Pascal Guiraud

List of Publications by Year
in descending order

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37 papers	1,258 citations	331670 21 h-index	361022 35 g-index
38 all docs	38 docs citations	38 times ranked	1257 citing authors

#	Article	IF	Citations
1	Effect of spheroid bubble interface contamination on gas-liquid mass transfer at intermediate Reynolds numbers: From DNS to Sherwood numbers. Chemical Engineering Science, 2022, 248, 116979.	3.8	8
2	The role of microplastics in microalgae cells aggregation: A study at the molecular scale using atomic force microscopy. Science of the Total Environment, 2022, 832, 155036.	8.0	21
3	Probing the interactions between air bubbles and (bio)interfaces at the nanoscale using FluidFM technology. Journal of Colloid and Interface Science, 2021, 604, 785-797.	9.4	14
4	The contribution of Atomic Force Microscopy (AFM) in microalgae studies: A review. Algal Research, 2021, 60, 102506.	4.6	11
5	A numerical framework to predict the performances of a tubular photobioreactor from operating and sunlight conditions. Algal Research, 2021, 60, 102550.	4.6	6
6	Towards a better understanding of microalgae natural flocculation mechanisms to enhance flotation harvesting efficiency. Water Science and Technology, 2020, 82, 1009-1024.	2.5	25
7	Nanoscale Evidence Unravels Microalgae Flocculation Mechanism Induced by Chitosan. ACS Applied Bio Materials, 2020, 3, 8446-8459.	4.6	25
8	How Mixing and Light Heterogeneity Impact the Overall Growth Rate in Photobioreactors. Chemical Engineering and Technology, 2019, 42, 1663-1669.	1.5	6
9	Flocculation-flotation harvesting mechanism of Dunaliella salina: From nanoscale interpretation to industrial optimization. Water Research, 2019, 155, 352-361.	11.3	27
10	Image processing for the experimental investigation of dense dispersed flows: Application to bubbly flows. International Journal of Multiphase Flow, 2019, 111, 16-30.	3.4	19
11	Analysis of cutting-oil emulsion destabilization by aluminum sulfate. Environmental Technology (United Kingdom), 2018, 39, 1450-1460.	2.2	9
12	On single bubble mass transfer in a volatile liquid. International Journal of Heat and Mass Transfer, 2018, 125, 1144-1155.	4.8	12
13	Role of Humic Acid in Enhancing Dissolved Air Flotation for the Removal of TiO₂ Nanoparticles. Industrial & Engineering Chemistry Research, 2017, 56, 2212-2220.	3.7	18
14	Surface-modified microbubbles (colloidal gas aphrons) for nanoparticle removal in a continuous bubble generation-flotation separation system. Water Research, 2017, 126, 399-410.	11.3	39
15	Environmental assessment of bioenergy production from microalgae based systems. Journal of Cleaner Production, 2016, 139, 51-60.	9.3	54
16	Fast Measurements of the Gasâ€Liquid Diffusion Coefficient in the Gaussian Wake of a Spherical Bubble. Chemical Engineering and Technology, 2015, 38, 941-946.	1.5	19
17	Dynamics and mass transfer of rising bubbles in a homogenous swarm at large gas volume fraction. Journal of Fluid Mechanics, 2015, 763, 254-285.	3.4	72
18	Experimental and numerical investigation of hydrodynamics in raceway reactors used for algaculture. Chemical Engineering Journal, 2014, 250, 230-239.	12.7	42

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19	Elimination of TiO2 nanoparticles with the assist of humic acid: Influence of agglomeration in the dissolved air flotation process. Journal of Hazardous Materials, 2013, 260, 122-130.	12.4	18
20	Experiments and modelling of a draft tube airlift reactor operated at high gas throughputs. Chemical Engineering Science, 2013, 104, 32-43.	3.8	4
21	High-pH-induced flocculationâ€“flotation of the hypersaline microalga Dunaliella salina. Bioresource Technology, 2013, 147, 464-470.	9.6	94
22	Mass or heat transfer inside a spherical gas bubble at low to moderate Reynolds number. International Journal of Heat and Mass Transfer, 2013, 67, 1096-1105.	4.8	43
23	Microbubble Generation through Porous Membrane under Aqueous or Organic Liquid Shear Flow. Industrial & Engineering Chemistry Research, 2012, 51, 1997-2009.	3.7	30
24	Silica Nanoparticle Separation from Water by Aggregation with AlCl₃. Industrial & Engineering Chemistry Research, 2012, 51, 1853-1863.	3.7	39
25	Experimental study of mass transfer in a dense bubble swarm. Chemical Engineering Science, 2011, 66, 3432-3440.	3.8	52
26	Direct measurement of mass transfer around a single bubble by micro-PLIFI. Chemical Engineering Science, 2011, 66, 3328-3338.	3.8	60
27	Particle bed deformation in front of a weir induced by subcritical laminar flow. Journal of Hydraulic Research/De Recherches Hydrauliques, 2011, 49, 194-204.	1.7	3
28	On the particle inertia-free collision with a partially contaminated spherical bubble. International Journal of Multiphase Flow, 2009, 35, 163-170.	3.4	14
29	LES and URANS simulations of hydrodynamics in mixing tank: Comparison to PIV experiments. Chemical Engineering Research and Design, 2008, 86, 1322-1330.	5.6	102
30	Fluctuating motion in a homogeneous liquid-liquid dispersed flow at high phase fraction. Physics of Fluids, 2007, 19, 057105.	4.0	5
31	Experimental determination of particles capture efficiency in flotation. Chemical Engineering Science, 2007, 62, 7359-7369.	3.8	34
32	Hold-up within two-phase countercurrent pulsed columns via Eulerian simulations. Chemical Engineering Science, 2007, 62, 4558-4572.	3.8	31
33	Local measurement of oxygen transfer around a single bubble by planar laser-induced fluorescence. Chemical Engineering Science, 2007, 62, 7245-7252.	3.8	61
34	A note on the modelling of the bouncing of spherical drops or solid spheres on a wall in viscous fluid. Chemical Engineering Science, 2006, 61, 3543-3549.	3.8	65
35	Drop break-up in turbulent pipe flow downstream of a restriction. Chemical Engineering Science, 2005, 60, 6511-6528.	3.8	104
36	Determination of the collision frequency between bubbles and particles in flotation. Chemical Engineering Science, 2005, 60, 6107-6117.	3.8	36

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37	Slip velocity and drag law in a liquid-liquid homogeneous dispersed flow. AICHE Journal, 2003, 49, 2300-2316.	3.6	35