Pierre Saramito

List of Publications by Year
in descending order

27 papers	1,204 citations	471509 17 h-index	526287 27 g-index
28 all docs	28 docs citations	28 times ranked	989 citing authors

#	Article	IF	Citations
1	A new constitutive equation for elastoviscoplastic fluid flows. Journal of Non-Newtonian Fluid Mechanics, 2007, 145, 1-14.	2.4	181
2	A new elastoviscoplastic model based on the Herschel–Bulkley viscoplastic model. Journal of Non-Newtonian Fluid Mechanics, 2009, 158, 154-161.	2.4	176
3	An adaptive finite element method for Bingham fluid flows around a cylinder. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 3317-3341.	6.6	131
4	Progress in numerical simulation of yield stress fluid flows. Rheologica Acta, 2017, 56, 211-230.	2.4	115
5	An adaptive finite element method for viscoplastic fluid flows in pipes. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 5391-5412.	6.6	87
6	A Maxwell elasto-brittle rheology for sea ice modelling. Cryosphere, 2016, 10, 1339-1359.	3.9	84
7	Complex fluids. Mathématiques Et Applications, 2016, , .	0.2	42
8	An adaptive finite element method for viscoplastic flows in a square pipe with stick–slip at the wall. Journal of Non-Newtonian Fluid Mechanics, 2008, 155, 101-115.	2.4	41
9	A damped Newton algorithm for computing viscoplastic fluid flows. Journal of Non-Newtonian Fluid Mechanics, 2016, 238, 6-15.	2.4	41
10	Vesicle tumbling inhibited by inertia. Physics of Fluids, 2012, 24, .	4.0	39
11	Colloquium: Mechanical formalisms for tissue dynamics. European Physical Journal E, 2015, 38, 121.	1.6	39
12	Computing the dynamics of biomembranes by combining conservative level set and adaptive finite element methods. Journal of Computational Physics, 2014, 263, 328-352.	3.8	29
13	On a modified non-singular log-conformation formulation for Johnson–Segalman viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 2014, 211, 16-30.	2.4	26
14	On the equilibrium equation for a generalized biological membrane energy by using a shape optimization approach. Physica D: Nonlinear Phenomena, 2010, 239, 1567-1572.	2.8	25
15	Ice bridges and ridges in the Maxwell-EB sea ice rheology. Cryosphere, 2017, 11, 2033-2058.	3.9	25
16	Modelling lava flow advance using a shallow-depth approximation for three-dimensional cooling of viscoplastic flows. Geological Society Special Publication, 2016, 426, 409-423.	1.3	20
17	A new operator splitting algorithm for elastoviscoplastic flow problems. Journal of Non-Newtonian Fluid Mechanics, 2013, 202, 13-21.	2.4	18
18	Improving the mass conservation of the level set method in a finite element context. Comptes Rendus Mathematique, 2010, 348, 535-540.	0.3	16

#	Article	IF	Citations
19	An adaptive finite element method for the modeling of the equilibrium of red blood cells. International Journal for Numerical Methods in Fluids, 2016, 80, 397-428.	1.6	13
20	Fully implicit methodology for the dynamics of biomembranes and capillary interfaces by combining the level set and Newton methods. Journal of Computational Physics, 2017, 343, 271-299.	3.8	12
21	A new rate-independent tensorial model for suspensions of noncolloidal rigid particles in Newtonian fluids. Journal of Rheology, 2018, 62, 889-903.	2.6	10
22	Laminar shallow viscoplastic fluid flowing through an array of vertical obstacles. Journal of Non-Newtonian Fluid Mechanics, 2018, 257, 59-70.	2.4	9
23	Tensorial rheological model for concentrated non-colloidal suspensions: normal stress differences. Journal of Fluid Mechanics, 2020, 898, .	3.4	7
24	A new brittle-elastoviscoplastic fluid based on the Drucker–Prager plasticity. Journal of Non-Newtonian Fluid Mechanics, 2021, 294, 104584.	2.4	5
25	Stick-slip transition capturing by using an adaptive finite element method. ESAIM: Mathematical Modelling and Numerical Analysis, 2004, 38, 249-260.	1.9	3
26	Shear-induced migration in concentrated suspensions: Particle mass conservation, contact pressure and jamming. Journal of Non-Newtonian Fluid Mechanics, 2022, 304, 104805.	2.4	2
27	Linking bulk modulus to an unilateral damage yield criterion: A thermodynamic modeling approach. International Journal of Damage Mechanics, 0, , 105678952199120.	4.2	1