Hryhoriy Nykyforchyn

List of Publications by Year
in descending order

140	1,551	304743	377865
papers	citations	22 h-index	34 g-index

142	142	142	570
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Methodology of hydrogen embrittlement study of long-term operated natural gas distribution pipeline steels caused by hydrogen transport. Frattura Ed Integrita Strutturale, 2022, 16, 396-404.	0.9	7
2	Analysis of operational factors affecting the serviceability of seaport hoisting and transporting equipment. Procedia Structural Integrity, 2022, 41, 326-332.	0.8	1
3	Mechanical fabrication methods of nanostructured surfaces. , 2021, , 25-67.		3
4	Assessment of Operational Degradation of Pipeline Steels. Materials, 2021, 14, 3247.	2.9	23
5	In-Service Degradation of Pipeline Steels. Lecture Notes in Civil Engineering, 2021, , 15-29.	0.4	8
6	Non-destructive evaluation of operated pipeline steel state taking into account degradation stage. Procedia Structural Integrity, 2020, 26, 219-224.	0.8	5
7	Role of hydrogen in operational degradation of pipeline steel. Procedia Structural Integrity, 2020, 28, 896-902.	0.8	19
8	Feature of stress corrosion cracking of degraded gas pipeline steels. Procedia Structural Integrity, 2019, 16, 153-160.	0.8	22
9	Laboratory method for simulating hydrogen assisted degradation of gas pipeline steels. Procedia Structural Integrity, 2019, 17, 568-575.	0.8	7
10	Non-destructive evaluation of brittle fracture resistance of operated gas pipeline steel using electrochemical fracture surface analysis. Engineering Failure Analysis, 2019, 104, 617-625.	4.0	24
11	Evaluation of impact toughness of gas pipeline steels under operation using electrochemical method. Procedia Structural Integrity, 2019, 22, 299-304.	0.8	7
12	Wear resistance of the surface nanocrystalline structure under an action of diethylene glycol medium. Applied Nanoscience (Switzerland), 2019, 9, 1085-1090.	3.1	7
13	Mechanical analysis at different scales of gas pipelines. Engineering Failure Analysis, 2018, 90, 434-439.	4.0	30
14	Electrochemical fracture analysis of in-service natural gas pipeline steels. Procedia Structural Integrity, 2018, 13, 1215-1220.	0.8	17
15	Wear Resistance of Steels with Surface Nanocrystalline Structure Generated by Mechanical-Pulse Treatment. Nanoscale Research Letters, 2017, 12, 150.	5.7	20
16	Analysis and mechanical properties characterization of operated gas main elbow with hydrogen assisted large-scale delamination. Engineering Failure Analysis, 2017, 82, 364-377.	4.0	37
17	Evaluation of the Residual Life of a Pipe of Oil Pipeline with an External Surface Stress-Corrosion Crack for a Laminar Flow of Oil with Repeated Hydraulic Shocks. Materials Science, 2017, 53, 216-225.	0.9	7
18	Micro and macro mechanical analysis of gas pipeline steels. Procedia Structural Integrity, 2017, 5, 627-632.	0.8	8

#	Article	IF	Citations
19	Corrosion Degradation of Steel of an Elbow of Gas Pipeline with Large-Scale Delamination after Long-Term Operation. Materials Science, 2017, 52, 861-865.	0.9	26
20	Analysis of the Plasticity Characteristics of Progressively Drawn Pearlitic Steel Wires. Materials Science, 2016, 51, 514-519.	0.9	5
21	Stress corrosion cracking of gas pipeline steels of different strength. Procedia Structural Integrity, 2016, 2, 509-516.	0.8	41
22	Hydrogen assisted macrodelamination in gas lateral pipe. Procedia Structural Integrity, 2016, 2, 501-508.	0.8	12
23	Diagnostic Indications of the In-Service Degradation of the Pressure Regulator of a Gas-Transportation System. Materials Science, 2016, 52, 233-239.	0.9	4
24	Formation of Surface Corrosion-Resistant Nanocrystalline Structures on Steel. Nanoscale Research Letters, 2016, 11, 51.	5.7	13
25	Analysis of Long-Term in-Service Degradation of the Shukhov Tower Elements. Strength of Materials, 2015, 47, 679-688.	0.5	4
26	Fractographic Signs of the In-Service Degradation of Welded Joints of Oil Mains. Materials Science, 2015, 51, 165-171.	0.9	11
27	Hydrogen Permeability of the Surface Nanocrystalline Structures of Carbon Steel. Materials Science, 2015, 50, 698-705.	0.9	9
28	Brittle-Fracture Resistance of the Metal of Hyperboloid Gridshell Shukhov Tower. Materials Science, 2015, 50, 578-584.	0.9	5
29	Influence of Hydrogen on the Mechanical Properties of Steels with the Surface Nanostructure. Springer Proceedings in Physics, 2015, , 457-465.	0.2	9
30	Physical and Mechanical Properties of Surface Nanocrystalline Structures Generated by Severe Thermal-Plastic Deformation. Springer Proceedings in Physics, 2015, , 31-41.	0.2	8
31	Structure and Properties of the Steels of Hyperboloid Gridshell shukhovâ€™s Towers After Long-Term Operation. Materials Science, 2014, 49, 787-795.	0.9	7
32	Computer analysis of characteristic elements of fractographic images. Materials Science, 2013, 48, 474-481.	0.9	42
33	In-service degradation of 20Kh13 steel for blades of steam turbines of thermal power plants. Materials Science, 2012, 47, 447-456.	0.9	7
34	Assessment of the In-Service Degradation of Pipeline Steel by Destructive and Nondestructive Methods. Materials Science, 2012, 47, 583-589.	0.9	16
35	Evaluation of corrosion defects in oil pipelines based on the approaches of fracture mechanics. Materials Science, 2011, 46, 619-627.	0.9	2
36	Specific features of hydrogen-induced corrosion degradation of steels of gas and oil pipelines and oil storage reservoirs. Materials Science, 2011, 47, 127-136.	0.9	43

#	Article	IF	Citations
37	Evaluation of the influence of shutdowns of a technological process on changes in the in-service state of the metal of main steam pipelines of thermal power plants. Materials Science, 2010, 46, 177-189.	0.9	32
38	Environmentally assisted â€œin-bulkâ€•steel degradation of long term service gas trunkline. Engineering Failure Analysis, 2010, 17, 624-632.	4.0	83
39	Effect of the long-term service of the gas pipeline on the properties of the ferrite-pearlite steel. Materials and Corrosion - Werkstoffe Und Korrosion, 2009, 60, 716-725.	1.5	46
40	Degradation of a low-carbon steel in long operation in an oil-hydraulic unit. Materials Science, 2009, 45, 84-88.	0.9	0
41	Automated determination of grain geometry in an exploited steam-pipeline steel. Materials Science, 2009, 45, 350-357.	0.9	10
42	Effect of hydrogenation on the fracture mode of a reactor pressure-vessel steel. Materials Science, 2009, 45, 613-625.	0.9	7
43	Degradation of steels used in gas main pipelines during their 40-year operation. Strength of Materials, 2009, 41, 501-505.	0.5	25
44	Specific features of the in-service bulk degradation of structural steels under the action of corrosive media. Strength of Materials, 2009, 41, 651-663.	0.5	5
45	In-service degradation of gas trunk pipeline X52 steel. Materials Science, 2008, 44, 104.	0.9	48
46	Electrochemical evaluation of the in-service degradation of an aircraft aluminum alloy. Materials Science, 2008, 44, 254-259.	0.9	6
47	Evaluation of heat release in the process of pulsed mechanical hardening of titanium alloys. Materials Science, 2008, 44, 418-422.	0.9	1
48	Influence of operation of Kh52 steel on corrosion processes in a model solution of gas condensate. Materials Science, 2008, 44, 619-629.	0.9	38
49	Hydrogen degradation of steels under long-term in-service conditions. , 2008, , 349-361.		7
50	Influence of electrolyte on corrosion properties of plasma electrolytic conversion coated magnesium alloys. Surface and Coatings Technology, 2007, 201, 8709-8714.	4.8	92
51	Abnormal manifestation of the high-temperature degradation of the weld metal of a low-alloy steel welded joint. Materials Science, 2007, 43, 77-84.	0.9	25
52	Hydrogen degradation of steels in gas mains after long periods of operation. Materials Science, 2007, 43, 708-717.	0.9	27
53	Plasma Electrolytic Oxidation of Arc-Sprayed Aluminum Coatings. Journal of Thermal Spray Technology, 2007, 16, 998-1004.	3.1	26
54	Production of conversion oxide-ceramic coatings on zirconium and titanium alloys. Materials Science, 2006, 42, 277-286.	0.9	30

#	Article	IF	Citations
55	Specific features of the influence of hydrogen on the properties and mechanism of fracture of the metal of welded joints of steam pipelines at thermal power plants. Materials Science, 2006, 42, 451-460.	0.9	7
56	Realization of synergism in 1-, 2-, 3-benzotriazole trimolybdate, tungstate, and chromate corrosion inhibitors. Materials Science, 2006, 42, 589-600.	0.9	5
57	Influence of process parameters on the corrosion properties of electrolytic conversion plasma coated magnesium alloys. Surface and Coatings Technology, 2005, 200, 68-72.	4.8	84
58	Electrochemical Properties of Steels in a Model Hydrogen Galvanic Couple. Materials Science, 2005, 41, 223-229.	0.9	6
59	Adsorption Effect in Corrosion Fracture Mechanics. Materials Science, 2005, 41, 295-303.	0.9	0
60	Electrochemical and Corrosion Properties of Hydrogenated 45 and 12KH18N10T Steels. Materials Science, 2005, 41, 508-519.	0.9	3
61	Estimation of Damage to the Collector of a Water Economizer by Thermal Fatigue Cracks. Materials Science, 2004, 40, 132-138.	0.9	2
62	Embrittlement of the steel of an oil-trunk pipeline. Materials Science, 2004, 40, 302-304.	0.9	23
63	Porosity and Corrosion Properties of Electrolyte Plasma Coatings on Magnesium Alloys. Materials Science, 2004, 40, 585-590.	0.9	19
64	Degradation of Welded Joints of Steam Pipelines of Thermal Electric Power Plants in Hydrogenating Media. Materials Science, 2004, 40, 836-843.	0.9	12
65	POROSITY AND CORROSION RESISTANCE OF PLASMA CONVERSION COATINGS ON MAGNESIUM ALLOYS. High Temperature Material Processes, 2004, 8, 635-643.	0.6	0
66	SYNTHESIS OF OXIDE-CERAMIC COATINGS ON MAGNESIUM ALLOYS AND THEIR CORROSION PROPERTIES. High Temperature Material Processes, 2003, 7, 6.	0.6	4
67	Corrosion Resistance of Pipe Steel in Oilâ€“Water Media. Materials Science, 2002, 38, 424-429.	0.9	21
68	Title is missing!. Materials Science, 2002, 38, 471-483.	0.9	3
69	Wear Resistance of Mechanical-Pulse Treated 40Kh Steel during Abrasive Friction and Cavitation. Materials Science, 2002, 38, 873-879.	0.9	4
70	Title is missing!. Materials Science, 2001, 37, 782-789.	0.9	0
71	Influence of Hydrogen on the Formation of Fatigue Thresholds in Structural Steels. Materials Science, 2001, 37, 252-263.	0.9	10
72	Title is missing!. Materials Science, 2000, 36, 534-540.	0.9	1

#	Article	IF	Citations
73	Corrosion Symposia in Poland. Materials Science, 2000, 36, 943-944.	0.9	0
74	â€œPLAN-Eastâ€•International Project of the â€œInco-Copernicusâ€•Program. Materials Science, 2000, 36, 784-785.	0.9	0
75	Distinctive features of fatigue crack growth in 14Mo V63 pipe steel after service. Materials Science, 1999, 35, 381-388.	0.9	1
76	Percolation methods for the construction of curves of hydrogen-assisted corrosion of chromium-molybdenum steels. Materials Science, 1999, 35, 790-795.	0.9	0
77	Effect of high-temperature degradation of heat-resistant steel on the mechanical and fractographic characteristics of fatigue crack growth. Materials Science, 1999, 35, 499-508.	0.9	12
78	Evaluation of the rate of diffusion growth of voids with regard for the concentration of stresses in their vicinity. Materials Science, 1998, 34, 197-202.	0.9	1
79	Influence of hydrogenation on high-temperature corrosion fatigue of Î±-titanium alloys. Materials Science, 1998, 34, 390-397.	0.9	4
80	Analytic evaluation of the pressure of methane in microvoids of 2.25Cr-1Mo steel subjected to hydrogen attack. Materials Science, 1998, 34, 512-520.	0.9	0
81	Effect of damage in service of 12Kh1MF steam-pipe steel on its crack resistance characteristics. Materials Science, 1998, 34, 110-114.	0.9	18
82	Structural steels surface modification by mechanical pulse treatment for corrosion protection and wear resistance. Surface and Coatings Technology, 1998, 100-101, 125-127.	4.8	12
83	Properties of synthesised oxide-ceramic coatings in electrolyte plasma on aluminium alloys. Surface and Coatings Technology, 1998, 100-101, 219-221.	4.8	31
84	Effect of hydrogen on the kinetics and mechanism of fatigue crack growth in structural steels. Materials Science, 1997, 33, 504-515.	0.9	11
85	Effect of pyrophosphate-polyphosphate inhibitors on the processes of corrosion and salt deposition in aqueous systems. Materials Science, 1997, 33, 346-357.	0.9	2
86	Some ambiguities in the experimental determination of the parameters of fracture mechanics. Materials Science, 1996, 32, 433-443.	0.9	0
87	Double influence of hydrogen on fatigue crack growth in heat-resistant steels. Materials Science, 1995, 30, 403-409.	0.9	0
88	Distinctive features of the effect of laser treatment on the corrosion-fatigue fracture of structural steel. Materials Science, 1995, 30, 653-662.	0.9	1
89	Computation model of corrosion-fatigue crack growth in thin metallic plates. Materials Science, 1995, 30, 25-30.	0.9	2
90	Spectral analysis of an electrolytic plasma in the process of synthesis of aluminum oxide. Materials Science, 1995, 30, 333-343.	0.9	91

#	Article	IF	Citations
91	Influence of hydrogen on deformation and torsional fracture of high-strength steel. Materials Science, 1994, 29, 413-419.	0.9	1
92	A two-parameter damage criterion and high-temperature fatigue crack growth in a corrosion-resistant steel. Soviet Materials Science, 1991, 26, 497-505.	0.0	0
93	A crack growth criterion in research on cyclic cracking resistance in elevated-plasticity materials. Soviet Materials Science, 1990, 25, 560-564.	0.0	0
94	High-temperature cracking resistance in cast steel in reforming oven tubes. Soviet Materials Science, 1990, 26, 183-188.	0.0	0
95	A two-parameter failure criterion for fatigue-crack growth. Soviet Materials Science, 1990, 26, 43-49.	0.0	1
96	Role of the adsorption factor in reduction of the long-term static crack resistance of high-strength steel in gaseous media. Soviet Materials Science, 1988, 23, 357-361.	0.0	0
97	Mechanism of the effect of hydrogen on fatigue crack propagation in structural steels. Soviet Materials Science, 1988, 24, 244-246.	0.0	1
98	Mechanical situation at the tip of a corrosion-fatigue crack and the cyclic crack resistance of steels. Soviet Materials Science, 1988, 24, 105-114.	0.0	3
99	Adequate methods of evaluating the service properties of metals with allowance for cyclic loading and corrosion effects. Strength of Materials, 1988, 20, 275-279.	0.5	0
100	Principles of inhibiting of corrosion-static crack growth in constructional steels caused by hydrogen embrittlement. Soviet Materials Science, 1987, 23, 241-246.	0.0	1
101	The role of residual stresses and strain hardening in the change in corrosion-cyclic crack resistance of casing steels. Soviet Materials Science, 1987, 22, 386-395.	0.0	3
102	Cyclic crack resistance of constructional steels in gaseous hydrogen. Soviet Materials Science, 1987, 22, 439-450.	0.0	5
103	Effect of the geometry of the tip of the preinduced fatigue crack on the level of KIscc. Soviet Materials Science, 1987, 22, 601-605.	0.0	0
104	Relationship of acoustic emission to the kinetics and micromechanism of fatigue failure of high-strength steel with a martensitic structure. Soviet Materials Science, 1987, 23, 156-160.	0.0	3
105	Influence of test temperature on the crack resistance of high-strength steels in corrosive media and after preliminary hydrogen impregnation. Soviet Materials Science, 1986, 22, 245-252.	0.0	0
106	Influence of the scale factor on the cyclic crack resistance of plastic steels in the low-amplitude area of loading. Soviet Materials Science, 1986, 21, 347-353.	0.0	3
107	Method features of evaluation of the cyclic crack resistance of constructional steels in gaseous media. Soviet Materials Science, 1986, 22, 184-187.	0.0	0
108	Cyclic crack resistance of an anticorrosion surfacing ? 15Kh2MFA steel joint. Soviet Materials Science, 1986, 21, 432-440.	0.0	1

#	Article	IF	Citations
109	Threshold of corrosion-static crack resistance as a characteristic of the competitive capacity of different constructional alloys. Soviet Materials Science, 1985, 21, 118-129.	0.0	0
110	A new method of increasing the cyclic crack resistance of structural parts. Soviet Materials Science, 1985, 21, 191-193.	0.0	1
111	Structural sensitivity of the cyclic crack resistance of rotor steel in gaseous hydrogen. Soviet Materials Science, 1985, 20, 424-429.	0.0	8
112	Cyclic-corrosion crack resistance: Rules of the formation of thresholds and life capabilities of various structural alloys. Soviet Materials Science, 1985, 21, 195-207.	0.0	5
113	Influence of fatigue crack closure and geometry on the structural sensitivity of the near-threshold fatigue of steels. Soviet Materials Science, 1984, 20, 62-67.	0.0	7
114	Influence of corrosive medium composition on crack development in high-strength steel with a martensitic structure. Soviet Materials Science, 1984, 20, 91-97.	0.0	1
115	Crack geometry factor and the structural sensitivity of the corrosion crack resistance of low-alloy steels in long-term loading. Soviet Materials Science, 1984, 19, 373-381.	0.0	0
116	Static corrosion crack resistance of heat-resistant vessel steels and their weld joints. Soviet Materials Science, 1984, 20, 326-332.	0.0	2
117	Kinetics and mechanism of corrosion-fatigue crack growth in ferritic-pearlitic class steels. Soviet Materials Science, 1983, 19, 22-30.	0.0	2
118	Effect of crack closure and evaluation of the cyclic crack resistance of constructional alloys. Soviet Materials Science, 1983, 19, 212-225.	0.0	22
119	Conditions of invariance of corrosion crack resistance characteristics. Soviet Materials Science, 1982, 17, 219-227.	0.0	4
120	Two features in rating the corrosion crack resistance of constructional alloys. Soviet Materials Science, 1982, 18, 30-40.	0.0	2
121	The applicability of criteria of fracture mechanics for evaluating the hydrogen embrittlement of high-strength steels. Soviet Materials Science, 1981, 16, 532-537.	0.0	3
122	Factors in acceleration of crack growth during corrosion fatigue of high-strength steels. Soviet Materials Science, 1981, 16, 406-410.	0.0	4
123	Inhibitor protection of high-strength steels from corrosion cracking in the stage of crack propagation. Soviet Materials Science, 1981, 17, 42-49.	0.0	4
124	An effective hypothesis proposed for evaluating the effect of corrosive media on the cyclic crack resistance of metals and alloys. Soviet Materials Science, 1979, 14, 469-475.	0.0	0
125	Rating the crack resistance of structural steels. Soviet Materials Science, 1978, 14, 139-143.	0.0	1
126	An investigation of the j-integral method for rating the crack resistance of constructional materials (a review). Soviet Materials Science, 1978, 14, 296-308.	0.0	3

#	Article	IF	Citations
127	Kinetic effects in the mechanics of delayed fracture of high-strength alloys. Soviet Materials Science, 1977, 12, 347-360.	0.0	3
128	Corrosion cracking of high-strength steel in antiplane strain. Soviet Materials Science, 1977, 13, 35-38.	0.0	1
129	Adsorption reduction of the crack resistance of steel in static loading. Soviet Materials Science, 1977, 12, 20-25.	0.0	1
130	Methodological aspects of determining fracture toughness of high-strength structural steels in operating media. Soviet Materials Science, 1976, 10, 555-560.	0.0	0
131	Installation for studying resistance of materials to cracking under prolonged loading in working environments. Soviet Materials Science, 1976, 11, 497-498.	0.0	0
132	Effect of aqueous medium on long-term crack stability of heat-hardened reinforcement. Soviet Materials Science, 1976, 11, 602-604.	0.0	0
133	Fracture toughness of high-strength bar reinforcement. Soviet Materials Science, 1976, 11, 696-700.	0.0	0
134	Fractographic investigations of the easing of crack propagation in hardened steels by water. Soviet Materials Science, 1976, 11, 143-148.	0.0	0
135	Effect of water and humidity on the crack resistance of structural steels with brief loading. Soviet Materials Science, 1975, 10, 13-15.	0.0	0
136	Simultaneous Reduction of Wear and Corrosion of Titanium, Magnesium and Zirconium Alloys by Surface Plasma Electrolytic Oxidation Treatment. Advanced Materials Research, 0, 38, 27-35.	0.3	12
137	Electrochemical Characteristics of PEO Treated Electric Arc Coatings on Lightweight Alloys. Advanced Materials Research, 0, 138, 55-62.	0.3	1
138	Fatigue Crack Growth Rates of S235 and S355 Steels after Friction Stir Processing. Materials Science Forum, 0, 726, 203-210.	0.3	12
139	Effect of Nanostructurisation of Structural Steels on its Wear Resistance and Hydrogen Embittlement Resistance. Solid State Phenomena, 0, 225, 65-70.	0.3	14
140	Fatigue Characteristic of S355J2 Steel after Surface Frictional-Mechanical Treatment in Corrosive Environment. Solid State Phenomena, 0, 224, 21-26.	0.3	0