Pronina Yg

List of Publications by Year in descending order

29 papers	293 citations	840776 11 h-index	940533 16 g-index
31 all docs	31 docs citations	31 times ranked	47 citing authors

#	Article	IF	Citations
1	Analytical solution for the general mechanochemical corrosion of an ideal elasticâ€“plastic thick-walled tube under pressure. International Journal of Solids and Structures, 2013, 50, 3626-3633.	2.7	28
2	Analytical solution for decelerated mechanochemical corrosion of pressurized elasticâ€“perfectly plastic thick-walled spheres. Corrosion Science, 2015, 90, 161-167.	6.6	28
3	An analytical solution for the mechanochemical growth of an elliptical hole in an elastic plane under a uniform remote load. European Journal of Mechanics, A/Solids, 2017, 61, 357-363.	3.7	23
4	On corrosion of a thin-walled spherical vessel under pressure. International Journal of Engineering Science, 2018, 130, 115-128.	5.0	23
5	A periodic set of edge dislocations in an elastic semi-infinite solid with a planar boundary incorporating surface effects. Engineering Fracture Mechanics, 2017, 186, 423-435.	4.3	21
6	Generalization of the LamÃ© problem for three-stage decelerated corrosion process of an elastic hollow sphere. Mechanics Research Communications, 2015, 65, 30-34.	1.8	19
7	Analytical Solution for the Lifetime of a Spherical Shell of Arbitrary Thickness Under the Pressure of Corrosive Environments: The Effect of Thermal and Elastic Stresses. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	17
8	Estimation of the life of an elastic tube under the action of a longitudinal force and pressure under uniform surface corrosion conditions. Russian Metallurgy (Metally), 2010, 2010, 361-364.	0.5	15
9	Stress concentration near the corrosion pit on the outer surface of a thick spherical member. , 2014, , .		15
10	On the applicability of thin spherical shell model for the problems of mechanochemical corrosion. AIP Conference Proceedings, 2015, , .	0.4	15
11	The thermoelasticity problem for pressure vessels with protective coatings, operating under conditions of mechanochemical corrosion. International Journal of Engineering Science, 2022, 170, 103589.	5.0	15
12	Study of possible void nucleation and growth in solids in the framework of the Davis-Nadai deformation theory. Mechanics of Solids, 2014, 49, 302-313.	0.7	13
13	Taking account of hydrostatic pressure in the modeling of corrosion of thick spherical shells. , 2015, , .		11
14	Comment on â€œGeneralization of the Lame problem for three-stage decelerated corrosion process of an elastic hollow sphereâ€• Mechanics Research Communications, 2019, 98, 52-53.	1.8	9
15	Initial boundary value problems for mechanochemical corrosion of a thick spherical member in terms of principal stress. AIP Conference Proceedings, 2015, , .	0.4	8
16	Comment on â€œNew understanding of the effect of hydrostatic pressure on the corrosion of Niâ€“Crâ€“Moâ€“V high strength steelâ€• Corrosion Science, 2015, 100, 672-673.	6.6	6
17	Integral equations for the mixed boundary value problem of a notched elastic half-plane. , 2015, , .		5
18	Calculation of the optimal initial thickness of a spherical vessel operating in mechanochemical corrosion conditions. , 2015, , .		3

#	Article	IF	Citations
19	Modelling the general corrosion of a steel tube under its own weight. Procedia Structural Integrity, 2017, 6, 48-55.	0.8	2
20	On Crack Propagation in a Two-Component Thermally Reinforced Pipe. Lecture Notes in Mechanical Engineering, 2020, , 179-184.	0.4	2
21	A New Model for the Mechanochemical Corrosion of a Thin Spherical Shell. EPJ Web of Conferences, 2016, 108, 02040.	0.3	1
22	Mechanochemical Corrosion: Modeling and Analytical Benchmarks for Initial Boundary Value Problems with Unknown Boundaries. Springer Proceedings in Mathematics and Statistics, 2016, , 301-309.	0.2	1
23	The influence of the initial thickness deviation of a steel tube subjected to general corrosion under its own weight on its durability. AIP Conference Proceedings, 2018, , .	0.4	1
24	Bifurcation of shock absorber arch type made of elastomers. AIP Conference Proceedings, 2018, , .	0.4	1
25	On the stress state of a pressurised pipe with an initial thickness variation, subjected to non-homogeneous internal corrosion. E3S Web of Conferences, 2019, 121, 01013.	0.5	1
26	NEW BENCHMARK FOR THE LIFE ASSESSMENT OF A THIN-WALLED PIPE SUBJECTED TO STRESS ASSISTED CORROSION. , 2016, , .		1
27	On the MATLAB finite element modelling of an elastic plane with a hole under tension. , 2017, , .		0
28	A thin-walled pressurized sphere exposed to external general corrosion and nonuniform heating. AIP Conference Proceedings, 2018, , .	0.4	0
29	Study of bending of plate steel with a through-the-thickness gradient of strength properties. Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya, 2022, 65, 21-27.	0.3	0