Preet M. Singh

List of Publications by Year
in descending order

70 papers	2,031 citations	279798 23 h-index	254184 43 g-index
71 all docs	71 docs citations	71 times ranked	1958 citing authors

#	Article	IF	Citations
1	Effect of excess Mg to control corrosion in molten MgCl2 and KCl eutectic salt mixture. Corrosion Science, 2022, 194, 109914.	6.6	16
2	Interaction of beryllium with 316H stainless steel in molten Li2BeF4 (FLiBe). Journal of Nuclear Materials, 2022, 565, 153698.	2.7	12
3	Effect of oxide impurities on the corrosion behavior of structural materials in molten LiF-NaF-KF. Corrosion Science, 2022, 206, 110473.	6.6	8
4	Stability of plasmaâ€enhanced atomic layer deposited barrier films in biological solutions. Engineering Reports, 2021, 3, e12303.	1.7	1
5	Effect of Li metal addition on corrosion control of Hastelloy N and stainless steel 316H in molten LiF-NaF-KF. Journal of Nuclear Materials, 2021, 555, 153098.	2.7	12
6	Corrosion Behavior of Pre-Carburized Hastelloy N, Haynes 244, Haynes 230, and Incoloy 800H in Molten FLiNaK. Nuclear Technology, 2020, 206, 1751-1768.	1.2	2
7	Role of Ferrite and Austenite Phases on the Overall Pitting Behavior of Lean Duplex Stainless Steels in Thiosulfate-Containing Environments. Journal of the Electrochemical Society, 2020, 167, 041502.	2.9	8
8	Carburization of metals by a chemical mechanism of carbon transport through molten fluoride salts. Journal of Nuclear Materials, 2020, 539, 152307.	2.7	3
9	Effect of Plastic Deformation on Pitting Mechanism of SS304. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4750-4757.	2.2	5
10	Crevice corrosion and environmentally assisted cracking of high-strength duplex stainless steels in simulated concrete pore solutions. Construction and Building Materials, 2019, 203, 366-376.	7.2	17
11	Effect of Elastic Stresses on Pitting Behavior of Stainless Steel 304. Journal of the Electrochemical Society, 2019, 166, C209-C216.	2.9	7
12	Coefficient of friction evolution with temperature under fretting wear for FeCrAl fuel cladding candidate. Journal of Nuclear Materials, 2019, 520, 140-151.	2.7	11
13	Effects of Isothermal Aging on the Microstructure Evolution and Pitting Corrosion Resistance of Lean Duplex Stainless Steel UNS S32003. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2103-2113.	2.2	10
14	Development of ALD Coatings for Harsh Environment Applications. ACS Applied Materials & Interfaces, 2019, 11, 7498-7509.	8.0	22
15	Phenomena Identification and Ranking Table (PIRT) study for metallic structural materials for advanced High-Temperature reactor. Annals of Nuclear Energy, 2019, 123, 222-229.	1.8	11
16	Study on the Repassivation Behavior of Steels Using Electrochemical Test Methods. , 2019, , 244-261.		1
17	Effect of Viscosity on the Erosion-Corrosion of Steels Exposed to White Liquor Including Abrasives for Extended Time Periods. Materials Performance and Characterization, 2019, 8, 20180013.	0.3	1
18	Inhibition of Bacterial Adhesion on Nanotextured Stainless Steel 316L by Electrochemical Etching. ACS Biomaterials Science and Engineering, 2018, 4, 90-97.	5.2	86

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19	Fretting wear comparison of cladding materials for reactor fuel cladding application. Journal of Nuclear Materials, 2018, 508, 505-515.	2.7	26
20	Redox potential control in molten salt systems for corrosion mitigation. Corrosion Science, 2018, 144, 44-53.	6.6	100
21	Carburization effects on the corrosion of Cr, Fe, Ni, W, and Mo in fluoride-salt cooled high temperature reactor (FHR) coolant. Annals of Nuclear Energy, 2018, 120, 279-285.	1.8	28
22	Evaluation of the heat-affected zone (HAZ) of a weld joint using nonlinear Rayleigh waves. Materials Letters, 2017, 190, 221-224.	2.6	14
23	Evaluation of sensitization in stainless steel 304 and 304L using nonlinear Rayleigh waves. NDT and E International, 2017, 88, 17-23.	3.7	46
24	Hydrophobicity and Improved Localized Corrosion Resistance of Grain Boundary Etched Stainless Steel in Chloride-Containing Environment. Journal of the Electrochemical Society, 2017, 164, C61-C65.	2.9	14
25	High Temperature Oxidation Behavior of APM and APMT under Dry Air/Steam Condition. MRS Advances, 2016, 1, 2471-2476.	0.9	2
26	High temperature oxidation and Î³â€² depletion in the single-crystal superalloy PWA 1484. Materials at High Temperatures, 2016, 33, 476-488.	1.0	8
27	Effect of Thiosulfate on Metastable Pitting of 304L and S32101 in Chloride- and Thiosulfate-Containing Environment. Corrosion, 2016, 72, 628-635.	1.1	20
28	Wettability control of stainless steel surfaces via evolution of intrinsic grain structures. Journal of Materials Science, 2016, 51, 5196-5206.	3.7	28
29	Effect of sulfates on passivation in alkaline environments. Proceedings of Institution of Civil Engineers: Construction Materials, 2016, 169, 39-43.	1.1	1
30	Investigation of copper plated-through-holes in glass fiber reinforced epoxy substrates using AC impedance spectroscopy. Journal of Materials Science: Materials in Electronics, 2015, 26, 2563-2570.	2.2	3
31	High Temperature Oxidation of Newly Developed Alloy 282 in the Flowing-Air and Steam Condition at 900â€“1100ÂÂ°C. Oxidation of Metals, 2015, 84, 291-305.	2.1	17
32	Corrosion Behavior of Austenitic and Duplex Stainless Steels in Thiosulfate- and Chloride-Containing Environments. Corrosion, 2015, 71, 937-944.	1.1	18
33	Preparation, structure and adsorption properties of synthesized multiwall carbon nanotubes for highly effective removal of maxilon blue dye. Korean Journal of Chemical Engineering, 2015, 32, 2456-2462.	2.7	40
34	Characterization of stress corrosion cracking in carbon steel using nonlinear Rayleigh surface waves. NDT and E International, 2014, 62, 144-152.	3.7	70
35	Recent Developments in High-Strength Stainless Steels for Corrosion Mitigation in Prestressed Concrete. Advances in Civil Engineering Materials, 2014, 3, 20140017.	0.6	0
36	Corrosion Study of Super Ferritic Stainless Steel UNS S44660 (26Cr-3Ni-3Mo) and Several Other Stainless Steel Grades (UNS S31603, S32101, and S32205) in Caustic Solution Containing Sodium Sulfide. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5039-5053.	2.2	19

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37	Chloride-induced corrosion resistance of high-strength stainless steels in simulated alkaline and carbonated concrete pore solutions. Corrosion Science, 2012, 57, 241-253.	6.6	159
38	Repassivation behavior of X65 pipeline steel in fuel grade ethanol and its implications for the stress corrosion cracking mechanism. Corrosion Science, 2012, 65, 238-248.	6.6	34
39	Characterization of Milled Wood Lignin (MWL) in Loblolly Pine Stem Wood, Residue, and Bark. Journal of Agricultural and Food Chemistry, 2011, 59, 12910-12916.	5.2	84
40	Electrochemical behaviour of duplex stainless steels in caustic environment. Corrosion Science, 2011, 53, 71-81.	6.6	32
41	Cathodic activities of oxygen and hydrogen on carbon steel in simulated fuel-grade ethanol. Electrochimica Acta, 2011, 56, 2312-2320.	5.2	19
42	Phase angle analysis for stress corrosion cracking of carbon steel in fuel-grade ethanol: Experiments and simulation. Electrochimica Acta, 2011, 56, 1835-1847.	5.2	50
43	Cathodic Activity of Carbon Steel in Simulated Fuel-Grade Ethanol and Its Impact on Hydrogen Embrittlement. ECS Meeting Abstracts, 2010, , .	0.0	0
44	Film Breakdown and Anodic Dissolution during Stress Corrosion Cracking of Carbon Steel in Bioethanol. Journal of the Electrochemical Society, 2010, 157, C86.	2.9	36
45	Role of water, acetic acid and chloride on corrosion and pitting behaviour of carbon steel in fuel-grade ethanol. Corrosion Science, 2010, 52, 2303-2315.	6.6	83
46	Effect of Ethanol Chemistry on SCC of Carbon Steel: Results of a Round Robin Testing. , 2010, , .		0
47	Effect of Ethanol Chemistry on Stress Corrosion Cracking of Carbon Steel in Fuel-Grade Ethanol. Corrosion, 2009, 65, 785-797.	1.1	59
48	Effect of Heat Treatment on Corrosion and Stress Corrosion Cracking of S32205 Duplex Stainless Steel in Caustic Solution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1388-1399.	2.2	30
49	Stress Corrosion Cracking Behavior of Peened Friction Stir Welded 2195 Aluminum Alloy Joints. Journal of Materials Engineering and Performance, 2009, 18, 406-413.	2.5	25
50	Corrosion susceptibility of peened friction stir welded 7075 aluminum alloy joints. Corrosion Science, 2009, 51, 135-143.	6.6	103
51	The new forestry biofuels sector. Biofuels, Bioproducts and Biorefining, 2008, 2, 58-73.	3.7	219
52	A Novel Method for Enhanced Recovery of Lignin from Aqueous Process Streams. Journal of Wood Chemistry and Technology, 2007, 27, 219-224.	1.7	17
53	Inspection of White Layer in Hard Turned Components Using Electrochemical Methods. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2007, 129, 447-452.	2.2	13
54	Initiation and Propagation of Stress-Assisted Corrosion (SAC) Cracks in Carbon Steel Boiler Tubes. Journal of Engineering Materials and Technology, Transactions of the ASME, 2007, 129, 559-566.	1.4	7

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55	Investigating a Mechanism for Transgranular Stress Corrosion Cracking on Buried Pipelines in Near-Neutral pH Environments. Corrosion, 2007, 63, 932-939.	1.1	23
56	Effect of wood species on corrosion behavior of carbon steel and stainless steels in black liquors. Corrosion Science, 2007, 49, 497-509.	6.6	19
57	Stress Assisted Corrosion of Waterwall Tubes in Recovery Boiler Tubes: Failure Analysis. Journal of Failure Analysis and Prevention, 2007, 7, 361-370.	0.9	21
58	Stress Corrosion Cracking of Welded 2205 Duplex Stainless Steel in Sulfide-containing Caustic Solution. Journal of Failure Analysis and Prevention, 2007, 7, 371-377.	0.9	40
59	Corrosion Behavior of Carbon Steels in Sulfide-Containing Caustic Solutions. Industrial & Engineering Chemistry Research, 2006, 45, 7789-7794.	3.7	17
60	Susceptibility of stainless steel alloys to crevice corrosion in ClO2 bleach plants. Corrosion Science, 2004, 46, 2159-2182.	6.6	7
61	Solubility in the NaOHâˆ’Na2CO3âˆ’Na2SO4âˆ’Na2SO3âˆ’Na2S2O3âˆ’Na2Sâˆ’H2O System, a Simulated Black Liquor Recovery Boiler Smelt. Industrial & Engineering Chemistry Research, 2003, 42, 4228-4233.	3.7	5
62	Electrochemical Noise (ECN) Measurements as a Corrosion Monitoring Tool: A Review. Corrosion Reviews, 2002, 20, 359-378.	2.0	7
63	Corrosion Fatigue of a Heat Treated Duplex Stainless Steel in Paper Machine White Waters. Corrosion Reviews, 2002, 20, 295-316.	2.0	3
64	Fracture and Fatigue of DRA Composites. , 1996, , 895-904.		5
65	The effects of reinforcement additions and heat treatment on the evolution of the poisson ratio during straining of discontinuously reinforced aluminum alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 2911-2921.	2.2	18
66	Effects of heat treatment on stress corrosion cracking of a discontinuously reinforced aluminum (DRA) 7XXX alloy during slow strain rate testing. Scripta Metallurgica Et Materialia, 1995, 33, 1393-1399.	1.0	9
67	Effects of heat treatment and reinforcement size. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1993, 24, 2531-2543.	1.4	147
68	Poisson ratio measurements for an al-based metal matrix composite during elastic and plastic deformation. Scripta Metallurgica Et Materialia, 1993, 29, 199-204.	1.0	16
69	Effects of Environmental Exposure on Ductile-Phase Toughening in Niobium Silicide-Niobium Composites. Materials Research Society Symposia Proceedings, 1993, 322, 503.	0.1	2
70	Environmental effects on ductile-phase toughening in Nb5Si3-Nb composites. Jom, 1992, 44, 36-41.	1.9	35