T Jonsson

List of Publications by Year in descending order

56 papers	1,347 citations	331538 21 h-index	395590 33 g-index
56 all docs	56 docs citations	56 times ranked	783 citing authors

#	Article	IF	Citations
1	Oxidation of Binary FeCr Alloys (Feâ€“2.25Cr, Feâ€“10Cr, Feâ€“18Cr and Feâ€“25Cr) in O2 and in O2Â+ÂH2O Environment at 600ÂÂ°C. Oxidation of Metals, 2011, 75, 183-207.	1.0	90
2	Oxidation of iron at 400â€“600Â°C in dry and wet O2. Corrosion Science, 2010, 52, 1560-1569.	3.0	78
3	The influence of small amounts of KCl(s) on the high temperature corrosion of a Feâ€2.25Crâ€1Mo steel at 400 and 500Â°C. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 606-615.	0.8	75
4	The Influence of KCl on the Corrosion of an Austenitic Stainless Steel (304L) in Oxidizing Humid Conditions at 600ÂÂ°C: A Microstructural Study. Oxidation of Metals, 2009, 72, 213-239.	1.0	67
5	An ESEM in situ investigation of initial stages of the KCl induced high temperature corrosion of a Feâ€“2.25Crâ€“1Mo steel at 400 Â°C. Corrosion Science, 2011, 53, 2233-2246.	3.0	67
6	Oxidation After Breakdown of the Chromium-Rich Scale on Stainless Steels at High Temperature: Internal Oxidation. Oxidation of Metals, 2016, 85, 509-536.	1.0	63
7	Oxidation of Feâ€“10Cr in O2 and in O2+H2O environment at 600Â°C: A microstructural investigation. Corrosion Science, 2013, 75, 326-336.	3.0	50
8	Paralinear Oxidation of Chromium in O2 + H2O Environment at 600â€“700ÂÂ°C. Oxidation of Metals, 2008, 70, 163-188.	1.0	49
9	An ESEM in situ investigation of the influence of H2O on iron oxidation at 500Â°C. Corrosion Science, 2009, 51, 1914-1924.	3.0	46
10	The influence of silicon on the corrosion properties of FeCrAl model alloys in oxidizing environments at 600 Â°C. Corrosion Science, 2018, 144, 266-276.	3.0	43
11	Microstructural Investigation of Protective and Non-Protective Oxides on 11% Chromium Steel. Oxidation of Metals, 2006, 66, 295-319.	1.0	40
12	A Microstructural and Kinetic Investigation of the KCl-Induced Corrosion of an FeCrAl Alloy at 600ÂÂ°C. Oxidation of Metals, 2015, 84, 105-127.	1.0	40
13	The Effect of Traces of SO2 on Iron Oxidation: A Microstructural Study. Oxidation of Metals, 2007, 67, 193-213.	1.0	31
14	High-Temperature Oxidation of FeCr(Ni) Alloys: The Behaviour After Breakaway. Oxidation of Metals, 2017, 87, 333-341.	1.0	30
15	High temperature oxidation of chromium: Kinetic modeling and microstructural investigation. Solid State Ionics, 2013, 240, 41-50.	1.3	28
16	Mitigation of Fireside Corrosion of Stainless Steel in Power Plants: A Laboratory Study of the Influences of SO₂ and KCl on Initial Stages of Corrosion. Energy & Fuels, 2014, 28, 3102-3109.	2.5	27
17	Oxidation behavior of a Mo(Si,Al)2 composite at 900â€“1600ÂÂ°C in dry air. Journal of Materials Science, 2013, 48, 1511-1523.	1.7	26
18	Oxidation behavior of a Mo (Si, Al)2-based composite at 300â€“1000Â°C. Intermetallics, 2010, 18, 633-640.	1.8	24

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19	Beyond breakaway corrosion â€“ Influence of chromium, nickel and aluminum on corrosion of iron-based alloys at 600â€¯<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.svg"><mml:mo>Â°</mml:mo></mml:math>C. Corrosion Science, 2020, 177, 108961.	3.0	24
20	Microstructural investigation of the effect of water vapour on the oxidation of alloy 353 MA in oxygen at 700 and 900Â°C. Materials at High Temperatures, 2005, 22, 231-243.	0.5	24
21	Grain contrast imaging in FIB and SEM. Journal of Physics: Conference Series, 2008, 126, 012054.	0.3	22
22	Oxidation of iron at 600â€‰Â°C â€“ experiments and simulations. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 133-142.	0.8	22
23	Microstructural Investigation of the HCl-Induced Corrosion of the Austenitic Alloy 310S (52Fe26Cr19Ni) at 500ÂÂ°C. Oxidation of Metals, 2014, 81, 575-596.	1.0	21
24	The Effect of H2 and H2O on the Oxidation of 304L-Stainless Steel at 600ÂÂ°C: General Behaviour (Part I). Oxidation of Metals, 2016, 85, 321-342.	1.0	20
25	The influence of a KCl-rich environment on the corrosion attack of 304 L: 3D FIB/SEM and TEM investigations. Corrosion Science, 2021, 183, 109315.	3.0	20
26	Microstructural investigation of the KCl-induced corrosion of the austenitic alloy Sanicro 28 (35Fe27Cr31Ni) at 600Â°C. Materials at High Temperatures, 2009, 26, 113-125.	0.5	18
27	High Temperature Oxidation of the Austenitic (35Fe27Cr31Ni) Alloy Sanicro 28 in O2Â+ÂH2O Environment. Oxidation of Metals, 2010, 74, 93-111.	1.0	18
28	Oxidation behavior at 300â€“1000Â°C of a (Mo,W)Si2-based composite containing boride. Intermetallics, 2010, 18, 77-86.	1.8	18
29	Oxidation of Fe-2.25Cr-1Mo in presence of KCl(s) at 400â€¯Â°C â€“ Crack formation and its influence on oxidation kinetics. Corrosion Science, 2020, 163, 108234.	3.0	17
30	High temperature corrosion behavior of FeCrAlSi model alloys in the presence of water vapor and KCl at 600ÂÂ°C â€“ The influence of Cr content. Corrosion Science, 2022, 198, 110114.	3.0	16
31	Oxidation Driven Permeation of Iron Oxide Scales by Chloride from Experiment Guided First-Principles Modeling. Journal of Physical Chemistry C, 2019, 123, 25957-25966.	1.5	14
32	Secondary corrosion protection of FeCr(Al) model alloys at 600 Â°C â€“ The influence of Cr and Al after breakaway corrosion. Corrosion Science, 2021, 189, 109584.	3.0	14
33	Influence of H[sub 2]O(g) on the Oxide Microstructure of the Stainless Steel 353MA at 900Â°C in Oxygen. Journal of the Electrochemical Society, 2007, 154, C603.	1.3	13
34	Critical Corrosion Phenomena on Superheaters in Biomass and Waste-Fired Boilers. Journal of Iron and Steel Research International, 2007, 14, 35-39.	1.4	13
35	A Comparative Study of the Initial Corrosion of KCl and PbCl2 on a Low-Alloyed Steel. Oxidation of Metals, 2017, 87, 779-787.	1.0	13
36	The influence of Si on the primary protection of lean FeCrAl model alloys in O2 and O2+H2O at 600 Â°Câ€”A microstructural investigation. Corrosion Science, 2021, 179, 109155.	3.0	13

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37	Continuous KCl addition in high temperature exposures of 304â€˜L â€“ A way to mimic a boiler environment. Corrosion Science, 2020, 167, 108511.	3.0	13
38	Microstructural investigation of the initial oxidation at 1450Â°C and 1500Â°C of a Mo(Si,Al)₂-based composite. Materials at High Temperatures, 2009, 26, 137-143.	0.5	12
39	The Influence of Oxide-Scale Microstructure on KCl(s)-Induced Corrosion of Low-Alloyed Steel at 400ÂÂ°C. Oxidation of Metals, 2019, 91, 291-310.	1.0	12
40	The Influence of H₂O on Iron Oxidation at 600Â°C: A Microstructural Study. Materials Science Forum, 0, 595-598, 1005-1012.	0.3	11
41	Oxidation behaviour of a (Mo, W)Si2-based composite in dry and wet oxygen atmospheres in the temperature range 350â€“950Â°C. Journal of the European Ceramic Society, 2009, 29, 2105-2118.	2.8	10
42	A Laboratory Study of the in Situ Sulfation of Alkali Chloride Rich Deposits: Corrosion Perspective. Energy & Fuels, 2016, 30, 7256-7267.	2.5	10
43	The effect of Ce on the high temperature oxidation properties of a Feâ€“22%Cr steel: microstructural investigation and EELS analysis. Materials at High Temperatures, 2015, 32, 118-122.	0.5	9
44	Microstructural investigation of the effect of water vapour on the oxidation of alloy 353 MA in oxygen at 700 and 900Â°C. Materials at High Temperatures, 2005, 22, 231-243.	0.5	8
45	Microstructural investigations of pure nickel exposed to KCl induced high temperature corrosion. Materials at High Temperatures, 2015, 32, 44-49.	0.5	8
46	Minor element effect on high temperature corrosion of a low-alloyed steel: Insight into alkali- and chlorine induced corrosion by means of atom probe tomography. Corrosion Science, 2021, 192, 109779.	3.0	8
47	Microstructural Study of the Influence of KCl and HCl on Preformed Corrosion Product Layers on Stainless Steel. Oxidation of Metals, 2017, 87, 801-811.	1.0	7
48	Investigating corrosion memory: The influence of previous boiler operation on current corrosion rate. Fuel Processing Technology, 2017, 156, 348-356.	3.7	7
49	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
50	Strategies for High-Temperature Corrosion Simulations of Fe-Based Alloys Using the Calphad Approach: Part I. Journal of Phase Equilibria and Diffusion, 2021, 42, 403-418.	0.5	7
51	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
52	The Influence of KCl and HCl on the High-Temperature Oxidation of a Fe-2.25Cr-1Mo Steel at 400ÂÂ°C. Oxidation of Metals, 2020, 93, 29-52.	1.0	6
53	High temperature corrosion memory in a waste fired boiler â€“ Influence of sulfur. Waste Management, 2021, 130, 30-37.	3.7	6
54	Thin foil analysis in the SEM. Journal of Physics: Conference Series, 2008, 126, 012075.	0.3	3

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55	Initial corrosion attack of 304L and T22 in 2 MW biomass gasifier: a microstructural investigation. Materials at High Temperatures, 2015, 32, 197-204.	0.5	2
56	HIGH TEMPERATURE CORROSION AND DIOXIN ABATEMENT USING SULFUR RECIRCULATION IN A WASTE-TO-ENERGY PLANT. Detritus, 2018, Volume 05 - March 2019, 1.	0.4	1