Alessandro Giacomini

List of Publications by Year
in descending order

40 papers	662 citations	623734 14 h-index	610901 24 g-index
40 all docs	40 docs citations	40 times ranked	369 citing authors

#	Article	IF	Citations
1	Ambrosio-Tortorelli approximation of quasi-static evolution of brittle fractures. Calculus of Variations and Partial Differential Equations, 2005, 22, 129-172.	1.7	107
2	Crack Initiation in Brittle Materials. Archive for Rational Mechanics and Analysis, 2008, 188, 309-349.	2.4	57
3	A Variational Approach to the Isoperimetric Inequality for the Robin Eigenvalue Problem. Archive for Rational Mechanics and Analysis, 2010, 198, 927-961.	2.4	43
4	A Γ-Convergence Approach to Stability of Unilateral Minimality Properties in Fracture Mechanics and Applications. Archive for Rational Mechanics and Analysis, 2006, 180, 399-447.	2.4	39
5	Influence of material parameters and crystallography on the size effects describable by means of strain gradient plasticity. Journal of the Mechanics and Physics of Solids, 2008, 56, 2906-2934.	4.8	37
6	Small‐strain heterogeneous elastoplasticity revisited. Communications on Pure and Applied Mathematics, 2012, 65, 1185-1241.	3.1	33
7	Piecewise rigidity. Journal of Functional Analysis, 2007, 244, 134-153.	1.4	32
8	Faber‐Krahn Inequalities for the Robin-Laplacian: A Free Discontinuity Approach. Archive for Rational Mechanics and Analysis, 2015, 218, 757-824.	2.4	32
9	Quasi-static Evolution for a Model in Strain Gradient Plasticity. SIAM Journal on Mathematical Analysis, 2008, 40, 1201-1245.	1.9	26
10	Non-interpenetration of matter for SBV deformations of hyperelastic brittle materials. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2008, 138, 1019-1041.	1.2	22
11	Shape optimization problems with Robin conditions on the free boundary. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2016, 33, 1539-1568.	1.4	21
12	DISCONTINUOUS FINITE ELEMENT APPROXIMATION OF QUASISTATIC CRACK GROWTH IN NONLINEAR ELASTICITY. Mathematical Models and Methods in Applied Sciences, 2006, 16, 77-118.	3.3	20
13	Continuous limits of discrete perimeters. ESAIM: Mathematical Modelling and Numerical Analysis, 2010, 44, 207-230.	1.9	18
14	The Interface Control Domain Decomposition Method for Stokes--Darcy Coupling. SIAM Journal on Numerical Analysis, 2016, 54, 1039-1068.	2.3	16
15	A Discontinuous Finite Element Approximation of Quasi-static Growth of Brittle Fractures. Numerical Functional Analysis and Optimization, 2003, 24, 813-850.	1.4	14
16	Size Effects on Quasi-Static Growth of Cracks. SIAM Journal on Mathematical Analysis, 2005, 36, 1887-1928.	1.9	14
17	Two-scale homogenization for a model in strain gradient plasticity. ESAIM - Control, Optimisation and Calculus of Variations, 2011, 17, 1035-1065.	1.3	12
18	On periodic homogenization in perfect elasto-plasticity. Journal of the European Mathematical Society, 2014, 16, 409-461.	1.4	11

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19	The Saint-Venant Inequality for the Laplace Operator with Robin Boundary Conditions. Milan Journal of Mathematics, 2015, 83, 327-343.	1.1	11
20	A GENERALIZATION OF {RM GO{L}c{A}B'S} THEOREM AND APPLICATIONS TO FRACTURE MECHANICS. Mathematical Models and Methods in Applied Sciences, 2002, 12, 1245-1267.	3.3	10
21	Lᵃˇž bounds of Steklov eigenfunctions and spectrum stability under domain variation. Journal of Differential Equations, 2020, 269, 11461-11491.	2.2	9
22	The taming of plastic slips in von Mises elasto-plasticity. Interfaces and Free Boundaries, 2016, 17, 497-516.	0.8	7
23	The elasto-plastic exquisite corpse: A Suquet legacy. Journal of the Mechanics and Physics of Solids, 2016, 97, 125-139.	4.8	7
24	Best constant in Poincaré inequalities with traces: A free discontinuity approach. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2019, 36, 1959-1986.	1.4	7
25	QUASI-STATIC EVOLUTIONS IN LINEAR PERFECT PLASTICITY AS A VARIATIONAL LIMIT OF FINITE PLASTICITY: A ONE-DIMENSIONAL CASE. Mathematical Models and Methods in Applied Sciences, 2013, 23, 1275-1308.	3.3	6
26	Fracture with healing: A first step towards a new view of cavitation. Analysis and PDE, 2019, 12, 417-447.	1.4	6
27	A density result for Sobolev spaces in dimension two, and applications to stability of nonlinear Neumann problems. Journal of Differential Equations, 2007, 237, 27-60.	2.2	5
28	The Robin–Laplacian problem on varying domains. Calculus of Variations and Partial Differential Equations, 2016, 55, 1.	1.7	5
29	Whitney property in two dimensional Sobolev spaces. Proceedings of the American Mathematical Society, 2008, 136, 2535-2545.	0.8	4
30	The most dangerous flaw orientation in brittle materials and structures. International Journal of Fracture, 2013, 183, 19-28.	2.2	4
31	A case study for uniqueness of elasto-plastic evolutions: The bi-axial test. Journal Des Mathematiques Pures Et Appliquees, 2016, 105, 198-227.	1.6	4
32	Minimization of the k-th eigenvalue of the Robin-Laplacian. Journal of Functional Analysis, 2019, 277, 643-687.	1.4	4
33	On the energetic formulation of the Gurtin and Anand model in strain gradient plasticity. Discrete and Continuous Dynamical Systems - Series B, 2012, 17, 527-552.	0.9	4
34	On the Fleck and Willis homogenization procedure in strain gradient plasticity. Discrete and Continuous Dynamical Systems - Series S, 2013, 6, 43-62.	1.1	4
35	Optimal partitions for Robin Laplacian eigenvalues. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	1.7	3
36	Degenerate Free Discontinuity Problems and Spectral Inequalities in Quantitative Form. Archive for Rational Mechanics and Analysis, 2021, 242, 453-483.	2.4	3

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37	Geodesical connectedness on stationary Lorentzian manifolds with nonsmooth boundary. Nonlinear Analysis: Theory, Methods & Applications, 2001, 47, 5041-5052.	1.1	2
38	The role of a vanishing interfacial layer in perfect elasto-plasticity. Chinese Annals of Mathematics Series B, 2015, 36, 813-828.	0.4	2
39	The Multiphase Mumford--Shah Problem. SIAM Journal on Imaging Sciences, 2019, 12, 1561-1583.	2.2	1
40	Local minimality results for the Mumford–Shah functional via monotonicity. Analysis and PDE, 2020, 13, 865-899.	1.4	0