Matteo Focardi

List of Publications by Year in descending order

44 papers	493 citations	759190 12 h-index	752679 20 g-index
47 all docs	47 docs citations	47 times ranked	229 citing authors

#	Article	IF	Citations
1	Endpoint regularity for 2d Mumford-Shah minimizers: On a theorem of Andersson and Mikayelyan. Journal Des Mathematiques Pures Et Appliquees, 2021, 155, 83-83.	1.6	1
2	Phase-Field Approximation of Functionals Defined on Piecewise-Rigid Maps. Journal of Nonlinear Science, 2021, 31, 1.	2.1	1
3	Quasi-Monotonicity Formulas for Classical Obstacle Problems with Sobolev Coefficients and Applications. Journal of Optimization Theory and Applications, 2020, 184, 125-138.	1.5	3
4	How a minimal surface leaves a thin obstacle. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2020, 37, 1017-1046.	1.4	3
5	The local structure of the free boundary in the fractional obstacle problem. Advances in Calculus of Variations, 2020, .	1.2	2
6	Approximation of fracture energies withp-growthviapiecewise affine finite elements. ESAIM - Control, Optimisation and Calculus of Variations, 2019, 25, 34.	1.3	10
7	A note on the Hausdorff dimension of the singular set of solutions to elasticity type systems. Communications in Contemporary Mathematics, 2019, 21, 1950026.	1.2	8
8	On the HÃ¶lder continuity for a class of vectorial problems. Advances in Nonlinear Analysis, 2019, 9, 1008-1025.	2.6	17
9	Existence of strong minimizers for the Griffith static fracture model in dimension two. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2019, 36, 455-474.	1.4	19
10	On the Measure and the Structure of the Free Boundary of the Lower Dimensional Obstacle Problem. Archive for Rational Mechanics and Analysis, 2018, 230, 125-184.	2.4	24
11	Which special functions of bounded deformation have bounded variation?. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2018, 148, 33-50.	1.2	18
12	The classical obstacle problem for nonlinear variational energies. Nonlinear Analysis: Theory, Methods & Applications, 2017, 154, 71-87.	1.1	11
13	Integral Representation for Functionals Defined on SBDp in Dimension Two. Archive for Rational Mechanics and Analysis, 2017, 223, 1337-1374.	2.4	24
14	Lower semi-continuity for non-coercive polyconvex integrals in the limit case. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2016, 146, 243-264.	1.2	1
15	Existence of minimizers for the 2d stationary Griffith fracture model. Comptes Rendus Mathematique, 2016, 354, 1055-1059.	0.3	7
16	Phase field approximation of cohesive fracture models. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2016, 33, 1033-1067.	1.4	71
17	Some recent results on the convergence of damage to fracture. Atti Della Accademia Nazionale Dei Lincei, Classe Di Scienze Fisiche, Matematiche E Naturali, Rendiconti Lincei Matematica E Applicazioni, 2016, 27, 51-60.	0.6	0
18	Fine regularity results for Mumford-Shah minimizers: porosity, higher integrability and the Mumford-Shah conjecture. , 2016, , 1-68.		1

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19	Multi-Value Microstructural Descriptors for Complex Materials: Analysis of Ground States. Archive for Rational Mechanics and Analysis, 2015, 217, 899-933.	2.4	11
20	Monotonicity formulas for obstacle problems with Lipschitz coefficients. Calculus of Variations and Partial Differential Equations, 2015, 54, 1547-1573.	1.7	14
21	Improved estimate of the singular set of Dir-minimizing Q-valued functions via an abstract regularity result. Journal of Functional Analysis, 2015, 268, 3290-3325.	1.4	12
22	A note on the Hausdorff dimension of the singular set for minimizers of the Mumfordâ€“Shah energy. Advances in Calculus of Variations, 2014, 7, 539-545.	1.2	6
23	Weak lower semicontinuity for polyconvex integrals in the limit case. Calculus of Variations and Partial Differential Equations, 2014, 51, 171-193.	1.7	5
24	Asymptotic Analysis of Ambrosio–Tortorelli Energies in Linearized Elasticity. SIAM Journal on Mathematical Analysis, 2014, 46, 2936-2955.	1.9	29
25	Density lower bound estimates for local minimizers of the 2d Mumfordâ€“Shah energy. Manuscripta Mathematica, 2013, 142, 215-232.	0.6	6
26	Higher integrability of the gradient for minimizers of the 2 d Mumfordâ€“Shah energy. Journal Des Mathematiques Pures Et Appliquees, 2013, 100, 391-409.	1.6	9
27	An intrinsic approach to manifold constrained variational problems. Annali Di Matematica Pura Ed Applicata, 2013, 192, 145-163.	1.0	6
28	Î“â€convergence: a tool to investigate physical phenomena across scales. Mathematical Methods in the Applied Sciences, 2012, 35, 1613-1658.	2.3	11
29	Vector-valued obstacle problems for non-local energies. Discrete and Continuous Dynamical Systems - Series B, 2012, 17, 487-507.	0.9	3
30	Homogenization of the Neumann problem in perforated domains: an alternative approach. Calculus of Variations and Partial Differential Equations, 2011, 42, 257-288.	1.7	12
31	Lower semicontinuous functionals for Almgren's multiple valued functions. Annales Academiae Scientiarum Fennicae Mathematica, 2011, 36, 393-410.	0.7	8
32	Aperiodic fractional obstacle problems. Advances in Mathematics, 2010, 225, 3502-3544.	1.1	12
33	On a 1-capacitary type problem in the plane. Communications on Pure and Applied Analysis, 2010, 9, 1319-1333.	0.8	0
34	FRACTURE MECHANICS IN PERFORATED DOMAINS: A VARIATIONAL MODEL FOR BRITTLE POROUS MEDIA. Mathematical Models and Methods in Applied Sciences, 2009, 19, 2065-2100.	3.3	17
35	Homogenization of Random Fractional Obstacle Problems via Î“-Convergence. Communications in Partial Differential Equations, 2009, 34, 1607-1631.	2.2	7
36	Discrete dynamics of complex bodies with substructural dissipation: Variational integrators and convergence. Discrete and Continuous Dynamical Systems - Series B, 2009, 11, 109-130.	0.9	1

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37	Convergence of asynchronous variational integrators in linear elastodynamics. International Journal for Numerical Methods in Engineering, 2008, 75, 755-769.	2.8	11
38	A 1D Macroscopic Phase Field Model for Dislocations and a Second Order $Gamma$-Limit. Multiscale Modeling and Simulation, 2008, 6, 1098-1124.	1.6	14
39	Relaxation of free-discontinuity energies with obstacles. ESAIM - Control, Optimisation and Calculus of Variations, 2008, 14, 879-896.	1.3	2
40	Asymptotic analysis of Mumfordâ€“Shah type energies in periodically perforated domains. Interfaces and Free Boundaries, 2007, 9, 107-132.	0.8	6
41	Approximation results by difference schemes of fracture energies: the vectorial case. Nonlinear Differential Equations and Applications, 2003, 10, 469-495.	0.8	3
42	VARIATIONAL APPROXIMATION OF FREE-DISCONTINUITY ENERGIES WITH LINEAR GROWTH. Communications in Contemporary Mathematics, 2002, 04, 685-723.	1.2	10
43	Existence of minimizers for a class of quasi-convex functionals with non-standard growth. Annali Di Matematica Pura Ed Applicata, 2002, 180, 493-510.	1.0	1
44	ON THE VARIATIONAL APPROXIMATION OF FREE-DISCONTINUITY PROBLEMS IN THE VECTORIAL CASE. Mathematical Models and Methods in Applied Sciences, 2001, 11, 663-684.	3.3	46