## Emilio MartÃ-nez Pañeda

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3143342/publications.pdf

Version: 2024-02-01



#	Article	IF	CITATIONS
1	A phase field model for hydrogen-assisted fatigue. International Journal of Fatigue, 2022, 154, 106521.	5.7	40
2	A generalised phase field model for fatigue crack growth in elastic–plastic solids with an efficient monolithic solver. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114286.	6.6	54
3	CFD simulations of turbulent dust dispersion in the 20ÂL vessel using OpenFOAM. Powder Technology, 2022, 397, 117033.	4.2	8
4	Comparison of hydrogen diffusivities measured by electrochemical permeation and temperature-programmed desorption in cold-rolled pure iron. Journal of Natural Gas Science and Engineering, 2022, 98, 104365.	4.4	11
5	Modelling fatigue crack growth in shape memory alloys. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 1243-1257.	3.4	22
6	Phase field fracture predictions of microscopic bridging behaviour of composite materials. Composite Structures, 2022, 286, 115242.	5.8	22
7	Cracking predictions of lithium-ion battery electrodes by X-ray computed tomography and modelling. Journal of Power Sources, 2022, 526, 231119.	7.8	47
8	Micromechanics-based phase field fracture modelling of CNT composites. Composites Part B: Engineering, 2022, 236, 109788.	12.0	17
9	Cohesive zone modelling of hydrogen assisted fatigue crack growth: The role of trapping. International Journal of Fatigue, 2022, 162, 106935.	5.7	11
10	A generalised, multi-phase-field theory for dissolution-driven stress corrosion cracking and hydrogen embrittlement. Journal of the Mechanics and Physics of Solids, 2022, 166, 104951.	4.8	29
11	Computational assessment of biomass dust explosions in the 20L sphere. Chemical Engineering Research and Design, 2022, 165, 791-814.	5.6	11
12	A phase field electro-chemo-mechanical formulation for predicting void evolution at the Li–electrolyte interface in all-solid-state batteries. Journal of the Mechanics and Physics of Solids, 2022, 167, 104999.	4.8	26
13	Adaptive phase field modelling of crack propagation in orthotropic functionally graded materials. Defence Technology, 2021, 17, 185-195.	4.2	30
14	Crack tip fields and fracture resistance parameters based on strain gradient plasticity. International Journal of Solids and Structures, 2021, 208-209, 63-82.	2.7	15
15	A phase field formulation for dissolution-driven stress corrosion cracking. Journal of the Mechanics and Physics of Solids, 2021, 147, 104254.	4.8	85
16	Phase field predictions of microscopic fracture and R-curve behaviour of fibre-reinforced composites. Composites Science and Technology, 2021, 202, 108539.	7.8	55
17	Mode II fracture of an MMA adhesive layer: Theory versus experiment. European Journal of Mechanics, A/Solids, 2021, 86, 104133.	3.7	18
18	Phase field modelling of fracture and fatigue in Shape Memory Alloys. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113504.	6.6	60

#	Article	IF	CITATIONS
19	Essential work of fracture assessment of acrylonitrile butadiene styrene (ABS) processed via fused filament fabrication additive manufacturing. International Journal of Advanced Manufacturing Technology, 2021, 113, 771-784.	3.0	17
20	A Unified Abaqus Implementation of the Phase Field Fracture Method Using Only a User Material Subroutine. Materials, 2021, 14, 1913.	2.9	52
21	A simple and robust Abaqus implementation of the phase field fracture method. Applications in Engineering Science, 2021, 6, 100050.	0.8	19
22	An assessment of phase field fracture: crack initiation and growth. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20210021.	3.4	57
23	A mechanism-based multi-trap phase field model for hydrogen assisted fracture. International Journal of Plasticity, 2021, 144, 103044.	8.8	47
24	A mechanism-based gradient damage model for metallic fracture. Engineering Fracture Mechanics, 2021, 255, 107927.	4.3	14
25	Interaction of Void Spacing and Material Size Effect on Inter-Void Flow Localization. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	5
26	Mode I and mode II stress intensity factors and dislocation density behaviour in strain gradient plasticity. Theoretical and Applied Fracture Mechanics, 2021, 116, 103128.	4.7	6
27	On the suitability of slow strain rate tensile testing for assessing hydrogen embrittlement susceptibility. Corrosion Science, 2020, 163, 108291.	6.6	63
28	Phase field fracture modelling using quasi-Newton methods and a new adaptive step scheme. Theoretical and Applied Fracture Mechanics, 2020, 107, 102446.	4.7	147
29	Analysis of hydrogen permeation tests considering two different modelling approaches for grain boundary trapping in iron. International Journal of Fracture, 2020, 223, 17-35.	2.2	17
30	Influence of charging conditions on simulated temperature-programmed desorption for hydrogen in metals. International Journal of Hydrogen Energy, 2020, 45, 23704-23720.	7.1	11
31	A phase field model for elastic-gradient-plastic solids undergoing hydrogen embrittlement. Journal of the Mechanics and Physics of Solids, 2020, 143, 104093.	4.8	79
32	Applications of phase field fracture in modelling hydrogen assisted failures. Theoretical and Applied Fracture Mechanics, 2020, 110, 102837.	4.7	48
33	Analysis of the influence of microstructural traps on hydrogen assisted fatigue. Acta Materialia, 2020, 199, 253-263.	7.9	61
34	Fracture in distortion gradient plasticity. International Journal of Engineering Science, 2020, 156, 103369.	5.0	13
35	Simulation of hydrogen permeation through pure iron for trapping and surface phenomena characterisation. Theoretical and Applied Fracture Mechanics, 2020, 110, 102818.	4.7	18
36	Generalised boundary conditions for hydrogen transport at crack tips. Corrosion Science, 2020, 173, 108698.	6.6	38

#	Article	IF	CITATIONS
37	Numerical study of interface cracking in composite structures using a novel geometrically nonlinear Linear Elastic Brittle Interface Model: Mixed-mode fracture conditions and application to structured interfaces. Composite Structures, 2020, 248, 112495.	5.8	6
38	Creep behaviour and tensile response of adhesively bonded polyethylene joints: Single-Lap and Double-Strap. International Journal of Adhesion and Adhesives, 2020, 102, 102666.	2.9	10
39	Mode II Fracture of an Elastic-Plastic Sandwich Layer. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	5
40	Cold Isostatic Pressing to Improve the Mechanical Performance of Additively Manufactured Metallic Components. Materials, 2019, 12, 2495.	2.9	9
41	Steady-state fracture toughness of elastic-plastic solids: Isotropic versus kinematic hardening. Engineering Fracture Mechanics, 2019, 207, 254-268.	4.3	8
42	The Essential Work of Fracture parameters for 3D printed polymer sheets. Materials and Design, 2019, 181, 107968.	7.0	22
43	Gradient-enhanced statistical analysis of cleavage fracture. European Journal of Mechanics, A/Solids, 2019, 77, 103785.	3.7	15
44	Phase field modelling of crack propagation in functionally graded materials. Composites Part B: Engineering, 2019, 169, 239-248.	12.0	136
45	Mode I crack tip fields: Strain gradient plasticity theory versus J2 flow theory. European Journal of Mechanics, A/Solids, 2019, 75, 381-388.	3.7	23
46	The role of plastic strain gradients in the crack growth resistance of metals. Journal of the Mechanics and Physics of Solids, 2019, 126, 136-150.	4.8	58
47	On the Finite Element Implementation of Functionally Graded Materials. Materials, 2019, 12, 287.	2.9	33
48	Pre-notched dog bone small punch specimens for the estimation of fracture properties. Engineering Failure Analysis, 2019, 96, 236-240.	4.0	8
49	Mechanism-Based Crack Tip Characterization. Springer Theses, 2018, , 69-81.	0.1	0
50	The Role of Energetic and Dissipative Length Parameters. Springer Theses, 2018, , 97-111.	0.1	0
51	A phase field formulation for hydrogen assisted cracking. Computer Methods in Applied Mechanics and Engineering, 2018, 342, 742-761.	6.6	245
52	Size effects in elastic-plastic functionally graded materials. Composite Structures, 2018, 204, 43-51.	5.8	23
53	Crack Growth Resistance in Metallic Alloys: The Role of Isotropic Versus Kinematic Hardening. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	14
54	SGP-Based Modeling of HEAC. Springer Theses, 2018, , 129-153.	0.1	0

#	Article	IF	CITATIONS
55	Gradient Plasticity Formulations. Springer Theses, 2018, , 13-31.	0.1	0
56	Hydrogen Diffusion Towards the Fracture Process Zone. Springer Theses, 2018, , 113-128.	0.1	0
57	On Fracture in Finite Strain Gradient Plasticity. Springer Theses, 2018, , 83-95.	0.1	0
58	Abaqus2Matlab: A suitable tool for finite element post-processing. Advances in Engineering Software, 2017, 105, 9-16.	3.8	121
59	Gradient plasticity crack tip characterization by means of the extended finite element method. Computational Mechanics, 2017, 59, 831-842.	4.0	32
60	A cohesive zone framework for environmentally assisted fatigue. Engineering Fracture Mechanics, 2017, 185, 210-226.	4.3	80
61	Non-local plasticity effects on notch fracture mechanics. Theoretical and Applied Fracture Mechanics, 2017, 92, 276-287.	4.7	29
62	Strain gradient plasticity modeling of hydrogen diffusion to the crack tip. International Journal of Hydrogen Energy, 2016, 41, 10265-10274.	7.1	75
63	Damage modeling in Small Punch Test specimens. Theoretical and Applied Fracture Mechanics, 2016, 86, 51-60.	4.7	31
64	Strain gradient plasticity-based modeling of hydrogen environment assisted cracking. Acta Materialia, 2016, 117, 321-332.	7.9	111
65	A finite element framework for distortion gradient plasticity with applications to bending of thin foils. International Journal of Solids and Structures, 2016, 96, 288-299.	2.7	44
66	Fracture toughness characterization through notched small punch test specimens. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 657, 422-430.	5.6	43
67	On fracture in finite strain gradient plasticity. International Journal of Plasticity, 2016, 80, 154-167.	8.8	90
68	Modeling damage and fracture within strain-gradient plasticity. International Journal of Solids and Structures, 2015, 59, 208-215.	2.7	76
69	Numerical analysis of quasi-static fracture in functionally graded materials. International Journal of Mechanics and Materials in Design, 2015, 11, 405-424.	3.0	61
70	Progress and opportunities in modelling environmentally assisted cracking. RILEM Technical Letters, 0, 6, 70-77.	0.0	11