Citations |
|----|--|------------|-----------|
| 73 | The effect of mixing on the extrusion–spheronisation of a micro-crystalline cellulose paste. International Journal of Pharmaceutics, 2015, 479, 1-10. | 5.2 | 12 |
| 74 | Development of a â€~millimanipulation' device to study the removal of soft solid fouling layers from solid substrates and its application to cooked lard deposits. Food and Bioproducts Processing, 2015, 93, 256-268. | 3.6 | 18 |
| 75 | Determination of the shear and extensional rheology of bubbly liquids with a shear-thinning continuous phase. Rheologica Acta, 2015, 54, 461-478. | 2.4 | 16 |
| 76 | A portable extensional rheometer for measuring the viscoelasticity of pitcher plant and other sticky liquids in the field. Plant Methods, 2015, 11, 16. | 4.3 | 12 |
| 77 | Flow patterns and cleaning behaviour of horizontal liquid jets impinging on angled walls. Food and Bioproducts Processing, 2015, 93, 333-342. | 3.6 | 18 |
| 78 | A New Approach for Mitigating Biofouling by Promoting Online Cleaning Using a Sacrificial Paraffin Coating. Heat Transfer Engineering, 2015, 36, 695-705. | 1.9 | 1 |
| 79 | Cleaning of a model food soil from horizontal plates by a moving vertical water jet. Chemical Engineering Science, 2015, 123, 450-459. | 3.8 | 22 |
| 80 | Value pricing of surface coatings for mitigating heat exchanger fouling. Food and Bioproducts Processing, 2015, 93, 343-363. | 3.6 | 24 |
| 81 | Stages in spheronisation: Evolution of pellet size and shape during spheronisation of microcrystalline cellulose-based paste extrudates. Powder Technology, 2015, 270, 163-175. | 4.2 | 16 |
| 82 | Investigation of static zones and wall slip through sequential ram extrusion of contrasting micro-crystalline cellulose-based pastes. Journal of Non-Newtonian Fluid Mechanics, 2015, 220, 57-68. | 2.4 | 15 |
| 83 | A novel laboratory scale method for studying heat treatment of cake flour. Journal of Food Engineering, 2015, 144, 36-44. | 5.2 | 24 |
| 84 | Effect of bubble volume fraction on the shear and extensional rheology of bubbly liquids based on guar gum (a Giesekus fluid) as continuous phase. Journal of Food Engineering, 2015, 146, 129-142. | 5.2 | 9 |
| 85 | Effect of concentration on shear and extensional rheology of guar gum solutions. Food Hydrocolloids, 2014, 40, 85-95. | 10.7 | 103 |
| 86 | A comparison of local phosphorescence detection and fluid dynamic gauging methods for studying the removal of cohesive fouling layers: Effect of layer roughness. Food and Bioproducts Processing, 2014, 92, 46-53. | 3.6 | 10 |
| 87 | Zero discharge fluid dynamic gauging for studying the thickness of soft solid layers. Journal of Food Engineering, 2014, 127, 24-33. | 5.2 | 8 |
| 88 | Aging is Important: Closing the Fouling–Cleaning Loop. Heat Transfer Engineering, 2014, 35, 311-326. | 1.9 | 16 |
| 89 | Pelletisation of canola meal by extrusion–spheronisation for ethanol dehydration. Biomass and Bioenergy, 2014, 66, 116-125. | 5.7 | 14 |
| 90 | Cleaning of soft-solid soil layers on vertical and horizontal surfaces by stationary coherent impinging liquid jets. Chemical Engineering Science, 2014, 109, 183-196. | 3.8 | 46 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 91 | The evolution of pellet size and shape during spheronisation of an extruded microcrystalline cellulose paste. Chemical Engineering Research and Design, 2014, 92, 2413-2424. | 5.6 | 23 |
| 92 | Investigating the effect of starting mode on food fat gel layer formation on cold surfaces. Journal of Food Engineering, 2013, 119, 454-463. | 5.2 | 3 |
| 93 | Flow patterns and draining films created by horizontal and inclined coherent water jets impinging on vertical walls. Chemical Engineering Science, 2013, 102, 585-601. | 3.8 | 51 |
| 94 | Effect of surfactant on flow patterns and draining films created by a static horizontal liquid jet impinging on a vertical surface at low flow rates. Chemical Engineering Science, 2013, 88, 79-94. | 3.8 | 26 |
| 95 | Experimental investigation of interactions between the temperature field and biofouling in a synthetic treated sewage stream. Biofouling, 2013, 29, 513-523. | 2.2 | 7 |
| 96 | A Critical Analysis of the Compensation Effect and Its Application to Heat Exchanger Fouling Studies. Heat Transfer Engineering, 2013, 34, 744-752. | 1.9 | 5 |
| 97 | A fluid dynamic gauging device for measuring fouling deposit thickness in opaque liquids at elevated temperature and pressure. Experimental Thermal and Fluid Science, 2013, 48, 19-28. | 2.7 | 9 |
| 98 | Applying thermo-hydraulic simulation and heat exchanger analysis to the retrofit of heat recovery systems. Applied Thermal Engineering, 2013, 51, 137-143. | 6.0 | 13 |
| 99 | A comparison of screen and ram extrusion–spheronisation of simple pharmaceutical pastes based on microcrystalline cellulose. International Journal of Pharmaceutics, 2013, 456, 489-498. | 5.2 | 12 |
| 100 | A novel lab-scale screen extruder for studying extrusion-spheronisation. International Journal of Pharmaceutics, 2013, 455, 285-297. | 5.2 | 10 |
| 101 | Evolution of cake batter bubble structure and rheology during planetary mixing. Food and Bioproducts Processing, 2013, 91, 192-206. | 3.6 | 38 |
| 102 | Comparison of the rheology of bubbly liquids prepared by whisking air into a viscous liquid (honey) and a shear-thinning liquid (guar gum solutions). Journal of Food Engineering, 2013, 118, 213-228. | 5.2 | 18 |
| 103 | Management of Crude Preheat Trains Subject to Fouling. Heat Transfer Engineering, 2013, 34, 692-701. | 1.9 | 18 |
| 104 | Characterising the structure of photosynthetic biofilms using fluid dynamic gauging. Biofouling, 2012, 28, 159-173. | 2.2 | 13 |
| 105 | Controlling AIDS progression in patients with rapid HIV dynamics. , 2012, , . | | 3 |
| 106 | Calculating thermal fouling resistances from dynamic heat transfer measurements. Chemical Engineering Science, 2012, 84, 772-780. | 3.8 | 8 |
| 107 | Quantification of porous microstructures in partially frozen drops using magnetic resonance techniques. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 415, 358-365. | 4.7 | 3 |
| 108 | Surface morphology and surface energy of anode materials influence power outputs in a multi-channel mediatorless bio-photovoltaic (BPV) system. Physical Chemistry Chemical Physics, 2012, 14, 12221. | 2.8 | 93 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 109 | Paste engineering: Multiâ€Phase materials and multiâ€phase flows. Canadian Journal of Chemical Engineering, 2012, 90, 277-289. | 1.7 | 15 |
| 110 | Influence of visco-elastic binder properties on ram extrusion of a hardmetal paste. Journal of Materials Science, 2012, 47, 6835-6848. | 3.7 | 16 |
| 111 | Surface flow and drainage films created by horizontal impinging liquid jets. Chemical Engineering Science, 2012, 68, 449-460. | 3.8 | 61 |
| 112 | Elucidating enzyme-based cleaning of protein soils (gelatine and egg yolk) using a scanning fluid dynamic gauge. Chemical Engineering Research and Design, 2012, 90, 162-171. | 5.6 | 16 |
| 113 | Identifying optimal cleaning cycles for heat exchangers subject to fouling and ageing. Applied Energy, 2012, 89, 60-66. | 10.1 | 55 |
| 114 | Scheduling the cleaning actions for a fouled heat exchanger subject to ageing: MINLP formulation. Computers and Chemical Engineering, 2012, 39, 179-185. | 3.8 | 21 |
| 115 | Optimisation and scale-up of a highly-loaded 5-ASA multi-particulate dosage form using a factorial approach. European Journal of Pharmaceutical Sciences, 2012, 45, 158-168. | 4.0 | 4 |
| 116 | Fluid dynamic gauging of microfiltration membranes fouled with sugar beet molasses. Journal of Food Engineering, 2012, 108, 22-29. | 5.2 | 17 |
| 117 | A spinning disc study of fouling of cold heat transfer surfaces by gel formation from model food fat solutions. Journal of Food Engineering, 2012, 109, 49-61. | 5.2 | 9 |
| 118 | Dynamic Gauging of Soft Fouling Layers on Solid and Porous Surfaces. Chemie-Ingenieur-Technik, 2012, 84, 46-53. | 0.8 | 5 |
| 119 | Fluid Dynamic Gauging Applied to Annular Test Apparatuses for Fouling and Cleaning. Heat Transfer Engineering, 2011, 32, 339-348. | 1.9 | 7 |
| 120 | Fouling in Crude Oil Preheat Trains: A Systematic Solution to an Old Problem. Heat Transfer Engineering, 2011, 32, 197-215. | 1.9 | 62 |
| 121 | A comparison of ram extrusion by single-holed and multi-holed dies for extrusion–spheronisation of microcrystalline-based pastes. International Journal of Pharmaceutics, 2011, 416, 210-22. | 5.2 | 9 |
| 122 | Solid monolayers of glycerides adsorbed on the surface of graphite powder. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 389, 180-187. | 4.7 | 5 |
| 123 | Effect of nozzle external geometry on the pressure and shear stress exerted on the surface being gauged in fluid dynamic gauging. Chemical Engineering Research and Design, 2011, 89, 2540-2551. | 5.6 | 5 |
| 124 | Optimum cleaning cycles for heat transfer equipment undergoing fouling and ageing. Chemical Engineering Science, 2011, 66, 604-612. | 3.8 | 56 |
| 125 | Exploration of alternative models for the aging of fouling deposits. AICHE Journal, 2011, 57, 3199-3209. | 3.6 | 27 |
| 126 | An analytical method for selecting the optimal nozzle external geometry for fluid dynamic gauging. Chemical Engineering Science, 2011, 66, 3579-3591. | 3.8 | 6 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 127 | Application of fluid dynamic gauging to annular test apparatuses for studying fouling and cleaning. Experimental Thermal and Fluid Science, 2011, 35, 509-520. | 2.7 | 15 |
| 128 | Pressure mode fluid dynamic gauging for studying cake build-up in cross-flow microfiltration. Journal of Membrane Science, 2011, 366, 304-313. | 8.2 | 26 |
| 129 | Rheological characterisation of cake batters generated by planetary mixing: Comparison between untreated and heat-treated wheat flours. Journal of Food Engineering, 2011, 104, 592-602. | 5.2 | 43 |
| 130 | Rheological characterisation of cake batters generated by planetary mixing: Elastic versus viscous effects. Journal of Food Engineering, 2011, 105, 332-342. | 5.2 | 20 |
| 131 | Modelling of shear rate distribution in two planetary mixtures for studying development of cake batter structure. Journal of Food Engineering, 2011, 105, 343-350. | 5.2 | 25 |
| 132 | Impact of deposit ageing on thermal fouling: Lumped parameter model. AICHE Journal, 2010, 56, 531-545. | 3.6 | 20 |
| 133 | Extrusion–spheronisation of microcrystalline cellulose pastes using a non-aqueous liquid binder. International Journal of Pharmaceutics, 2010, 389, 1-9. | 5.2 | 23 |
| 134 | 2-D simulation of wick debinding for ceramic parts in close proximity. Chemical Engineering Science, 2010, 65, 5990-6000. | 3.8 | 8 |
| 135 | The application of fluid dynamic gauging in the investigation of synthetic membrane fouling phenomena. Food and Bioproducts Processing, 2010, 88, 409-418. | 3.6 | 18 |
| 136 | Studies into the swelling of gelatine films using a scanning fluid dynamic gauge. Food and Bioproducts Processing, 2010, 88, 357-364. | 3.6 | 28 |
| 137 | Swelling and dissolution in cleaning of whey protein gels. Food and Bioproducts Processing, 2010, 88, 375-383. | 3.6 | 32 |
| 138 | Impact of deposit aging and surface roughness on thermal fouling: Distributed model. AICHE Journal, 2010, 56, 3257-3273. | 3.6 | 38 |
| 139 | Scheduling cleaning in a crude oil preheat train subject to fouling: Incorporating desalter control. Applied Thermal Engineering, 2010, 30, 1852-1862. | 6.0 | 55 |
| 140 | Gas flow in rotary kilns. Particuology, 2010, 8, 613-616. | 3.6 | 3 |
| 141 | A scanning fluid dynamic gauging technique for probing surface layers. Measurement Science and Technology, 2010, 21, 085103. | 2.6 | 24 |
| 142 | Extrusion–spheronisation of highly loaded 5-ASA multiparticulate dosage forms. International Journal of Pharmaceutics, 2010, 402, 153-164. | 5.2 | 33 |
| 143 | Viscous dissipation and apparent wall slip in capillary rheometry of ice cream. Food and Bioproducts Processing, 2009, 87, 266-272. | 3.6 | 10 |
| 144 | Effect of salts on the alkaline degradation of \hat{l}^2 -lactoglobulin gels and aggregates: Existence of a dissolution threshold. Food Hydrocolloids, 2009, 23, 1587-1595. | 10.7 | 12 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Experimental and CFD studies of fluid dynamic gauging in annular flows. AICHE Journal, 2009, 55, 1937-1947. | 3.6 | 10 |
| 146 | Inâ€Situ Xâ€Ray Studies of Cocoa Butter Droplets Undergoing Simulated Spray Freezing. JAOCS, Journal of the American Oil Chemists' Society, 2009, 86, 215. | 1.9 | 11 |
| 147 | Shear Rheology of Molten Crumb Chocolate. Journal of Food Science, 2009, 74, E55-61. | 3.1 | 46 |
| 148 | Maldistribution of fluids in extrudates. Journal of the European Ceramic Society, 2009, 29, 937-941. | 5.7 | 9 |
| 149 | Development of an improved heating system for industrial tunnel baking ovens. Journal of Food Engineering, 2009, 91, 64-71. | 5.2 | 17 |
| 150 | Experimental and CFD studies of fluid dynamic gauging in duct flows. Chemical Engineering Science, 2009, 64, 219-227. | 3.8 | 13 |
| 151 | Long-term HIV dynamics subject to continuous therapy and structured treatment interruptions. Chemical Engineering Science, 2009, 64, 1600-1617. | 3.8 | 49 |
| 152 | Planning of patient-specific drug-specific optimal HIV treatment strategies. Chemical Engineering Science, 2009, 64, 4024-4039. | 3.8 | 12 |
| 153 | Experimental Studies of Freezing Fouling of Model Food Fat Solutions Using a Novel Spinning Disc Apparatus. Energy & Samp; Fuels, 2009, 23, 6131-6145. | 5.1 | 9 |
| 154 | The Effect of Fouling on Heat Transfer, Pressure Drop, and Throughput in Refinery Preheat Trains: Optimization of Cleaning Schedules. Heat Transfer Engineering, 2009, 30, 805-814. | 1.9 | 32 |
| 155 | Platform for Techno-economic Analysis of Fouling Mitigation Options in Refinery Preheat Trains. Energy & Energy | 5.1 | 40 |
| 156 | Simultaneous Consideration of Flow and Thermal Effects of Fouling in Crude Oil Preheat Trains. Heat Transfer Engineering, 2009, 30, 815-821. | 1.9 | 14 |
| 157 | Solid–liquid transitions in the rheology of a structured yeast extract paste, Marmiteâ,,¢. Journal of Food Engineering, 2008, 88, 353-363. | 5.2 | 9 |
| 158 | Thermo-hydraulic channelling in parallel heat exchangers subject to fouling. Chemical Engineering Science, 2008, 63, 3400-3410. | 3.8 | 46 |
| 159 | Comparison between the dissolution of whey protein gels and of synthetic polymers. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1007-1021. | 2.1 | 6 |
| 160 | Dynamic Gauging in Duct Flows. Canadian Journal of Chemical Engineering, 2008, 81, 279-284. | 1.7 | 7 |
| 161 | Shaping ceramics by plastic processing. Journal of the European Ceramic Society, 2008, 28, 1341-1351. | 5.7 | 29 |
| 162 | Rheology of a thermoplastic paste through the mushy state transition. Chemical Engineering Science, 2008, 63, 1438-1448. | 3.8 | 7 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 163 | Modelling laminar pulsed flow in rectangular microchannels. Chemical Engineering Science, 2008, 63, 2682-2689. | 3.8 | 15 |
| 164 | Diffusion of NaOH into a protein gel. Chemical Engineering Science, 2008, 63, 2763-2772. | 3.8 | 33 |
| 165 | Phenomenological study and modelling of wick debinding. Chemical Engineering Science, 2008, 63, 3802-3809. | 3.8 | 21 |
| 166 | Causticâ€induced gelation of βâ€lactoglobulin. International Journal of Food Science and Technology, 2008, 43, 1379-1386. | 2.7 | 11 |
| 167 | Fluid dynamic gauging studies of swelling behaviour of whey protein gels in NaOH/NaCl solutions. International Journal of Food Science and Technology, 2008, 43, 1901-1907. | 2.7 | 8 |
| 168 | Novel Rheology in a Structured Food Product—Marmite™. AIP Conference Proceedings, 2008, , . | 0.4 | 0 |
| 169 | Rheology of Commercial and Model Ice Creams. Applied Rheology, 2008, 18, 12913-1-12913-11. | 5.2 | 11 |
| 170 | Chapter 3 Extrusionâ€"spheronisation. Handbook of Powder Technology, 2007, 11, 189-217. | 0.1 | 11 |
| 171 | Pulsed Flow Cleaning of Whey Protein Fouling Layers. Heat Transfer Engineering, 2007, 28, 202-209. | 1.9 | 46 |
| 172 | Fluid dynamic gauging: a new technique for studying membrane fouling. Water Science and Technology: Water Supply, 2007, 7, 175-184. | 2.1 | 1 |
| 173 | Swelling and Its Suppression in the Cleaning of Polymer Fouling Layers. Industrial & Engineering Chemistry Research, 2007, 46, 4846-4855. | 3.7 | 15 |
| 174 | Swelling and Dissolution of β-Lactoglobulin Gels in Alkali. Biomacromolecules, 2007, 8, 469-476. | 5.4 | 49 |
| 175 | Extraction of Crude Oil Fouling Model Parameters from Plant Exchanger Monitoring. Heat Transfer Engineering, 2007, 28, 185-192. | 1.9 | 23 |
| 176 | The pH Threshold in the Dissolution of \hat{l}^2 -Lactoglobulin Gels and Aggregates in Alkali. Biomacromolecules, 2007, 8, 1162-1170. | 5.4 | 45 |
| 177 | Modelling of paste flows subject to liquid phase migration. International Journal for Numerical Methods in Engineering, 2007, 72, 1157-1180. | 2.8 | 25 |
| 178 | Effects of drying technique on extrusion–spheronisation granules and tablet properties. International Journal of Pharmaceutics, 2007, 332, 38-44. | 5.2 | 23 |
| 179 | Fluid dynamic gauging: A new tool to study deposition on porous surfaces. Journal of Membrane Science, 2007, 296, 29-41. | 8.2 | 30 |
| 180 | Dissolving heat-induced protein gel cubes in alkaline solutions under natural and forced convection conditions. Journal of Food Engineering, 2007, 79, 1315-1321. | 5.2 | 15 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 181 | Polyelectrolyte screening effects on the dissolution of whey protein gels at high pH conditions. Food Hydrocolloids, 2007, 21, 1275-1284. | 10.7 | 30 |
| 182 | The Effect of Drying Technique on Tablets Formed from Extrusion-spheronization Granules. Chemical Engineering Research and Design, 2007, 85, 996-1004. | 5.6 | 9 |
| 183 | Fluid dynamic gauging: a technique for studying the cleaning of food process surfaces. Food Manufacturing Efficiency, 2007, 1, 35-41. | 0.2 | 7 |
| 184 | SELECTION OF SIGNAL PROCESSING TECHNIQUES FOR EXTRACTING QUANTITATIVE INDICATORS OF PASTE QUALITY FROM EXTRUSION PRESSURE DATA. Chemical Engineering Communications, 2006, 193, 986-1007. | 2.6 | 1 |
| 185 | Effect of Gel Structure on the Dissolution of Heat-Induced β-Lactoglobulin Gels in Alkali. Journal of Agricultural and Food Chemistry, 2006, 54, 5437-5444. | 5.2 | 34 |
| 186 | Real-time monitoring of chocolate extrusion by signal processing of pressure transducer data. Food Control, 2006, 17, 862-867. | 5.5 | 4 |
| 187 | Solvent-based cleaning of emulsion polymerization reactors. Chemical Engineering Journal, 2006, 117, 61-69. | 12.7 | 7 |
| 188 | Modelling laminar pulsed flow for the enhancement of cleaning. Chemical Engineering Science, 2006, 61, 2079-2084. | 3.8 | 16 |
| 189 | Exploiting the curious characteristics of dense solid–liquid pastes. Chemical Engineering Science, 2006, 61, 4147-4154. | 3.8 | 26 |
| 190 | Paste extrusion through non-axisymmetric geometries: Insights gained by application of a liquid phase drainage criterion. Powder Technology, 2006, 168, 64-73. | 4.2 | 21 |
| 191 | Roller extrusion of biscuit doughs. Journal of Food Engineering, 2006, 74, 431-450. | 5.2 | 12 |
| 192 | Effect of surface treatment on cleaning of a model food soil. Surface and Coatings Technology, 2006, 201, 943-951. | 4.8 | 44 |
| 193 | A study of surface fracture in paste extrusion using signal processing. Journal of Materials Science, 2006, 41, 2895-2906. | 3.7 | 7 |
| 194 | Temperature profiles in a controlled-stress parallel plate rheometer. Rheologica Acta, 2006, 46, 23-31. | 2.4 | 5 |
| 195 | Velocity profiling inside a ram extruder using magnetic resonance (MR) techniques. Chemical Engineering Science, 2006, 61, 1357-1367. | 3.8 | 25 |
| 196 | Fundamentals of spray freezing of instant coffee. Journal of Food Engineering, 2006, 74, 451-461. | 5.2 | 33 |
| 197 | Microstructures formed by spray freezing of food fats. JAOCS, Journal of the American Oil Chemists' Society, 2006, 83, 1053-1062. | 1.9 | 19 |
| 198 | Liquid phase migration in the extrusion and squeezing of microcrystalline cellulose pastes. European Journal of Pharmaceutical Sciences, 2006, 29, 22-34. | 4.0 | 56 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 199 | Probing The Mechanisms Limiting Dissolution of Whey Protein Gels During Cleaning. Food and Bioproducts Processing, 2006, 84, 311-319. | 3.6 | 17 |
| 200 | Comparison of Whey Protein Model Foulants for Studying Cleaning of Milk Fouling Deposits. Food and Bioproducts Processing, 2006, 84, 329-337. | 3.6 | 18 |
| 201 | Comparative Studies of Fluid Dynamic Gauging and a Micromanipulation Probe for Strength Measurements. Food and Bioproducts Processing, 2006, 84, 353-358. | 3.6 | 20 |
| 202 | Extrusion behaviour of cohesive potato starch pastes: I. Rheological characterisation. Journal of Food Engineering, 2005, 66, 1-12. | 5.2 | 33 |
| 203 | Extrusion behaviour of cohesive potato starch pastes: II. Microstructure–process interactions. Journal of Food Engineering, 2005, 66, 13-24. | 5.2 | 37 |
| 204 | Using magnetic resonance to validate predictions of the solid fraction formed during recalescence of freezing drops. International Journal of Heat and Mass Transfer, 2005, 48, 1017-1021. | 4.8 | 35 |
| 205 | A critical assessment of the Jastrzebski interface condition for the capillary flow of pastes, foams and polymers. Chemical Engineering Science, 2005, 60, 493-502. | 3.8 | 36 |
| 206 | Mechanisms in high-viscosity immersion–granulation. Chemical Engineering Science, 2005, 60, 3777-3793. | 3.8 | 18 |
| 207 | Effect of solids formulation on the manufacture of high shear mixer agglomerates. Advanced Powder Technology, 2005, 16, 145-169. | 4.1 | 12 |
| 208 | A regime map for stages in high shear mixer agglomeration using ultra-high viscosity binders. Advanced Powder Technology, 2005, 16 , $373-386$. | 4.1 | 13 |
| 209 | Influence of Process Parameters on the Tapping Characteristics of High Shear Mixer Agglomerates Made with Ultra-High Viscosity Binders. Chemical Engineering Research and Design, 2005, 83, 7-23. | 5.6 | 9 |
| 210 | Measurement of the Thermophysical Properties of a Thermoplastic Ceramic Paste Across its Solidification Range Using Power-Compensated Differential Scanning Calorimeter. Journal of the American Ceramic Society, 2005, 88, 3116-3124. | 3.8 | 4 |
| 211 | An Experimental and Theoretical Investigation of Bread Dough Sheeting. Food and Bioproducts Processing, 2005, 83, 175-184. | 3.6 | 30 |
| 212 | NMR verification of single droplet freezing models. AICHE Journal, 2005, 51, 2640-2648. | 3.6 | 18 |
| 213 | Rapid measurement of dispersion and velocity in freezing drops using magnetic resonance methods. Experiments in Fluids, 2005, 38, 750-758. | 2.4 | 5 |
| 214 | Extrudate fracture and spheronisation of microcrystalline cellulose pastes. Journal of Materials Science, 2005, 40, 4199-4219. | 3.7 | 18 |
| 215 | Challenges in Cleaning: Recent Developments and Future Prospects. Heat Transfer Engineering, 2005, 26, 51-59. | 1.9 | 88 |
| 216 | Mechanisms in the Solvent Cleaning of Emulsion Polymerization Reactor Surfaces. Industrial & Engineering Chemistry Research, 2005, 44, 4605-4616. | 3.7 | 9 |

| # | Article | IF | CITATIONS |
|-----|--|-------------|-----------|
| 217 | Roller Extrusion of a Ceramic Paste. Industrial & Engineering Chemistry Research, 2005, 44, 4099-4111. | 3.7 | 7 |
| 218 | Retrofitting Crude Oil Refinery Heat Exchanger Networks to Minimize Fouling While Maximizing Heat Recovery. Heat Transfer Engineering, 2005, 26, 23-34. | 1.9 | 25 |
| 219 | Design of reverse osmosis (RO) water treatment networks subject to fouling. Water Science and Technology, 2004, 49, 263-270. | 2.5 | 12 |
| 220 | A Model Experimental Study of Coring by Palm Oil Fats in Distribution Lines. Food and Bioproducts Processing, 2004, 82, 207-212. | 3.6 | 5 |
| 221 | Mitigation of Crude Oil Refinery Heat Exchanger Fouling Through Retrofits Based on Thermo-Hydraulic Fouling Models. Chemical Engineering Research and Design, 2004, 82, 53-71. | 5. 6 | 125 |
| 222 | Monitoring Structural Aspects of Pastes Undergoing Continuous Extrusion Using Signal Processing of Pressure Data. Chemical Engineering Research and Design, 2004, 82, 770-783. | 5.6 | 9 |
| 223 | Magnetic Resonance Studies of Liquid–Soft Solid Mixing by Extrusion. Chemical Engineering Research and Design, 2004, 82, 1360-1366. | 5.6 | 2 |
| 224 | Imaging droplet freezing using MRI. Chemical Engineering Science, 2004, 59, 2113-2122. | 3.8 | 34 |
| 225 | Fluid dynamic gauging for measuring the strength of soft deposits. Journal of Food Engineering, 2004, 65, 175-187. | 5. 2 | 68 |
| 226 | The production of homogeneous extrudates of microcrystalline cellulose pastes. International Journal of Pharmaceutics, 2004, 276, 185-189. | 5. 2 | 4 |
| 227 | Rheological study of a talc-based paste for extrusion-granulation. Journal of the European Ceramic Society, 2004, 24, 3155-3168. | 5.7 | 38 |
| 228 | An NMR study of the freezing of emulsion-containing drops. Journal of Colloid and Interface Science, 2004, 275, 165-171. | 9.4 | 30 |
| 229 | CFD studies of dynamic gauging. Chemical Engineering Science, 2004, 59, 3381-3398. | 3.8 | 41 |
| 230 | Measuring self-diffusion in super-cooled liquid droplets with pulsed gradient spin echo (PGSE) techniques. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 234, 129-134. | 4.7 | 5 |
| 231 | Tapping characterisation of high shear mixer agglomerates made with ultra-high viscosity binders. Powder Technology, 2003, 132, 249-266. | 4.2 | 21 |
| 232 | Characterising paste extrusion behaviour by signal processing of pressure sensor data. Powder Technology, 2003, 132, 233-248. | 4.2 | 18 |
| 233 | Stress relaxation in the extrusion of pastes. Journal of the European Ceramic Society, 2003, 23, 637-646. | 5.7 | 9 |
| 234 | THERMAL DIFFUSIVITY MEASUREMENTS OF PETFOOD. International Journal of Food Properties, 2002, 5, 145-151. | 3.0 | 11 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 235 | Optimization of cleaning schedulesin heat exchanger networkssubject to fouling. Chemical Engineering Communications, 2002, 189, 1517-1549. | 2.6 | 23 |
| 236 | Thermal Conductivity of Whey Protein Films Undergoing Swelling. Food and Bioproducts Processing, 2002, 80, 332-339. | 3.6 | 29 |
| 237 | Ram Extrusion of Potato Starch Dough Through Multi-Holed Dies. Food and Bioproducts Processing, 2002, 80, 12-19. | 3.6 | 21 |
| 238 | Investigation of Alkaline Cleaning-in-Place of Whey Protein Deposits Using Dynamic Gauging. Food and Bioproducts Processing, 2002, 80, 199-214. | 3.6 | 43 |
| 239 | In situ measurements of porosities and permeabilities of alumina pastes. Powder Technology, 2002, 123, 262-274. | 4.2 | 12 |
| 240 | Use of crude oil fouling threshold data in heat exchanger design. Applied Thermal Engineering, 2002, 22, 763-776. | 6.0 | 40 |
| 241 | Evaluation of laboratory crude oil threshold fouling data for application to refinery pre-heat trains. Applied Thermal Engineering, 2002, 22, 777-788. | 6.0 | 98 |
| 242 | Granular Flow in a Planetary Mixer. Chemical Engineering Research and Design, 2002, 80, 432-440. | 5.6 | 27 |
| 243 | A Model Describing Liquid Phase Migration Within an Extruding Microcrystalline Cellulose Paste. Chemical Engineering Research and Design, 2002, 80, 701-714. | 5.6 | 48 |
| 244 | Long-Term Scheduling of Cleaning of Heat Exchanger Networks. Chemical Engineering Research and Design, 2002, 80, 561-578. | 5.6 | 27 |
| 245 | Mitigation of Fouling in Refinery Heat Exchanger Networks by Optimal Management of Cleaning. Energy & Samp; Fuels, 2001, 15, 1038-1056. | 5.1 | 60 |
| 246 | A theoretical study of freezing fouling: limiting behaviour based on a heat and mass transfer analysis. Chemical Engineering and Processing: Process Intensification, 2001, 40, 335-344. | 3.6 | 16 |
| 247 | Measurement of particle size distribution of tripalmitin crystals in a model solution using a laser diffraction method. JAOCS, Journal of the American Oil Chemists' Society, 2001, 78, 1013-1020. | 1.9 | 13 |
| 248 | Development of a novel nonâ€contact proximity gauge for thickness measurement of soft deposits and its application in fouling studies. Canadian Journal of Chemical Engineering, 2000, 78, 935-947. | 1.7 | 77 |
| 249 | Effects of liquid phase migration on extrusion of microcrystalline cellulose pastes. International Journal of Pharmaceutics, 2000, 204, 117-126. | 5.2 | 68 |
| 250 | Enhanced cleaning of whey protein soils using pulsed flows. Journal of Food Engineering, 2000, 46, 199-209. | 5.2 | 115 |
| 251 | Optimisation of membrane regeneration scheduling in reverse osmosis networks for seawater desalination. Desalination, 1999, 125, 37-54. | 8.2 | 39 |
| 252 | Optimization of Scheduling of Cleaning in Heat Exchanger Networks Subject to Fouling. Food and Bioproducts Processing, 1999, 77, 159-164. | 3.6 | 37 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 253 | Cleaning-in-Place of Whey Protein Fouling Deposits. Food and Bioproducts Processing, 1999, 77, 127-136. | 3.6 | 82 |
| 254 | Interpretation of Paste Extrusion Data. Chemical Engineering Research and Design, 1998, 76, 3-8. | 5.6 | 32 |
| 255 | Liquid Phase Migration in the Extrusion of Icing Sugar Pastes. Food and Bioproducts Processing, 1998, 76, 39-46. | 3.6 | 18 |
| 256 | Investigation of Whey Protein Deposit Properties Using Heat Flux Sensors. Food and Bioproducts Processing, 1997, 75, 106-110. | 3.6 | 43 |
| 257 | Chemical reaction fouling: A review. Experimental Thermal and Fluid Science, 1997, 14, 361-374. | 2.7 | 122 |
| 258 | A study of autoxidation reaction fouling in heat exchangers. Canadian Journal of Chemical Engineering, 1996, 74, 236-246. | 1.7 | 37 |
| 259 | Integration of Maintenance and Operation into the Design of Reverse Osmosis Membrane Networks. Special Publication - Royal Society of Chemistry, 0, , 258-259. | 0.0 | 1 |