Gilles A Francfort

List of Publications by Year
in descending order

27	2,076	949033 11	721071 23
papers	citations	h-index	g-index

27	27	27	1227
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Variational fracture: twenty years after. International Journal of Fracture, 2022, 237, 3-13.	1.1	11
2	Enhancement of elasto-dielectrics by homogenization of active charges. Journal Des Mathematiques Pures Et Appliquees, 2021, 156, 392-419.	0.8	5
3	Revisiting nucleation in the phase-field approach to brittle fracture. Journal of the Mechanics and Physics of Solids, 2020, 142, 104027.	2.3	86
4	A Two-Dimensional Labile Aether Through Homogenization. Communications in Mathematical Physics, 2019, 367, 599-628.	1.0	4
5	Approximation of a Brittle Fracture Energy with a Constraint of Non-interpenetration. Archive for Rational Mechanics and Analysis, 2018, 228, 867-889.	1.1	31
6	Recovering convexity in non-associated plasticity. Comptes Rendus - Mecanique, 2018, 346, 198-205.	2.1	5
7	Quasistatic evolution in non-associative plasticity revisited. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	0.9	2
8	Fracture and healing of elastomers: A phase-transition theory and numerical implementation. Journal of the Mechanics and Physics of Solids, 2018, 112, 523-551.	2.3	48
9	The taming of plastic slips in von Mises elasto-plasticity. Interfaces and Free Boundaries, 2016, 17, 497-516.	0.2	7
10	Korn-Poincare inequalities for functions with a small jump set. Indiana University Mathematics Journal, 2016, 65, 1373-1399.	0.4	31
11	Isotropy prohibits the loss of strong ellipticity through homogenization in linear elasticity. Comptes Rendus Mathematique, 2016, 354, 1139-1144.	0.1	6
12	A note on the derivation of rigid-plastic models. Nonlinear Differential Equations and Applications, 2016, 23, 1.	0.4	1
13	A case study for uniqueness of elasto-plastic evolutions: The bi-axial test. Journal Des Mathematiques Pures Et Appliquees, 2016, 105, 198-227.	0.8	4
14	The elasto-plastic exquisite corpse: A Suquet legacy. Journal of the Mechanics and Physics of Solids, 2016, 97, 125-139.	2.3	7
15	The role of a vanishing interfacial layer in perfect elasto-plasticity. Chinese Annals of Mathematics Series B, 2015, 36, 813-828.	0.2	2
16	Loss of ellipticity through homogenization in linear elasticity. Mathematical Models and Methods in Applied Sciences, 2015, 25, 905-928.	1.7	11
17	A Critical Revisiting of Finite Elasto-Plasticity. SIAM Journal on Mathematical Analysis, 2015, 47, 526-565.	0.9	16
18	Quasi-static Evolution in Nonassociative Plasticity: The Cap Model. SIAM Journal on Mathematical Analysis, 2012, 44, 245-292.	0.9	32

#	Article	IF	Citations
19	Smallâ€strain heterogeneous elastoplasticity revisited. Communications on Pure and Applied Mathematics, 2012, 65, 1185-1241.	1.2	33
20	Revisiting Energy Release Rates in Brittle Fracture. Journal of Nonlinear Science, 2010, 20, 395-424.	1.0	37
21	The Variational Approach to Fracture. Journal of Elasticity, 2008, 91, 5-148.	0.9	1,167
22	The Variational Approach to Fracture. , 2008, , .		123
23	Quasistatic Crack Growth in Nonlinear Elasticity. Archive for Rational Mechanics and Analysis, 2005, 176, 165-225.	1.1	249
24	Existence and convergence for quasi-static evolution in brittle fracture. Communications on Pure and Applied Mathematics, 2003, 56, 1465-1500.	1.2	144
25	Homogenisation of a class of fourth order equations with application to incompressible elasticity. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1992, 120, 25-46.	0.8	11
26	Quasi-Static Evolution for the Armstrong-Frederick Hardening-Plasticity Model. Applied Mathematics Research EXpress, 0, , .	1.0	3
27	Un rÃ©sumÃ© de la thÃ©orie variationnelle de la rupture. SÃ©minaire Laurent Schwartz â€" EDP Et Applications, 0, , 1-11.	0.0	0