

# Pascal Guiraud

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Drop break-up in turbulent pipe flow downstream of a restriction. <i>Chemical Engineering Science</i> , 2005, 60, 6511-6528.	3.8	104
2	LES and URANS simulations of hydrodynamics in mixing tank: Comparison to PIV experiments. <i>Chemical Engineering Research and Design</i> , 2008, 86, 1322-1330.	5.6	102
3	High-pH-induced flocculation/flotation of the hypersaline microalga <i>Dunaliella salina</i> . <i>Bioresource Technology</i> , 2013, 147, 464-470.	9.6	94
4	Dynamics and mass transfer of rising bubbles in a homogenous swarm at large gas volume fraction. <i>Journal of Fluid Mechanics</i> , 2015, 763, 254-285.	3.4	72
5	A note on the modelling of the bouncing of spherical drops or solid spheres on a wall in viscous fluid. <i>Chemical Engineering Science</i> , 2006, 61, 3543-3549.	3.8	65
6	Local measurement of oxygen transfer around a single bubble by planar laser-induced fluorescence. <i>Chemical Engineering Science</i> , 2007, 62, 7245-7252.	3.8	61
7	Direct measurement of mass transfer around a single bubble by micro-PLIFI. <i>Chemical Engineering Science</i> , 2011, 66, 3328-3338.	3.8	60
8	Environmental assessment of bioenergy production from microalgae based systems. <i>Journal of Cleaner Production</i> , 2016, 139, 51-60.	9.3	54
9	Experimental study of mass transfer in a dense bubble swarm. <i>Chemical Engineering Science</i> , 2011, 66, 3432-3440.	3.8	52
10	Mass or heat transfer inside a spherical gas bubble at low to moderate Reynolds number. <i>International Journal of Heat and Mass Transfer</i> , 2013, 67, 1096-1105.	4.8	43
11	Experimental and numerical investigation of hydrodynamics in raceway reactors used for algal culture. <i>Chemical Engineering Journal</i> , 2014, 250, 230-239.	12.7	42
12	Silica Nanoparticle Separation from Water by Aggregation with $AlCl_3$ . <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 1853-1863.	3.7	39
13	Surface-modified microbubbles (colloidal gas aphrons) for nanoparticle removal in a continuous bubble generation-flotation separation system. <i>Water Research</i> , 2017, 126, 399-410.	11.3	39
14	Determination of the collision frequency between bubbles and particles in flotation. <i>Chemical Engineering Science</i> , 2005, 60, 6107-6117.	3.8	36
15	Slip velocity and drag law in a liquid-liquid homogeneous dispersed flow. <i>AIChE Journal</i> , 2003, 49, 2300-2316.	3.6	35
16	Experimental determination of particles capture efficiency in flotation. <i>Chemical Engineering Science</i> , 2007, 62, 7359-7369.	3.8	34
17	Hold-up within two-phase countercurrent pulsed columns via Eulerian simulations. <i>Chemical Engineering Science</i> , 2007, 62, 4558-4572.	3.8	31
18	Microbubble Generation through Porous Membrane under Aqueous or Organic Liquid Shear Flow. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 1997-2009.	3.7	30

#	ARTICLE	IF	CITATIONS
19	Flocculation-flotation harvesting mechanism of <i>Dunaliella salina</i> : From nanoscale interpretation to industrial optimization. <i>Water Research</i> , 2019, 155, 352-361.	11.3	27
20	Towards a better understanding of microalgae natural flocculation mechanisms to enhance flotation harvesting efficiency. <i>Water Science and Technology</i> , 2020, 82, 1009-1024.	2.5	25
21	Nanoscale Evidence Unravels Microalgae Flocculation Mechanism Induced by Chitosan. <i>ACS Applied Bio Materials</i> , 2020, 3, 8446-8459.	4.6	25
22	The role of microplastics in microalgae cells aggregation: A study at the molecular scale using atomic force microscopy. <i>Science of the Total Environment</i> , 2022, 832, 155036.	8.0	21
23	Fast Measurements of the Gas-Liquid Diffusion Coefficient in the Gaussian Wake of a Spherical Bubble. <i>Chemical Engineering and Technology</i> , 2015, 38, 941-946.	1.5	19
24	Image processing for the experimental investigation of dense dispersed flows: Application to bubbly flows. <i>International Journal of Multiphase Flow</i> , 2019, 111, 16-30.	3.4	19
25	Elimination of TiO <sub>2</sub> nanoparticles with the assist of humic acid: Influence of agglomeration in the dissolved air flotation process. <i>Journal of Hazardous Materials</i> , 2013, 260, 122-130.	12.4	18
26	Role of Humic Acid in Enhancing Dissolved Air Flotation for the Removal of TiO <sub>2</sub> Nanoparticles. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 2212-2220.	3.7	18
27	On the particle inertia-free collision with a partially contaminated spherical bubble. <i>International Journal of Multiphase Flow</i> , 2009, 35, 163-170.	3.4	14
28	Probing the interactions between air bubbles and (bio)interfaces at the nanoscale using FluidFM technology. <i>Journal of Colloid and Interface Science</i> , 2021, 604, 785-797.	9.4	14
29	On single bubble mass transfer in a volatile liquid. <i>International Journal of Heat and Mass Transfer</i> , 2018, 125, 1144-1155.	4.8	12
30	The contribution of Atomic Force Microscopy (AFM) in microalgae studies: A review. <i>Algal Research</i> , 2021, 60, 102506.	4.6	11
31	Analysis of cutting-oil emulsion destabilization by aluminum sulfate. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 1450-1460.	2.2	9
32	Effect of spheroid bubble interface contamination on gas-liquid mass transfer at intermediate Reynolds numbers: From DNS to Sherwood numbers. <i>Chemical Engineering Science</i> , 2022, 248, 116979.	3.8	8
33	How Mixing and Light Heterogeneity Impact the Overall Growth Rate in Photobioreactors. <i>Chemical Engineering and Technology</i> , 2019, 42, 1663-1669.	1.5	6
34	A numerical framework to predict the performances of a tubular photobioreactor from operating and sunlight conditions. <i>Algal Research</i> , 2021, 60, 102550.	4.6	6
35	Fluctuating motion in a homogeneous liquid-liquid dispersed flow at high phase fraction. <i>Physics of Fluids</i> , 2007, 19, 057105.	4.0	5
36	Experiments and modelling of a draft tube airlift reactor operated at high gas throughputs. <i>Chemical Engineering Science</i> , 2013, 104, 32-43.	3.8	4

#	ARTICLE	IF	CITATIONS
37	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