Sannakaisa Virtanen

List of Publications by Citations

246 papers	9,373 citations	46 h-index	87 g-index
263 ext. papers	10,807 ext. citations	5 avg, IF	6.6 L-index

#	Paper	IF	Citations
246	Biomedical coatings on magnesium alloys - a review. *Acta Biomaterialia*, **2012**, 8, 2442-55	10.8	876
245	Fundamentals and advances in magnesium alloy corrosion. *Progress in Materials Science*, **2017**, 89, 92-193	42.2	788
244	Biodegradable Mg and Mg alloys: Corrosion and biocompatibility. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2011**, 176, 1600-1608	3.1	270
243	Hydroxyapatite growth on anodic TiO2 nanotubes. *Journal of Biomedical Materials Research - Part A* , **2006**, 77, 534-41	5.4	239
242	Passive and transpassive behaviour of CoCrMo in simulated biological solutions. *Electrochimica Acta* , **2004**, 49, 2167-2178	6.7	232
241	Special modes of corrosion under physiological and simulated physiological conditions. *Acta Biomaterialia*, **2008**, 4, 468-76	10.8	213
240	Self-organized nanotubular TiO2 matrix as support for dispersed Pt/Ru nanoparticles: Enhancement of the electrocatalytic oxidation of methanol. *Electrochemistry Communications*, **2005** , 7, 1417-1422	5.1	206
239	Grain character influences on corrosion of ECAPed pure magnesium. *Corrosion Engineering Science and Technology*, **2010**, 45, 224-230	1.7	163
238	In vitro biocompatibility of CoCrMo dental alloys fabricated by selective laser melting. *Dental Materials*, **2014**, 30, 525-34	5.7	147
237	Effect of surface pre-treatments on biocompatibility of magnesium. *Acta Biomaterialia*, **2009**, 5, 2783-9	10.8	140
236	The composition of the boundary region of MnS inclusions in stainless steel and its relevance in triggering pitting corrosion. *Corrosion Science*, **2005**, 47, 1239-1250	6.8	140
235	High temperature oxidation of γ′-strengthened Co-base superalloys. *Corrosion Science*, **2011**, 53, 2027-2034	6.8	139
234	Electrochemical characterisation of passive films on Ti alloys under simulated biological conditions. *Electrochimica Acta*, **2002**, 47, 1913-1923	6.7	136
233	Composition of corrosion layers on a magnesium rare-earth alloy in simulated body fluids. *Journal of Biomedical Materials Research - Part A*, **2009**, 88, 359-69	5.4	129
232	Control of magnesium corrosion and biocompatibility with biomimetic coatings. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2011**, 96, 84-90	3.5	121
231	Effect of B and Cr on the high temperature oxidation behaviour of novel γ′-strengthened Co-base superalloys. *Corrosion Science*, **2011**, 53, 2713-2720	6.8	116
230	Time-dependent electrochemical characterization of the corrosion of a magnesium rare-earth alloy in simulated body fluids. *Journal of Biomedical Materials Research - Part A*, **2008**, 85, 167-75	5.4	116

229	Characterization of electrophoretic chitosan coatings on stainless steel. *Materials Letters*, **2012**, 66, 302-304	3.0	105
228	Impact of ultrafine-grained microstructure on the corrosion of aluminium alloy AA2024. *Corrosion Science*, **2012**, 57, 209-214	6.8	105
227	Analytical characterization of the corrosion mechanisms of WC□Co by electrochemical methods and inductively coupled plasma mass spectroscopy. *Corrosion Science*, **2007**, 49, 2002-2020	6.8	101
226	Iron and iron-based alloys for temporary cardiovascular applications. *Journal of Materials Science: Materials in Medicine*, **2015**, 26, 138	4.5	97
225	Influence of temper and surface condition on the exfoliation behaviour of high strength Al□Zn□Mg□Cu alloys. *Corrosion Science*, **2007**, 49, 1437-1449	6.8	89
224	Electrochemical Behavior of Cr2 O 3 / Fe2 O 3 Artificial Passive Films Studied by In Situ XANES. *Journal of the Electrochemical Society*, **1998**, 145, 791-801	3.9	80
223	Self-organized TiO2 Nanotube Arrays: Critical Effects on Morphology and Growth. *Israel Journal of Chemistry*, **2010**, 50, 453-467	3.4	79
222	Effect of WC grain size on the corrosion behavior of WC□Co based hardmetals in alkaline solutions. *International Journal of Refractory Metals and Hard Materials*, **2009**, 27, 806-812	4.1	73
221	In Situ X-Ray Absorption Near-Edge Spectroscopic Study of the Cathodic Reduction of Artificial Iron Oxide Passive Films. *Journal of the Electrochemical Society*, **1996**, 143, 574-582	3.9	72
220	Localized corrosion of ultrafine-grained Al□Mg model alloys. *Electrochimica Acta*, **2010**, 55, 1966-1970	6.7	71
219	Modelling and analysis of the oxidation influence on creep behaviour of thin-walled structures of the single-crystal nickel-base superalloy Ren□N5 at 980 °C. *Acta Materialia*, **2010**, 58, 1607-1617	8.4	70
218	Protein adsorption on magnesium and its alloys: A review. *Applied Surface Science*, **2019**, 464, 212-219	6.7	70
217	Electrochemical investigations of magnesium in DMEM with biodegradable polycaprolactone coating as corrosion barrier. *Applied Surface Science*, **2013**, 282, 264-270	6.7	67
216	Electrophoretic deposition and characterization of chitosan/bioactive glass composite coatings on Mg alloy substrates. *Electrochimica Acta*, **2017**, 232, 456-464	6.7	64
215	Corrosion Properties of Polydopamine Coatings Formed in One-Step Immersion Process on Magnesium. *ACS Applied Materials & Interfaces*, **2015**, 7, 26758-66	9.5	64
214	Alginate/Bioglass□ composite coatings on stainless steel deposited by direct current and alternating current electrophoretic deposition. *Surface and Coatings Technology*, **2013**, 233, 49-56	4.4	64
213	Transpassive Dissolution of Cr and Sputter-Deposited Cr Oxides Studied by In Situ X-Ray Near-Edge Spectroscopy. *Journal of the Electrochemical Society*, **1996**, 143, 3997-4005	3.9	64
212	Electrophoretic deposition of nanostructured-TiO2/chitosan composite coatings on stainless steel. *RSC Advances*, **2013**, 3, 11247	3.7	61

211	Corrosion behaviour of multiwall carbon nanotube/magnesium composites in 3.5% NaCl. *Electrochimica Acta*, **2011**, 56, 7141-7148	6.7	57
210	The effect of nickel and silicon addition on some oxidation properties of novel Co-based high temperature alloys. *Corrosion Science*, **2013**, 69, 43-49	6.8	56
209	Intermediate Co/Ni-base model superalloys Thermophysical properties, creep and oxidation. *Scripta Materialia*, **2016**, 112, 83-86	5.6	55
208	Corrosion of Mg alloy AZ91D in the presence of living cells. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2011**, 99, 276-81	3.5	55
207	Tackling Mg alloy corrosion by natural polymer coatings-A review. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 2628-41	5.4	55
206	Chemical and physical properties of regenerative medicine materials controlling stem cell fate. *Annals of Medicine*, **2012**, 44, 635-50	1.5	54
205	Bulk Metal Oxides as a Model for the Electronic Properties of Passive Films. *Journal of the Electrochemical Society*, **1995**, 142, 3336-3342	3.9	52
204	Electrophoretic Deposition of Chitosan/h-BN and Chitosan/h-BN/TiO Composite Coatings on Stainless Steel (316L) Substrates. *Materials*, **2014**, 7, 1814-1829	3.5	51
203	Effect of Mo species on metastable pitting of Fe18Cr alloys A current transient analysis. *Corrosion Science*, **2006**, 48, 1585-1607	6.8	50
202	Electrophoretic deposition of ZnO/alginate and ZnO-bioactive glass/alginate composite coatings for antimicrobial applications. *Materials Science and Engineering C*, **2015**, 55, 137-44	8.3	48
201	Optimization of electrochemical polymerization parameters of polypyrrole on Mg Al alloy (AZ91D) electrodes and corrosion performance. *Electrochimica Acta*, **2011**, 56, 5347-5354	6.7	47
200	Electrophoretic deposition of organic/inorganic composite coatings containing ZnO nanoparticles exhibiting antibacterial properties. *Materials Science and Engineering C*, **2017**, 77, 780-789	8.3	46
199	Corrosion behaviour of stainless steels and a single crystal superalloy in a ternary LiCl KCl CsCl molten salt. *Corrosion Science*, **2015**, 90, 46-53	6.8	45
198	Influence of scandium on the pitting behaviour of Al Zn Mg Cu alloys. *Acta Materialia*, **2007**, 55, 6666-6672	8.4	45
197	Passivity of Iron in Alkaline Solutions Studied by In Situ XANES and a Laser Reflection Technique. *Journal of the Electrochemical Society*, **1999**, 146, 2097-2102	3.9	45
196	Investigations on the passivity of iron in borate and phosphate buffers, pH 8.4. *Corrosion Science*, **2006**, 48, 3472-3488	6.8	44
195	Protective layer formation on magnesium in cell culture medium. *Materials Science and Engineering C*, **2016**, 63, 341-51	8.3	43
194	Electrophoretic deposition of cellulose nanocrystals (CNs) and CNs/alginate nanocomposite coatings and free standing membranes. *Colloids and Surfaces B: Biointerfaces*, **2014**, 118, 41-8	6	43

193	Accelerated Degradation Behavior and Cytocompatibility of Pure Iron Treated with Sandblasting. *ACS Applied Materials & Interfaces*, **2016**, 8, 26482-26492	9.5	43
192	Functionalization of metallic magnesium with protein layers via linker molecules. *Langmuir*, **2010**, 26, 12044-8	4	42
191	Effect of acidic etching and fluoride treatment on corrosion performance in Mg alloy AZ91D (MgAlZn). *Electrochimica Acta*, **2009**, 55, 250-257	6.7	42
190	Dissolution of Thin Iron Oxide Films Used as Models for Iron Passive Films Studied by In Situ X-Ray Absorption Near-Edge Spectroscopy. *Journal of the Electrochemical Society*, **1997**, 144, 198-204	3.9	42
189	ICP-MS, SKPFM, XPS, and Microcapillary Investigation of the Local Corrosion Mechanisms of WC□Co Hardmetal. *Journal of the Electrochemical Society*, **2008**, 155, C415	3.9	42
188	A novel approach for the formation of Mg(OH)2/MgO nanowhiskers on magnesium: Rapid anodization in chloride containing solutions. *Electrochemistry Communications*, **2008**, 10, 288-292	5.1	42
187	Influence of second phase particles on initial electrochemical properties of AA7010-T76. *Electrochimica Acta*, **2007**, 53, 2055-2059	6.7	41
186	Protein interactions with corroding metal surfaces: comparison of Mg and Fe. *Faraday Discussions*, **2015**, 180, 347-60	3.6	40
185	Electrophoretic deposition of tetracycline hydrochloride loaded halloysite nanotubes chitosan/bioactive glass composite coatings for orthopedic implants. *Surface and Coatings Technology*, **2017**, 327, 146-157	4.4	40
184	A surface analytical and electrochemical study on the role of cerium in the chemical surface treatment of stainless steels. *Corrosion Science*, **1997**, 39, 1897-1913	6.8	40
183	Corrosion properties of laser beam joints of aluminium with zinc-coated steel. *Corrosion Science*, **2007**, 49, 4243-4258	6.8	40
182	Artificial Cr- and Fe-Oxide Passive Layers Prepared by Sputter Deposition. *Journal of the Electrochemical Society*, **1995**, 142, 3067-3972	3.9	40
181	Early stages of scale formation during oxidation of □′ strengthened single crystal ternary Co-base superalloy at 900 °C. *Corrosion Science*, **2018**, 135, 78-86	6.8	39
180	Electrophoretic deposition of chitosan/bioactive glass/silica coatings on stainless steel and WE43 Mg alloy substrates. *Surface and Coatings Technology*, **2018**, 344, 553-563	4.4	39
179	Thermophysical and Mechanical Properties of Advanced Single Crystalline Co-base Superalloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 4099-4109	2.3	38
178	Electrochemical polymerization and characterization of polypyrrole on Mg□Al alloy (AZ91D). *Synthetic Metals*, **2011**, 161, 360-364	3.6	37
177	Electrophoretic Deposition of Bioadaptive Drug Delivery Coatings on Magnesium Alloy for Bone Repair. *ACS Applied Materials & Interfaces*, **2019**, 11, 8625-8634	9.5	37
176	Microelectrochemical Studies on the Influence of Cr and Mo on Nucleation Events of Pitting Corrosion. *Journal of the Electrochemical Society*, **2000**, 147, 155	3.9	36

175	Electrophoretic deposition of nanostructured TiO2/alginate and TiO2-bioactive glass/alginate composite coatings on stainless steel. *Advances in Applied Ceramics*, **2014**, 113, 42-49	2.3	35
174	Detection of nanoscale □MgZn2 phase dissolution from an Al-Zn-Mg-Cu alloy by electrochemical microtransients. *Surface and Interface Analysis*, **2008**, 40, 1219-1225	1.5	35
173	In vitro study of polycaprolactone/bioactive glass composite coatings on corrosion and bioactivity of pure Mg. *Applied Surface Science*, **2015**, 355, 832-841	6.7	32
172	Corrosion of martensitic stainless steel in ethanol-containing gasoline: Influence of contamination by chloride, H 2 O and acetic acid. *Corrosion Science*, **2015**, 98, 318-326	6.8	32
171	Interaction of bovine serum albumin and lysozyme with stainless steel studied by time-of-flight secondary ion mass spectrometry and X-ray photoelectron spectroscopy. *Langmuir*, **2012**, 28, 16306-17	4	32
170	Electrochemical Behavior of Magnesium Alloy AZ31 in 0.5 M KOH Solution. *Electrochemical and Solid-State Letters*, **2007**, 10, C9		32
169	Cu-releasing bioactive glass/polycaprolactone coating on Mg with antibacterial and anticorrosive properties for bone tissue engineering. *Biomedical Materials (Bristol)*, **2017**, 13, 015001	3.5	31
168	Metal-assisted etching of p-type silicon under anodic polarization in HF solution with and without H2O2. *Electrochimica Acta*, **2010**, 55, 903-912	6.7	31
167	Developing surface pre-treatments for electrophoretic deposition of biofunctional chitosan-bioactive glass coatings on a WE43 magnesium alloy. *Applied Surface Science*, **2017**, 405, 441-448	6.7	30
166	Anodic growth of self-ordered magnesium oxy-fluoride nanoporous/tubular layers on Mg alloy (WE43). *Electrochemistry Communications*, **2010**, 12, 796-799	5.1	30
165	Influence of the microstructure on the corrosion behaviour of cast Mg-Al alloys. *Corrosion Science*, **2019**, 155, 195-208	6.8	29
164	The effect of grain boundaries on high temperature oxidation of new □-strengthened Co□□□B superalloys. *Corrosion Science*, **2014**, 79, 29-33	6.8	29
163	Effect of Processing on Grain Size and Corrosion of AA2024-T3. *Corrosion*, **2011**, 67, 105001-105001-10	1.8	29
162	Investigation of the electrochemical behaviour of WC□Co hardmetal with electrochemical and surface analytical methods. *Surface Science*, **2004**, 566-568, 1240-1245	1.8	29
161	Electrochemical behavior of nanostructured TiO2/alginate composite coating on magnesium alloy AZ91D via electrophoretic deposition. *Surface and Coatings Technology*, **2015**, 265, 212-217	4.4	28
160	Corrosion properties of novel □-strengthened Co-base superalloys. *Corrosion Science*, **2013**, 66, 233-241	6.8	28
159	Influence of surface self-modification in Ringer's solution on the passive behavior of titanium. *Journal of Biomedical Materials Research - Part A*, **2005**, 75, 934-40	5.4	28
158	Influence of Co to Ni ratio in □-strengthened model alloys on oxidation resistance and the efficacy of the halogen effect at 900 °C. *Corrosion Science*, **2019**, 156, 84-95	6.8	27

157	Correlation between the surface coverage of severe shot peening and surface microstructural evolutions in AISI 321: A TEM, FE-SEM and GI-XRD study. *Surface and Coatings Technology*, **2018**, 334, 461-470	4.4	27
156	A novel local drug delivery system: Superhydrophobic titanium oxide nanotube arrays serve as the drug reservoir and ultrasonication functions as the drug release trigger. *Materials Science and Engineering C*, **2018**, 82, 277-283	8.3	27
155	Application of electrochemical noise to monitor stress corrosion cracking of stainless steel in tetrathionate solution under constant load. *Corrosion Science*, **2012**, 63, 129-139	6.8	27
154	Properties of the Nanoporous Anodic Oxide Electrochemically Grown on Steel in Hot 50% NaOH. *Journal of the Electrochemical Society*, **2009**, 156, C45	3.9	27
153	Oxidation kinetics of thin copper films and wetting behaviour of copper and Organic Solderability Preservatives (OSP) with lead-free solder. *Applied Surface Science*, **2011**, 257, 6481-6488	6.7	27
152	Corrosion of Biomedical Implant Materials. *Corrosion Reviews*, **2008**, 26,	3.2	27
151	Functionalization of steel surfaces with organic acids: Influence on wetting and corrosion behavior. *Applied Surface Science*, **2017**, 404, 326-333	6.7	26
150	Anodized titanium and stainless steel in contact with CFRP: an electrochemical approach considering galvanic corrosion. *Journal of Biomedical Materials Research - Part A*, **2007**, 82, 936-46	5.4	26
149	Influence of MoO42□anion in the electrolyte on passivity breakdown of iron. *Corrosion Science*, **2001**, 43, 1165-1177	6.8	26
148	Electrophoretic deposition of lawsone loaded bioactive glass (BG)/chitosan composite on polyetheretherketone (PEEK)/BG layers as antibacterial and bioactive coating. *Journal of Biomedical Materials Research - Part A*, **2018**, 106, 3111-3122	5.4	26
147	Localised corrosion: general discussion. *Faraday Discussions*, **2015**, 180, 381-414	3.6	25
146	A facile and scalable method to produce superhydrophic stainless steel surface. *Applied Surface Science*, **2014**, 311, 753-757	6.7	25
145	Application of the electrochemical microcapillary technique to study intergranular stress corrosion cracking of austenitic stainless steel on the micrometre scale. *Corrosion Science*, **2012**, 55, 126-132	6.8	25
144	Corrosion behavior of biodegradable metals in two different simulated physiological solutions: Comparison of Mg, Zn and Fe. *Corrosion Science*, **2021**, 182, 109278	6.8	25
143	Cell Adhesion on Surface-Functionalized Magnesium. *ACS Applied Materials & Interfaces*, **2016**, 8, 11998-2006	9.5	25
142	From Waste to Valuable Resource: Lignin as a Sustainable Anti-Corrosion Coating. *Coatings*, **2018**, 8, 4542.9		25
141	Characterization of r.f.-sputtered iron oxide films for modeling passive films. *Thin Solid Films*, **1998**, 312, 46-60	2.2	24
140	Protein-adsorption and Ca-phosphate formation on chitosan-bioactive glass composite coatings. *Applied Surface Science*, **2017**, 416, 454-460	6.7	23

139	First approach for thermodynamic modelling of the high temperature oxidation behaviour of ternary γ′-strengthened Co–Al–W superalloys. *Corrosion Science*, **2014**, 89, 1-5	6.8	23
138	Poly(N-methyl aniline) thin films on copper: Synthesis, characterization and corrosion protection. *Thin Solid Films*, **2011**, 519, 5868-5874	2.2	23
137	Surface Enhanced Roman Spectroscopy of Iron Oxide Thin Films: Comparison with the Passive Film on Iron. *Journal of the Electrochemical Society*, **1997**, 144, 1604-1609	3.9	23
136	An analysis of the in vivo deterioration of Co-Cr-Mo implants through wear and corrosion. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2007**, 221, 291-303	1.7	22
135	Electrochemical Behavior of Fe in Phosphate Solutions Studied by In Situ X-Ray Absorption Near Edge Structure. *Journal of the Electrochemical Society*, **1999**, 146, 4087-4094	3.9	22
134	Effect of inflammatory conditions and H2O2 on bare and coated Ti6Al4V surfaces: Corrosion behavior, metal ion release and Ca-P formation under long-term immersion in DMEM. *Applied Surface Science*, **2015**, 357, 101-111	6.7	20
133	Biodegradable nanostructures: Degradation process and biocompatibility of iron oxide nanostructured arrays. *Materials Science and Engineering C*, **2018**, 85, 203-213	8.3	20
132	In situ X-ray absorption near edge structure studies of mechanisms of passivity. *Electrochimica Acta*, **2002**, 47, 3117-3125	6.7	20
131	The effect of laser surface modification on the corrosion behaviour of Fe and Al base alloys. *Corrosion Science*, **1994**, 36, 1625-1633	6.8	20
130	Albumin coatings by alternating current electrophoretic deposition for improving corrosion resistance and bioactivity of titanium implants. *Materials Science and Engineering C*, **2017**, 73, 798-807	8.3	19
129	Fabrication of ZnO nanotube layer on Zn and evaluation of corrosion behavior and bioactivity in view of biodegradable applications. *Applied Surface Science*, **2019**, 494, 259-265	6.7	19
128	Albumin coating on magnesium via linker molecules--comparing different coating mechanisms. *Colloids and Surfaces B: Biointerfaces*, **2013**, 103, 586-94	6	19
127	In vitro corrosion survey of Mg–Ca and Mg–Zn–Ca alloys with and without calcium phosphate conversion coatings. *Corrosion Engineering Science and Technology*, **2012**, 47, 365-373	1.7	19
126	Elektrochemische Korrosionsuntersuchungen an der Magnesiumlegierung AZ91: Beschreibung kritischer Parameter und deren Einfluss auf die Angriffsmechanismen auf NRC-Proben. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2004**, 55, 5-17	1.6	19
125	Editors' Choice—Respirometric in Situ Methods for Real-Time Monitoring of Corrosion Rates: Part I. Atmospheric Corrosion. *Journal of the Electrochemical Society*, **2020**, 167, 021510	3.9	19
124	Real-Time Monitoring of Atmospheric Magnesium Alloy Corrosion. *Journal of the Electrochemical Society*, **2019**, 166, C3001-C3009	3.9	19
123	Influence of MWCNT dispersion on corrosion behaviour of their Mg composites. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2012**, 63, 384-387	1.6	18
122	Metastable and Stable Pitting Corrosion of Titanium in Halide Solutions. *Corrosion*, **2004**, 60, 643-649	1.8	18

121	Electrophoretic deposition of gelatine nanoparticle/chitosan coatings. *Electrochimica Acta*, **2019**, 307, 318-325	6.7	17
120	Passivity, breakdown and repassivation of glassy Fe?Cr?P alloys. *Corrosion Science*, **1990**, 31, 333-342	6.8	17
119	Influence of proteins on the corrosion behavior of a chitosan-bioactive glass coated magnesium alloy. *Materials Science and Engineering C*, **2019**, 100, 706-714	8.3	17
118	Alternating Current Electrophoretic Deposition for the Immobilization of Antimicrobial Agents on Titanium Implant Surfaces. *ACS Applied Materials & Interfaces*, **2017**, 9, 8533-8546	9.5	16
117	Electrophoretic co-deposition of cellulose nanocrystals-45S5 bioactive glass nanocomposite coatings on stainless steel. *Applied Surface Science*, **2016**, 362, 323-328	6.7	16
116	Electrochemical Activity and Electrical Properties of Optimized Polypyrrole Coatings on Iron. *Journal of the Electrochemical Society*, **2015**, 162, E307-E313	3.9	16
115	TEM and ToF-SIMS studies on the corrosion behavior of vanadium and chromium containing WC□Co hard metals in alkaline solutions. *International Journal of Refractory Metals and Hard Materials*, **2011**, 29, 376-383	4.1	16
114	Porosity Tailored Growth of Black Anodic Layers on Magnesium in an Organic Electrolyte. *Journal of the Electrochemical Society*, **2009**, 156, C62	3.9	16
113	Microstructural Effects on the Corrosion Behavior of High-Strength Al□Zn□Mg□Cu Alloys in an Overaged Condition. *Journal of the Electrochemical Society*, **2007**, 154, C411	3.9	16
112	Electrochemical behavior of surface films formed on Fe in chromate solutions. *Corrosion Science*, **2003**, 45, 1405-1419	6.8	16
111	XPS analytical characterization of amorphous alloys: Fe70Cr10P13C7. *Surface and Interface Analysis*, **1990**, 15, 668-674	1.5	16
110	Stress corrosion cracking initiation and short crack growth behaviour in Alloy 182 weld metal under simulated boiling water reactor hydrogen water chemistry conditions. *Corrosion Science*, **2018**, 131, 208-222	6.8	16
109	In Vitro Osteocompatibility and Enhanced Biocorrosion Resistance of Diammonium Hydrogen Phosphate-Pretreated/Poly(ether imide) Coatings on Magnesium for Orthopedic Application. *ACS Applied Materials & Interfaces*, **2019**, 11, 29667-29680	9.5	15
108	Chemical vapor deposition of titanium based ceramic coatings on low carbon steel: Characterization and electrochemical evaluation. *Surface and Coatings Technology*, **2011**, 205, 5454-5463	4.4	15
107	XPS studies on passive films on amorphous Fe-Cr-(B,P)-C alloys. *Corrosion Science*, **1994**, 36, 373-384	6.8	15
106	Electrochemical and surface analytical study of the corrosion behavior of mild steel with cathodically produced zinc phosphate coating. *Surface and Interface Analysis*, **2009**, 41, 911-917	1.5	14
105	Electrochemical evaluation of the corrosion behavior of steel coated with titanium-based ceramic layers. *Surface and Coatings Technology*, **2011**, 205, 3006-3011	4.4	14
104	Effect of metalloids on the passivity of amorphous Fe?Cr alloys. *Journal of the Less Common Metals*, **1988**, 145, 581-593		14

103	A One-Pot Universal Approach to Fabricate Lubricant-Infused Slippery Surfaces on Solid Substrates. *Advanced Functional Materials*, **2021**, 31, 2101090	15.6	14
102	Tuning of the Mg Alloy AZ31 Anodizing Process for Biodegradable Implants. *ACS Applied Materials & Interfaces*, **2021**, 13, 12866-12876	9.5	14
101	Using tapered specimens to study the effect of hydrogen and surface finish on SCC initiation in Alloy 182 under boiling water reactor conditions. *Corrosion Engineering Science and Technology*, **2017**, 52, 558-566	1.7	12
100	Influence of Electrolyte Composition (Simulated Body Fluid vs. Dulbecco□ Modified Eagle□ Medium), Temperature, and Solution Flow on the Biocorrosion Behavior of Commercially Pure Mg. *Corrosion*, **2017**, 73, 1413-1422	1.8	12
99	Transport mechanisms during the high-temperature oxidation of ternary /□ Co-base model alloys. *Npj Materials Degradation*, **2019**, 3,	5.7	12
98	Electrochemical characterisation of novel /□-strengthened Co-base superalloys. *Electrochimica Acta*, **2012**, 76, 275-281	6.7	12
97	High-Throughput Investigation of the Oxidation and Phase Constitution of Thin-Film Ni□Al□Cr Materials Libraries. *Advanced Engineering Materials*, **2015**, 17, 1365-1373	3.5	12
96	High temperature oxidation behaviour of AISI 321 stainless steel with an ultrafine-grained surface at 800 °C in Ar□0 vol.% O2. *Corrosion Science*, **2020**, 163, 108282	6.8	12
95	Growth Mechanisms of Oxide Scales on Two-phase Co/Ni-base Model Alloys between 800 °C and 900 °C. *Journal of the Electrochemical Society*, **2020**, 167, 021504	3.9	11
94	Passivity of High Corrosion Resistant Cu-Al-Sn Alloys. *Journal of the Electrochemical Society*, **1993**, 140, 2786-2790	3.9	11
93	High corrosion resistance of amorphous Fe-Cr-P alloys.. *ISIJ International*, **1991**, 31, 229-232	1.7	11
92	New insights into the effects of surface nanocrystallization on the oxidation of 321 austenitic stainless steel in a humid oxygen environment at 1000 °C. *Corrosion Science*, **2019**, 147, 231-245	6.8	11
91	Thermal stability of nanocrystalline surface layer of AISI 321 stainless steel. *Vacuum*, **2017**, 146, 297-303	3.7	10
90	Study of the electrochemical stability of polypyrrole coating on iron in sodium salicylate aqueous solution. *Synthetic Metals*, **2016**, 221, 1-7	3.6	10
89	Long-term corrosion study of low carbon steel coated with titanium boronitride in simulated soil solution. *Electrochimica Acta*, **2012**, 76, 312-319	6.7	10
88	Influence of W Content on the Oxidation Behaviour of Ternary (gamma ^{prime })-Strengthened Co-Based Model Alloys Between 800 and (900,^{circ }{hbox {C}}). *Oxidation of Metals*, **2019**, 92, 541-560	1.6	9
87	Biocorrosion of TiO2 nanoparticle coating of Ti□Al□V in DMEM under specific in vitro conditions. *Applied Surface Science*, **2015**, 329, 356-362	6.7	9
86	Corrosion Behavior of Polypyrrole/AZ91D in Simulated Body Fluid Solutions and Its Functionalization with Albumin Monolayers. *Corrosion*, **2012**, 68, 536-547	1.8	9

85	Electrochemical characterization of new stainless Cu?Al?Sn alloys. *Corrosion Science*, **1995**, 37, 793-799	6.8	9
84	Corrosion and passivation of amorphous and crystalline Fe?Cr alloys in ethanol/water/HCl mixtures. *Electrochimica Acta*, **1987**, 32, 927-934	6.7	9
83	Modification of in vitro degradation behavior of pure iron with ultrasonication treatment: Comparison of two different pseudo-physiological solutions. *Materials Science and Engineering C*, **2019**, 95, 275-285	8.3	9
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