Melanie Montgomery

List of Publications by Year
in descending order

54	830	430754	552653
papers	citations	18 h-index	26 g-index

54	54	54	430
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Field test corrosion experiments in Denmark with biomass fuels. Part 1: Straw-firing. Materials and Corrosion - Werkstoffe Und Korrosion, 2002, 53, 121-131.	0.8	62
2	Lab-scale Investigation of Deposit-induced Chlorine Corrosion of Superheater Materials under Simulated Biomass-firing Conditions. Part 1: Exposure at 560 Â°C^{â€}. Energy & Fuels, 2009, 23, 3457-3468.	2.5	60
3	In-situ corrosion investigation at MasnedÃ¸ CHP plant - a straw-fired power plant. Materials and Corrosion - Werkstoffe Und Korrosion, 1999, 50, 579-584.	0.8	59
4	Experiences with high temperature corrosion at strawâ€firing power plants in Denmark. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 593-605.	0.8	40
5	High Temperature Corrosion under Laboratory Conditions Simulating Biomass-Firing: A Comprehensive Characterization of Corrosion Products. Energy & Fuels, 2014, 28, 6447-6458.	2.5	39
6	Microstructural investigation of the oxide formed on TP 347H FG during longâ€term steam oxidation. Materials and Corrosion - Werkstoffe Und Korrosion, 2010, 61, 665-675.	0.8	33
7	Potential high temperature corrosion problems due to co-firing of biomass and fossil fuels. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 783-793.	0.8	32
8	KClâ€induced high temperature corrosion of selected commercial alloys. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 1414-1429.	0.8	31
9	Field test corrosion experiments in Denmark with biomass fuels. Part 2: Co-firing of straw and coal. Materials and Corrosion - Werkstoffe Und Korrosion, 2002, 53, 185-194.	0.8	29
10	Effect of Water Vapor on High-Temperature Corrosion under Conditions Mimicking Biomass Firing. Energy & Fuels, 2015, 29, 5802-5815.	2.5	28
11	Oxidation of X20 in Water Vapour: The Effect of Temperature and Oxygen Partial Pressure. Oxidation of Metals, 2009, 71, 201-218.	1.0	25
12	Experiences with Inconel 625 in Biomass and Waste Incineration Plants. Materials Science Forum, 2006, 522-523, 523-530.	0.3	23
13	Corrosion behaviour of Ni and nickel aluminide coatings exposed in a biomass fired power plant for two years. Surface and Coatings Technology, 2019, 362, 355-365.	2.2	23
14	Investigation on steam oxidation behaviour of TP347H FG Part 1: Exposure at 256 bar. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 459-467.	0.8	22
15	Fireside corrosion and steamside oxidation of 9â€“12%Cr martensitic steels exposed for long term testing. Corrosion Engineering Science and Technology, 2009, 44, 196-210.	0.7	21
16	KClâ€induced high temperature corrosion of selected commercial alloys. Materials and Corrosion - Werkstoffe Und Korrosion, 2016, 67, 26-38.	0.8	21
17	The influence of combustion-derived pollutants on limestone deterioration: 2. The wet deposition of pollutant species. Corrosion Science, 1996, 38, 267-278.	3.0	20
18	Time and Temperature Effects on Alkali Chloride Induced High Temperature Corrosion of Superheaters during Biomass Firing. Energy & Fuels, 2018, 32, 7991-7999.	2.5	20

#	Article	IF	Citations
19	Effect of flue gas composition on deposit induced high temperature corrosion under laboratory conditions mimicking biomass firing. Part I: Exposures in oxidizing and chlorinating atmospheres. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 499-514.	0.8	18
20	Effect of flue gas composition on deposit induced high temperature corrosion under laboratory conditions mimicking biomass firing. Part II: Exposures in SO₂ containing atmospheres. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 515-528.	0.8	13
21	Effect of microstructure on KCl corrosion attack of modified AISI 310 steel. Materials at High Temperatures, 2018, 35, 243-254.	0.5	13
22	Long term steam oxidation of TP 347H FG in power plants. Materials at High Temperatures, 2005, 22, 263-2670.	0.5	13
23	Field Investigation of Steamside Oxidation of TP347H. Materials Science Forum, 2004, 461-464, 1007-1014.	0.3	11
24	Materials problems and solutions in biomass fired plants. Energy Materials, 2006, 1, 227-237.	0.1	11
25	High temperature corrosion during biomass firing: improved understanding by depth resolved characterisation of corrosion products. Materials at High Temperatures, 2015, 32, 92-101.	0.5	11
26	Effects of Different Fuel Specifications and Operation Conditions on the Performance of Coated and Uncoated Superheater Tubes in Two Different Biomass-Fired Boilers. ACS Applied Energy Materials, 2018, 1, 1463-1475.	2.5	11
27	Steam Oxidation of TP 347H FG in Power Plants. Materials Science Forum, 2006, 522-523, 181-188.	0.3	10
28	Phase Identification and Internal Stress Analysis of Steamside Oxides on Plant Exposed Superheater Tubes. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1477-1486.	1.1	10
29	In situ corrosion testing of various nickel alloys at MÃ¥bjerg waste incineration plant. Materials and Corrosion - Werkstoffe Und Korrosion, 2013, 64, 14-25.	0.8	10
30	Microstructural investigations of Ni and Ni2Al3 coatings exposed in biomass power plants. Materials at High Temperatures, 2018, 35, 255-266.	0.5	10
31	Development of the inner oxide zone upon steam oxidation of an austenitic stainless steel. Materials at High Temperatures, 2009, 26, 39-44.	0.5	9
32	Investigation of steam oxidation behaviour of TP347H FG. Part 2: Exposure at 91 bar. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 542-549.	0.8	8
33	Effect of service exposure on KCl corrosion attack of AISI 347H FG steel. Journal of Materials Science, 2019, 54, 13787-13809.	1.7	8
34	Characterization of pack cemented Ni₂Al₃ coating exposed to KCl(s) induced corrosion at 600ÂÂ°C. Materials at High Temperatures, 2018, 35, 267-274.	0.5	7
35	Breakdown mechanism of Î³-Al2O3 on Ni2Al3 coatings exposed in a biomass fired power plant. Corrosion Science, 2020, 170, 108583.	3.0	7
36	Field test corrosion experiences when co-firing straw and coal: 10 year status within Elsam. Materials at High Temperatures, 2007, 24, 343-349.	0.5	6

#	Article	IF	Citations
37	High temperature corrosion investigation in an oxyfuel combustion test rig. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 257-269.	0.8	6
38	Corrosion in the Flue Gas Cleaning System of a Biomass-Fired Power Plant. Journal of Failure Analysis and Prevention, 2017, 17, 195-204.	0.5	6
39	Influence of Preoxidation on High-Temperature Corrosion of a FeCrAl Alloy Under Conditions Relevant to Biomass Firing. Oxidation of Metals, 2018, 89, 99-122.	1.0	6
40	KClâ€induced corrosion of Niâ€based alloys containing 35â€“45 wt% Cr. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 1486-1506.	0.8	6
41	Failure of Titanium Condenser Tubes After 24ÂYears Power Plant Service. Journal of Failure Analysis and Prevention, 2014, 14, 554-563.	0.5	5
42	Pre-oxidation and its effect on reducing high-temperature corrosion of superheater tubes during biomass firing. Surface Engineering, 2017, 33, 428-432.	1.1	5
43	Steam oxidation of X20CrMoV121: Comparison of laboratory exposures and in situ exposure in power plants. Materials and Corrosion - Werkstoffe Und Korrosion, 2012, 63, 674-684.	0.8	4
44	Biomass firing: Danish experiences. Energy Materials, 2006, 1, 17-19.	0.1	3
45	Influence of preoxidation on high temperature corrosion of a Ni-based alloy under conditions relevant to biomass firing. Surface and Coatings Technology, 2017, 319, 76-87.	2.2	3
46	Complementary Methods for the Characterization of Corrosion Products on a Plant-Exposed Superheater Tube. Metallography, Microstructure, and Analysis, 2017, 6, 22-35.	0.5	3
47	Danish Experiences in Biomass Corrosion and Recent Areas of Research. Corrosion, 2019, 75, 358-366.	0.5	3
48	On-Plant Test of TÃœV HCM12 and ASME T23 Alloys for Use as Water Wall Materials. Key Engineering Materials, 2000, 171-174, 169-178.	0.4	2
49	Corrosion of welds in biomass power plants. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 585-592.	0.8	2
50	Annealing of Shot Peened Austenitic Superheater Tubes and Its Consequences for Steamside Oxidation. Metallography, Microstructure, and Analysis, 2020, 9, 603-614.	0.5	1
51	Investigation on the Hygroscopicity of Deposits at the Cold-End of Biomass and Coal-Fired Plants. Energy & Fuels, 2021, 35, 8006-8022.	2.5	1
52	Microscopical investigation of steamside oxide on X20CrMoV121 superheater tubes. Materials at High Temperatures, 2011, 28, 355-360.	0.5	0
53	Microscopical investigation of steamside oxide on X20CrMoV121 superheater tubes. Materials at High Temperatures, 2012, 29, 199-204.	0.5	0
54	Nitridation of grate in a biomassâ€fired boiler. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 1461-1475.	0.8	0