Frank Y Cheng

List of Publications by Year in descending order

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265 papers

13,002 citations

67 h-index 95 g-index

270 all docs

270 docs citations

times ranked

270

6088 citing authors

#	Article	IF	CITATIONS
1	Development of an empirical model to predict the burst pressure of corroded elbows of pipelines by finite element modelling. International Journal of Pressure Vessels and Piping, 2022, 195, 104602.	1.2	11
2	Hydrogen-induced degradation of high-strength steel pipeline welds: A critical review. Engineering Failure Analysis, 2022, 133, 105985.	1.8	37
3	A novel model for prediction of burst capacity of corroded pipelines subjected to combined loads of bending moment and axial compression. International Journal of Pressure Vessels and Piping, 2022, 196, 104621.	1.2	9
4	Corrosion Resistance Mechanism of Mica–Graphene/Epoxy Composite Coating in CO2-Clâ^' System. Materials, 2022, 15, 1194.	1.3	1
5	Corrosion of steel in a CO2-containing solution droplet generated in wet gas pipelines studied by scanning Kelvin probe. Journal of Pipeline Science and Engineering, 2022, 2, 71-77.	2.4	7
6	Internal microbiologically influenced corrosion of natural gas pipelines: A critical review. Journal of Natural Gas Science and Engineering, 2022, 102, 104581.	2.1	18
7	Electrochemical thermodynamics of stress corrosion of pipeline steel in active and passive environments studied by scanning Kelvin probe. Corrosion Engineering Science and Technology, 2022, 57, 363-370.	0.7	2
8	Corrosion inhibition behavior of X80 pipeline steel by imidazoline derivative in the CO2-saturated seawater containing sulfate-reducing bacteria with organic carbon starvation. Corrosion Science, 2022, 203, 110345.	3.0	24
9	N-doped carbon-coated Cu2O nanowire arrays on copper foam for rapid and stable water disinfection. Journal of Colloid and Interface Science, 2022, 625, 761-773.	5.0	3
10	A new method for assessment of burst pressure capacity of corroded X80 steel pipelines containing a dent. International Journal of Pressure Vessels and Piping, 2022, 199, 104742.	1.2	11
11	Interaction between internal and external defects on pipelines and its effect on failure pressure. Thin-Walled Structures, 2021, 159, 107230.	2.7	19
12	Numerical modeling of the critical pipeline inclination for the elimination of the water accumulation on the pipe floor in oil-water fluid flow. Petroleum, 2021, 7, 209-221.	1.3	4
13	Facile Li-Al layered double hydroxide films on Al alloy for enhanced hydrophobicity, anti-biofouling and anti-corrosion performance. Journal of Materials Science and Technology, 2021, 79, 230-242.	5.6	26
14	Modeling of mechano-electrochemical interaction between circumferentially aligned corrosion defects on pipeline under axial tensile stresses. Journal of Petroleum Science and Engineering, 2021, 198, 108160.	2.1	15
15	Modeling of mechano-electrochemical interaction at a corrosion defect on a suspended gas pipeline and the failure pressure prediction. Thin-Walled Structures, 2021, 160, 107404.	2.7	14
16	Investigating crevice corrosion of copper and copper alloys using wire beam electrode. Corrosion Engineering Science and Technology, 2021, 56, 407-418.	0.7	3
17	Mechano-electrochemical interaction for pipeline corrosion: A review. Journal of Pipeline Science and Engineering, 2021, 1, 1-16.	2.4	33
18	A review on defect assessment of pipelines: Principles, numerical solutions, and applications. International Journal of Pressure Vessels and Piping, 2021, 191, 104329.	1.2	30

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19	Modeling of mechanical behavior of corroded X80 steel pipeline reinforced with type-B repair sleeve. Thin-Walled Structures, 2021, 163, 107708.	2.7	18
20	Hydrogen permeation and distribution at a high-strength X80 steel weld under stressing conditions and the implication on pipeline failure. International Journal of Hydrogen Energy, 2021, 46, 23100-23112.	3.8	43
21	Assessment of Interaction Between a Dent and an Adjacent Corrosion Feature on Pipelines and the Effect on Pipeline Failure Pressure by Finite-Element Modeling. Journal of Pipeline Systems Engineering and Practice, 2021, 12, .	0.9	3
22	Assessment by finite element modelling of the mechano-electrochemical interaction at corrosion defect on elbows of oil/gas pipelines. Ocean Engineering, 2021, 234, 109228.	1.9	14
23	Modeling of the mechano-electrochemical effect at corrosion defect with varied inclinations on oil/gas pipelines. Petroleum Science, 2021, 18, 1520-1529.	2.4	10
24	Buckling resistance of an X80 steel pipeline at corrosion defect under bending moment. Journal of Natural Gas Science and Engineering, 2021, 93, 104016.	2.1	13
25	Microstructural response and improving surface mechanical properties of pure copper subjected to laser shock peening. Applied Surface Science, 2021, 564, 150336.	3.1	26
26	A novel strain-based assessment method of compressive buckling of X80 corroded pipelines subjected to bending moment load. Thin-Walled Structures, 2021, 167, 108172.	2.7	14
27	Thermodynamics of spontaneous dissociation and dissociative adsorption of hydrogen molecules and hydrogen atom adsorption and absorption on steel under pipelining conditions. International Journal of Hydrogen Energy, 2021, 46, 34469-34486.	3.8	37
28	Finite element modeling of corrosion defect growth and failure pressure prediction of pipelines. International Journal of Pressure Vessels and Piping, 2021, 194, 104509.	1.2	22
29	Effect of uniaxial elastic stress on corrosion of X80 pipeline steel in an acidic soil solution containing sulfate-reducing bacteria trapped under disbonded coating. Corrosion Science, 2021, 193, 109893.	3.0	28
30	Corrosion Mechanism of L360 Pipeline Steel Coated with S8 in CO2-Clâ^' System at Different pH Values. Metals, 2021, 11, 1975.	1.0	3
31	Derivation of the mechanistic relationship of pit initiation on pipelines resulting from cathodic protection potential fluctuations. Corrosion Science, 2020, 163, 108226.	3.0	11
32	Modeling and analysis of a catastrophic oil spill and vapor cloud explosion in a confined space upon oil pipeline leaking. Petroleum Science, 2020, 17, 556-566.	2.4	13
33	Antifouling and antibacterial behaviors of capsaicin-based pH responsive smart coatings in marine environments. Materials Science and Engineering C, 2020, 108, 110361.	3.8	74
34	Preparation of (3-mercaptopropyl)trimethoxylsilane film on brass and its corrosion resistance in natural seawater. Progress in Organic Coatings, 2020, 138, 105392.	1.9	19
35	Development mechanism of local corrosion pit in X80 pipeline steel under flow conditions. Tribology International, 2020, 146, 106145.	3.0	18
36	Investigation of microâ€electrochemical activities of oxide inclusions and microphases in duplex stainless steel and the implication on pitting corrosion. Materials and Corrosion - Werkstoffe Und Korrosion, 2020, 71, 876-886.	0.8	19

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37	Corrosion of underground pipelines in clay soil with varied soil layer thicknesses and aerations. Arabian Journal of Chemistry, 2020, 13, 3601-3614.	2.3	41
38	Visible light illuminated high-performance WO3-TiO2-BiVO4 nanocomposite photoanodes capable of energy self-storage for photo-induced cathodic protection. Corrosion Science, 2020, 164, 108333.	3.0	48
39	Corrosion of pipelines under dynamic direct current interference. Construction and Building Materials, 2020, 261, 120550.	3.2	16
40	Modeling of local buckling of corroded X80 gas pipeline under axial compression loading. Journal of Natural Gas Science and Engineering, 2020, 81, 103472.	2.1	26
41	Assessment by finite element modelling of the mechano-electrochemical interaction at double-ellipsoidal corrosion defect with varied inclinations on pipelines. Construction and Building Materials, 2020, 260, 120459.	3.2	18
42	Passivity degradation and photocorrosion of X52 carbon steel under visible light illumination in concentrated carbonate/bicarbonate solutions. Corrosion Science, 2020, 172, 108727.	3.0	8
43	Essential role of element Si in corrosion resistance of a bridge steel in chloride atmosphere. Corrosion Science, 2020, 173, 108758.	3.0	31
44	Corrosion of initial pits on abandoned X52 pipeline steel in a simulated soil solution containing sulfate-reducing bacteria. Journal of Materials Research and Technology, 2020, 9, 7180-7189.	2.6	23
45	Effect of tensile stress on the hydrogen permeation of MS X65 pipeline steel under sulfide films. International Journal of Hydrogen Energy, 2020, 45, 12419-12431.	3.8	16
46	Failure pressure prediction by defect assessment and finite element modelling on natural gas pipelines under cyclic loading. Journal of Natural Gas Science and Engineering, 2020, 81, 103445.	2.1	31
47	Microbial corrosion of initial perforation on abandoned pipelines in wet soil containing sulfate-reducing bacteria. Colloids and Surfaces B: Biointerfaces, 2020, 190, 110899.	2.5	9
48	Downhole O ₂ corrosion during air-assisted steam injection for secondary or tertiary oil recovery. Corrosion Engineering Science and Technology, 2020, 55, 189-195.	0.7	5
49	Reviewâ€"Electrochemical Noise Applied in Corrosion Science: Theoretical and Mathematical Models towards Quantitative Analysis. Journal of the Electrochemical Society, 2020, 167, 081507.	1.3	78
50	Development mechanism of internal local corrosion of X80 pipeline steel. Journal of Materials Science and Technology, 2020, 49, 186-201.	5.6	35
51	Local buckling failure analysis of high strength pipelines containing a plain dent under bending moment. Journal of Natural Gas Science and Engineering, 2020, 77, 103266.	2.1	22
52	Modelling of mechano-electrochemical interaction at overlapped corrosion defects and the implication on pipeline failure prediction. Engineering Structures, 2020, 212, 110466.	2.6	22
53	Corrosion of X52 pipeline steel in a simulated soil solution with coexistence of Desulfovibrio desulfuricans and Pseudomonas aeruginosa bacteria. Corrosion Science, 2020, 173, 108753.	3.0	32
54	Investigation by numerical modeling of the mechano-electrochemical interaction of circumferentially aligned corrosion defects on pipelines. Thin-Walled Structures, 2019, 144, 106314.	2.7	34

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55	Unexpected cathodic role of Mg41Sm5 phase in mitigating localized corrosion of extruded Mg-Sm-Zn-Zr alloy in NaCl solution. Corrosion Science, 2019, 159, 108133.	3.0	79
56	Water disinfection using Ag nanoparticle–CuO nanowire co-modified 3D copper foam nanocomposites in high flow under low voltages. Environmental Science: Nano, 2019, 6, 2801-2809.	2.2	18
57	Preparation of graphene nanoplate added zinc-rich epoxy coatings for enhanced sacrificial anode-based corrosion protection. Corrosion Science, 2019, 159, 108120.	3.0	7 5
58	Synergism of imidazoline and sodium dodecylbenzenesulphonate inhibitors on corrosion inhibition of X52 carbon steel in CO2-saturated chloride solutions. Journal of Molecular Liquids, 2019, 294, 111674.	2.3	47
59	Preparation of Co3O4@ZnO core-shell nanocomposites with intrinsic p-n junction as high-performance photoelectrodes for photoelectrochemical cathodic protection under visible light. Applied Surface Science, 2019, 476, 815-821.	3.1	57
60	Corrosion of X52 steel under thin layers of water condensate in wet gas pipelines. Journal of Natural Gas Science and Engineering, 2019, 68, 102921.	2.1	21
61	Effect of O ₂ on down-hole corrosion during air-assisted steam injection for heavy oil recovery. Corrosion Engineering Science and Technology, 2019, 54, 310-316.	0.7	4
62	Facile fabrication of hydrophobic polysiloxane coatings for protection of AZ31 magnesium alloy. Journal of Materials Science, 2019, 54, 9759-9774.	1.7	10
63	Modelling of mechano-electrochemical interaction of multiple longitudinally aligned corrosion defects on oil/gas pipelines. Engineering Structures, 2019, 190, 9-19.	2.6	33
64	Enhanced corrosion protection property of Li-Al layered double hydroxides (LDHs) film modified by 2-guanidinosuccinic acid with excellent self-repairing and self-antibacterial properties. Applied Surface Science, 2019, 480, 384-394.	3.1	28
65	4-aminoazobenzene modified natural glucomannan as a green eco-friendly inhibitor for the mild steel in 0.5 M HCl solution. Corrosion Science, 2019, 151, 132-142.	3.0	128
66	Passivation behavior and surface chemistry of 2507 super duplex stainless steel in artificial seawater: Influence of dissolved oxygen and pH. Corrosion Science, 2019, 150, 218-234.	3.0	212
67	pH responsive antifouling and antibacterial multilayer films with Self-healing performance. Chemical Engineering Journal, 2019, 356, 130-141.	6.6	74
68	Effect of roughness on general corrosion and pitting of (FeCoCrNi)0.89(WC)0.11 high-entropy alloy composite in 3.5 wt.% NaCl solution. Corrosion Science, 2019, 146, 44-57.	3.0	112
69	USING WBE CONJUNCTION WITH ELECTROCHEMICAL NOISE TO EVALUATE THE CORROSION REGULARITY OF ENAMEL COATING MODIFIED ON MILD STEEL IMMERSED IN CORROSIVE SOLUTION. Surface Review and Letters, 2019, 26, 1950049.	0.5	1
70	Microbiologically-enhanced galvanic corrosion of the steel beneath a deposit in simulated oilfield-produced water containing Desulfotomaculum nigrificans. Electrochemistry Communications, 2018, 90, 1-5.	2.3	48
71	Stearic acid modified zinc nano-coatings with superhydrophobicity and enhanced antifouling performance. Surface and Coatings Technology, 2018, 340, 55-65.	2.2	55
72	Corrosion of X80 pipeline steel under sulfate-reducing bacterium biofilms in simulated CO2-saturated oilfield produced water with carbon source starvation. Corrosion Science, 2018, 136, 47-59.	3.0	104

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73	Effect of Submicronâ€Scale MnS Inclusions on Hydrogen Trapping and HIC Susceptibility of X70 Pipeline Steels. Steel Research International, 2018, 89, 1700566.	1.0	20
74	Assessment by finite element modeling of the interaction of multiple corrosion defects and the effect on failure pressure of corroded pipelines. Engineering Structures, 2018, 165, 278-286.	2.6	70
75	Microbial corrosion of X52 pipeline steel under soil with varied thicknesses soaked with a simulated soil solution containing sulfate-reducing bacteria and the associated galvanic coupling effect. Electrochimica Acta, 2018, 266, 312-325.	2.6	73
76	Fabrication of micro/nanostructured superhydrophobic ZnO-alkylamine composite films on steel for high-performance self-cleaning and anti-adhesion of bacteria. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 544, 35-43.	2.3	20
77	Mechanistic aspects of microbially influenced corrosion of X52 pipeline steel in a thin layer of soil solution containing sulphate-reducing bacteria under various gassing conditions. Corrosion Science, 2018, 133, 178-189.	3.0	71
78	Photocatalytic anti-bioadhesion and bacterial deactivation on nanostructured iron oxide films. Journal of Materials Chemistry B, 2018, 6, 1458-1469.	2.9	16
79	Three-dimensional graphene nanosheet doped with gold nanoparticles as electrochemical DNA biosensor for bacterial detection. Sensors and Actuators B: Chemical, 2018, 262, 860-868.	4.0	26
80	Facile Synthesis of NiCo _{2–<i>x</i>} Fe _{<i>x</i>} O ₄ Nanotubes/Carbon Textiles Composites for High-Performance Electrochemical Energy Storage Devices. ACS Applied Nano Materials, 2018, 1, 997-1002.	2.4	11
81	Corrosion of antibacterial Cu-bearing 316L stainless steels in the presence of sulfate reducing bacteria. Corrosion Science, 2018, 132, 46-55.	3.0	102
82	Development of nanostructured photocatalytic coatings for anti-bioadhesion and self-cleaning of residual bacterial cells. Chemical Engineering Journal, 2018, 338, 513-525.	6.6	10
83	One-step facile preparation of ZnO nanorods as high-performance photoanodes for photoelectrochemical cathodic protection. Electrochimica Acta, 2018, 276, 311-318.	2.6	64
84	Degradation of fusion bonded epoxy pipeline coatings in the presence of direct current interference. Progress in Organic Coatings, 2018, 120, 79-87.	1,9	9
85	Microbiologically influenced corrosion of 316L stainless steel in the presence of Chlorella vulgaris. International Biodeterioration and Biodegradation, 2018, 129, 209-216.	1.9	50
86	Hydrogen trapping and hydrogen induced cracking of welded X100 pipeline steel in H2S environments. International Journal of Hydrogen Energy, 2018, 43, 2293-2306.	3.8	60
87	Effect of selected biocides on microbiologically influenced corrosion caused by Desulfovibrio ferrophilus IS5. Scientific Reports, 2018, 8, 16620.	1.6	43
88	Microbiologically influenced corrosion of X52 pipeline steel in thin layers of solution containing sulfate-reducing bacteria trapped under disbonded coating. Corrosion Science, 2018, 145, 271-282.	3.0	41
89	Permeability of coal tar enamel coating to cathodic protection current on pipelines. Construction and Building Materials, 2018, 192, 20-27.	3.2	11
90	Effect of Iron Oxidizing Bacteria Biofilm on Corrosion Inhibition of Imidazoline Derivative in CO ₂ -Containing Oilfield Produced Water with Organic Carbon Source Starvation. Journal of the Electrochemical Society, 2018, 165, C354-C361.	1.3	17

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91	Interfacial potential barrier driven electrochemical detection of Cr6+. Analytica Chimica Acta, 2018, 1029, 8-14.	2.6	14
92	Effects of temperature and applied strain on corrosion of X80 pipeline steel in chloride solutions. Corrosion Engineering Science and Technology, 2018, 53, 393-402.	0.7	15
93	Correlation of temperature with galvanic corrosion behaviour of copper alloys based on wire beam electrode. Corrosion Engineering Science and Technology, 2018, 53, 331-339.	0.7	5
94	Fabrication of ZnO/rGO/PPy heterostructure for electrochemical detection of mercury ion. Journal of Electroanalytical Chemistry, 2018, 826, 90-95.	1.9	30
95	Effect of cathodic protection potential fluctuations on pitting corrosion of X100 pipeline steel in acidic soil environment. Corrosion Science, 2018, 143, 428-437.	3.0	55
96	Effects of alternating current interference on cathodic protection potential and its effectiveness for corrosion protection of pipelines. Corrosion Engineering Science and Technology, 2017, 52, 22-28.	0.7	20
97	An intelligent coating doped with inhibitor-encapsulated nanocontainers for corrosion protection of pipeline steel. Chemical Engineering Journal, 2017, 315, 537-551.	6.6	132
98	Characterization of Surface Films Formed During Corrosion of a Pipeline Steel in H2S Environments. Journal of Materials Engineering and Performance, 2017, 26, 828-836.	1.2	7
99	A comparative study of corrosion of 316L stainless steel in biotic and abiotic sulfide environments. International Biodeterioration and Biodegradation, 2017, 120, 91-96.	1.9	22
100	Fabrication of SiO2 nanoparticle–polyelectrolyte nanocontainers with preloaded benzotriazole inhibitors and their self-releasing mechanism and kinetics. Journal of Materials Science, 2017, 52, 8576-8590.	1.7	20
101	A finite element based model for prediction of corrosion defect growth on pipelines. International Journal of Pressure Vessels and Piping, 2017, 153, 70-79.	1.2	40
102	Passive film growth on carbon steel and its nanoscale features at various passivating potentials. Applied Surface Science, 2017, 396, 144-153.	3.1	68
103	AgNP-coordinated glucosamine-grafted carbon nanotubes with enhanced antibacterial properties. New Journal of Chemistry, 2017, 41, 7045-7051.	1.4	12
104	Accelerated corrosion of pipeline steel and reduced cathodic protection effectiveness under direct current interference. Construction and Building Materials, 2017, 148, 675-685.	3.2	65
105	Effect of fluid flow on biofilm formation and microbiologically influenced corrosion of pipelines in oilfield produced water. Journal of Petroleum Science and Engineering, 2017, 156, 451-459.	2.1	54
106	Adhesion of Bacillus subtilis and Pseudoalteromonas lipolytica to steel in a seawater environment and their effects on corrosion. Colloids and Surfaces B: Biointerfaces, 2017, 157, 157-165.	2.5	46
107	A peptide-based biological coating for enhanced corrosion resistance of titanium alloy biomaterials in chloride-containing fluids. Journal of Biomaterials Applications, 2017, 31, 1225-1234.	1.2	8
108	<i>In-situ</i> characterization of the early stage of pipeline steel corrosion in bicarbonate solutions by electrochemical atomic force microscopy. Surface and Interface Analysis, 2017, 49, 133-139.	0.8	11

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109	Mechanism of microbiologically influenced corrosion of X52 pipeline steel in a wet soil containing sulfate-reduced bacteria. Electrochimica Acta, 2017, 253, 368-378.	2.6	91
110	The influence of cathodic protection potential on the biofilm formation and corrosion behaviour of an X70 steel pipeline in sulfate reducing bacteria media. Journal of Alloys and Compounds, 2017, 729, 180-188.	2.8	58
111	Bi-layered CeO2/SrTiO3 nanocomposite photoelectrode for energy storage and photocathodic protection. Electrochimica Acta, 2017, 253, 134-141.	2.6	35
112	Nanopatterning of steel by one-step anodization for anti-adhesion of bacteria. Scientific Reports, 2017, 7, 5326.	1.6	26
113	Effect of sulfide films formed on X65 steel surface on hydrogen permeation in H2S environments. International Journal of Hydrogen Energy, 2017, 42, 4561-4570.	3.8	68
114	Factors Affecting the Performance and Applicability of SrTiO ₃ Photoelectrodes for Photoinduced Cathodic Protection. Journal of the Electrochemical Society, 2017, 164, C1067-C1075.	1.3	19
115	Biocide-mediated corrosion of coiled tubing. PLoS ONE, 2017, 12, e0181934.	1.1	14
116	Peptide-based biocoatings for corrosion protection of stainless steel biomaterial in a chloride solution. Materials Science and Engineering C, 2016, 68, 695-700.	3.8	13
117	Modeling of corrosion of steel tubing in CO ₂ storage. , 2016, 6, 797-811.		7
118	Modeling by computational fluid dynamics simulation of pipeline corrosion in CO 2 -containing oil-water two phase flow. Journal of Petroleum Science and Engineering, 2016, 146, 134-141.	2.1	43
119	Effect of Stress on Corrosion at Crack Tip on Pipeline Steel in a Near-Neutral pH Solution. Journal of Materials Engineering and Performance, 2016, 25, 4988-4995.	1.2	10
120	Corrosion of pipelines in CO2-saturated oil-water emulsion flow studied by electrochemical measurements and computational fluid dynamics modeling. Journal of Petroleum Science and Engineering, 2016, 147, 408-415.	2.1	25
121	Fabrication of Halloysite nanocontainers and their compatibility with epoxy coating for anti-corrosion performance. Corrosion Engineering Science and Technology, 2016, 51, 489-497.	0.7	30
122	Monitor safety of aged fuel pipelines. Nature, 2016, 529, 156-156.	13.7	46
123	Corrosion inhibition of carbon steel in CO2-containing oilfield produced water in the presence of iron-oxidizing bacteria and inhibitors. Corrosion Science, 2016, 105, 149-160.	3.0	128
124	Effect of surface finishing on early-stage corrosion of a carbon steel studied by electrochemical and atomic force microscope characterizations. Applied Surface Science, 2016, 366, 95-103.	3.1	43
125	The effect of magneticfield on biomineralization and corrosion behavior of carbon steel induced by iron-oxidizing bacteria. Corrosion Science, 2016, 102, 93-102.	3.0	118
126	Novel inhibitors containing multi-functional groups for pipeline corrosion inhibition in oilfield formation water. Corrosion, 2015, , .	0.5	2

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127	Pipeline corrosion. Corrosion Engineering Science and Technology, 2015, 50, 161-162.	0.7	4
128	Inhibitive Performance of Benzotriazole for Steel Corrosion Studied by Electrochemical and AFM Characterization. Journal of Materials Engineering and Performance, 2015, 24, 4997-5001.	1.2	9
129	Study of cathodic protection shielding under coating disbondment on pipelines. Corrosion Science, 2015, 99, 249-257.	3.0	42
130	Effect of alternating current interference on coating disbondment and cathodic protection shielding on pipelines. Corrosion Engineering Science and Technology, 2015, 50, 211-217.	0.7	18
131	Effect of heat treatment on microstructure evolution and erosion–corrosion behavior of a nickel–aluminum bronze alloy in chloride solution. Corrosion Science, 2015, 98, 260-270.	3.0	106
132	Triazolyl-acylhydrazone derivatives as novel inhibitors for copper corrosion in chloride solutions. Corrosion Science, 2015, 100, 341-352.	3.0	86
133	Effects of elastic and plastic deformations on corrosion of an aluminum bronze alloy in NaCl solution. Corrosion, 2015, , .	0.5	0
134	AC Corrosion at Coating Defect on Pipelines. Corrosion, 2015, 71, 267-276.	0.5	19
135	Effect of heat treatment on microstructure evolution and erosion–corrosion behavior of a nickel–aluminum bronze alloy in chloride solution. Corrosion Science, 2015, 98, 260-270.	3.0	34
136	Inhibitive Performance of a Rust Converter on Corrosion of Mild Steel. Journal of Materials Engineering and Performance, 2014, 23, 4102-4108.	1.2	11
137	A comparison of hydrogen permeation and the resulting corrosion enhancement of X65 and X80 pipeline steels. Canadian Metallurgical Quarterly, 2014, 53, 107-111.	0.4	6
138	Corrosion of mild steel in sea mud containing sulphate reducing bacteria. Canadian Metallurgical Quarterly, 2014, 53, 450-454.	0.4	6
139	Corrosion of galvanised steel cord reinforcement in HDPE composite pipes in petroleum production. Corrosion Engineering Science and Technology, 2014, 49, 296-302.	0.7	3
140	Experimental and numerical studies of effectiveness of cathodic protection at corrosion defects on pipelines. Corrosion Science, 2014, 78, 162-171.	3.0	45
141	Understand the AC induced pitting corrosion on pipelines in both high pH and neutral pH carbonate/bicarbonate solutions. Corrosion Science, 2014, 85, 304-310.	3.0	90
142	Erosion-Corrosion of Carbon Steel Pipes in Oil Sands Slurry Studied by Weight-Loss Testing and CFD Simulation. Journal of Materials Engineering and Performance, 2013, 22, 3043-3048.	1.2	15
143	Mechanism of electrochemical corrosion of carbon steel under deoxygenated water drop and sand deposit. Electrochimica Acta, 2013, 114, 403-408.	2.6	53
144	Mechanistic aspects of electrodeposition of Ni–Co–SiC composite nano-coating on carbon steel. Electrochimica Acta, 2013, 109, 638-644.	2.6	56

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145	Strain Aging of X100 Steel in Service and the Enhanced Susceptibility of Pipelines to Stress Corrosion Cracking. Journal of Materials Engineering and Performance, 2013, 22, 3778-3782.	1.2	12
146	Surfactant-free electrochemical synthesis of hierarchical platinum particle electrocatalysts for oxidation of ammonia. Journal of Power Sources, 2013, 223, 165-174.	4.0	70
147	Recent advances in electrocatalysts for electro-oxidation of ammonia. Journal of Materials Chemistry A, 2013, 1, 3216-3238.	5.2	155
148	Mechanism of electrochemical corrosion of steel under water drop. Electrochemistry Communications, 2013, 35, 8-11.	2.3	23
149	Hydrogen Permeation and Electrochemical Corrosion Behavior of the X80 Pipeline Steel Weld. Journal of Materials Engineering and Performance, 2013, 22, 170-175.	1.2	36
150	Corrosion of 16Mn Line Pipe Steel in a Simulated Soil Solution and the Implication on Its Long-Term Corrosion Behavior. Journal of Materials Engineering and Performance, 2013, 22, 498-504.	1.2	11
151	Fabrication of Ni–Co–SiC composite coatings by pulse electrodeposition — Effects of duty cycle and pulse frequency. Surface and Coatings Technology, 2013, 216, 282-288.	2.2	110
152	Development of a finite element model for simulation and prediction of mechanoelectrochemical effect of pipeline corrosion. Corrosion Science, 2013, 73, 150-160.	3.0	128
153	Effect of alternating current on cathodic protection on pipelines. Corrosion Science, 2013, 66, 263-268.	3.0	101
154	Correlation of initiation of corrosion pits and metallurgical features of X100 pipeline steel. Canadian Metallurgical Quarterly, 2013, 52, 484-487.	0.4	5
155	Effect of alternating current on corrosion and effectiveness of cathodic protection of pipelines. Canadian Metallurgical Quarterly, 2012, 51, 81-90.	0.4	54
156	Assessment of the Complexity of Stress/Strain Conditions of X100 Steel Pipeline and the Effect on the Steel Corrosion and Failure Pressure Prediction., 2012,,.		2
157	A Real-Time AC/DC Measurement Technique for Assessment of AC Corrosion of Buried Pipelines. , 2012, , .		0
158	Mechanistic aspect of near-neutral pH stress corrosion cracking of pipelines under cathodic polarization. Corrosion Science, 2012, 55, 54-60.	3.0	158
159	An experimental investigation of corrosion of X100 pipeline steel under uniaxial elastic stress in a near-neutral pH solution. Corrosion Science, 2012, 59, 103-109.	3.0	135
160	Development of a real-time AC/DC data acquisition technique for studies of AC corrosion of pipelines. Corrosion Science, 2012, 61, 215-223.	3.0	99
161	Corrosion of X100 pipeline steel under plastic strain in a neutral pH bicarbonate solution. Corrosion Science, 2012, 64, 145-152.	3.0	133
162	Reliability and failure pressure prediction of various grades of pipeline steel inÂtheÂpresence of corrosion defects and pre-strain. International Journal of Pressure Vessels and Piping, 2012, 89, 75-84.	1.2	109

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163	Understand the occurrence of pitting corrosion of pipeline carbon steel under cathodic polarization. Electrochimica Acta, 2012, 60, 259-263.	2.6	103
164	Parametric effects on the erosion–corrosion rate and mechanism of carbon steel pipes in oil sands slurry. Wear, 2012, 276-277, 141-148.	1.5	76
165	In Situ Characterization of Pitting Corrosion of Stainless Steel by a Scanning Electrochemical Microscopy. Journal of Materials Engineering and Performance, 2012, 21, 406-410.	1.2	18
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