Vincent Maurice

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/106780/publications.pdf

Version: 2024-02-01

175 papers 8,242 citations

54 h-index 83 g-index

180 all docs

 $\frac{180}{\text{docs citations}}$

180 times ranked

6023 citing authors

#	Article	IF	CITATIONS
1	Localized corrosion (pitting): A model of passivity breakdown including the role of the oxide layer nanostructure. Corrosion Science, 2008, 50, 2698-2704.	6.6	317
2	Xâ€Ray Photoelectron Spectroscopy and Scanning Tunneling Microscopy Study of Passive Films Formed on (100) Feâ€18Crâ€13Ni Singleâ€Crystal Surfaces. Journal of the Electrochemical Society, 1998, 145, 909-920.	2.9	264
3	XPS and STM study of the growth and structure of passive films in high temperature water on a nickel-base alloy. Electrochimica Acta, 2004, 49, 3957-3964.	5.2	245
4	Low-temperature atomic layer deposition of Al2O3 thin coatings for corrosion protection of steel: Surface and electrochemical analysis. Corrosion Science, 2011, 53, 2168-2175.	6.6	199
5	XPS and STM Study of Passive Films Formed on Feâ€22Cr(110) Singleâ€Crystal Surfaces. Journal of the Electrochemical Society, 1996, 143, 1182-1200.	2.9	182
6	Li-Ion Intercalation in Thermal Oxide Thin Films of MoO ₃ as Studied by XPS, RBS, and NRA. Journal of Physical Chemistry C, 2008, 112, 11050-11058.	3.1	181
7	In situ STM study of the initial stages of oxidation of Cu(111) in aqueous solution. Surface Science, 2000, 458, 185-194.	1.9	176
8	Surface hydroxylation and local structure of NiO thin films formed on Ni(111). Surface Science, 1998, 407, 36-58.	1.9	167
9	In situ STM study of the duplex passive films formed on Cu(111) and Cu(001) in 0.1 M NaOH. Corrosion Science, 2004, 46, 245-264.	6.6	166
10	XPS and STM Investigation of the Passive Film Formed on Cr(110) Singleâ€Crystal Surfaces. Journal of the Electrochemical Society, 1994, 141, 3016-3027.	2.9	150
11	Progress in corrosion science at atomic and nanometric scales. Progress in Materials Science, 2018, 95, 132-171.	32.8	142
12	In Situ Scanning Tunneling Microscopy Study of the Anodic Oxidation of Cu(111) in 0.1 M NaOH. Journal of Physical Chemistry B, 2001, 105, 4263-4269.	2.6	136
13	XPS study of the initial stages of oxidation of $\hat{l}\pm 2$ -Ti3Al and \hat{l}^3 -TiAl intermetallic alloys. Acta Materialia, 2007, 55, 3315-3325.	7.9	131
14	Initial and later stages of anodic oxide formation on Cu, chemical aspects, structure and electronic properties. Electrochimica Acta, 2001, 46, 3755-3766.	5.2	125
15	XPS study of Li ion intercalation in V2O5 thin films prepared by thermal oxidation of vanadium metal. Electrochimica Acta, 2007, 52, 5644-5653.	5.2	124
16	Initial stages of oxidation of Cu(111). Surface Science, 2007, 601, 1193-1204.	1.9	119
17	Oxide Film Growth Kinetics on Metals and Alloys. Journal of the Electrochemical Society, 2013, 160, C189-C196.	2.9	116
18	XPS and ToF-SIMS study of Sn–Co alloy thin films as anode for lithium ion battery. Journal of Power Sources, 2010, 195, 8251-8257.	7.8	111

#	Article	IF	CITATIONS
19	Effects of molybdenum on the composition and nanoscale morphology of passivated austenitic stainless steel surfaces. Faraday Discussions, 2015, 180, 151-170.	3.2	111
20	Self-assembling of atomic vacancies at an oxide/intermetallic alloy interface. Nature Materials, 2004, 3, 687-691.	27.5	103
21	Ultra-Thin Aluminium Oxide Films Deposited by Plasma-Enhanced Atomic Layer Deposition for Corrosion Protection. Journal of the Electrochemical Society, 2011, 158, C132.	2.9	100
22	Passive films at the nanoscale. Electrochimica Acta, 2012, 84, 129-138.	5.2	100
23	Surface Structure of Nickel in Acid Solution Studied by In Situ Scanning Tunneling Microscopy. Journal of the Electrochemical Society, 2000, 147, 1393.	2.9	99
24	XPS, LEED and STM study of thin oxide films formed on Cr(110). Surface Science, 2000, 458, 195-215.	1.9	96
25	In situ STM study of the effect of chlorides on the initial stages of anodic oxidation of $Cu(111)$ in alkaline solutions. Electrochimica Acta, 2003, 48, 1157-1167.	5.2	92
26	Growth, structure and chemical properties of FeO overlayers on Pt(100) and Pt(111). Surface Science, 1992, 268, 170-178.	1.9	91
27	XPS and ToF-SIMS Study of Electrode Processes on Snâ^'Ni Alloy Anodes for Li-Ion Batteries. Journal of Physical Chemistry C, 2011, 115, 7012-7018.	3.1	89
28	The epitaxial growth of zirconium oxide thin films on $Pt(111)$ single crystal surfaces. Surface Science, 1990, 237, 116-126.	1.9	88
29	Tantalum oxide nanocoatings prepared by atomic layer and filtered cathodic arc deposition for corrosion protection of steel: Comparative surface and electrochemical analysis. Electrochimica Acta, 2013, 90, 232-245.	5.2	88
30	XPS, time-of-flight-SIMS and polarization modulation IRRAS study of Cr2O3 thin film materials as anode for lithium ion battery. Electrochimica Acta, 2009, 54, 3700-3707.	5.2	81
31	In situ STM study of the anodic oxidation of Cu(0 0 1) in 0.1 M NaOH. Journal of Electroanalytical Chemistry, 2003, 554-555, $113-125$.	3.8	76
32	A scanning tunneling microscopy study of the structure of thin oxide films grown on Ni(111) single crystal surfaces by anodic polarization in acid electrolyte. Surface Science, 1994, 304, 98-108.	1.9	75
33	Ab initio modelling of localized corrosion: Study of the role of surface steps in the interaction of chlorides with passivated nickel surfaces. Corrosion Science, 2009, 51, 2174-2182.	6.6	7 5
34	Passivation-Induced Physicochemical Alterations of the Native Surface Oxide Film on 316L Austenitic Stainless Steel. Journal of the Electrochemical Society, 2019, 166, C3376-C3388.	2.9	75
35	Hydroxylation-induced modifications of the Al2O3/NiAl(001) surface at low water vapour pressure. Surface Science, 2005, 581, 88-104.	1.9	73
36	Mechanisms of Cr and Mo Enrichments in the Passive Oxide Film on 316L Austenitic Stainless Steel. Frontiers in Materials, 2019, 6, .	2.4	72

3

#	Article	IF	CITATIONS
37	Thin films of vanadium oxide grown on vanadium metal: oxidation conditions to produce V2O5 films for Li-intercalation applications and characterisation by XPS, AFM, RBS/NRA. Surface and Interface Analysis, 2006, 38, 6-18.	1.8	71
38	Corrosion protection of aluminium by ultra-thin atomic layer deposited alumina coatings. Corrosion Science, 2016, 106, 16-24.	6.6	68
39	Bulk and surface properties of Cu2O: A first-principles investigation. Computational and Theoretical Chemistry, 2009, 903, 41-48.	1.5	67
40	Oxidation resistance of a Zr-doped NiAl coating thermochemically deposited on a nickel-based superalloy. Surface and Coatings Technology, 2009, 204, 756-760.	4.8	67
41	Electrochemical and time-of-flight secondary ion mass spectrometry analysis of ultra-thin metal oxide (Al2O3 and Ta2O5) coatings deposited by atomic layer deposition on stainless steel. Electrochimica Acta, 2011, 56, 10516-10523.	5. 2	67
42	Current developments of nanoscale insight into corrosion protection by passive oxide films. Current Opinion in Solid State and Materials Science, 2018, 22, 156-167.	11.5	67
43	In Situ Scanning Tunneling Microscope Study of the Passivation of $Cu(111)$. Journal of the Electrochemical Society, 1999, 146, 524-530.	2.9	65
44	Failure mechanism of thin Al2O3 coatings grown by atomic layer deposition for corrosion protection of carbon steel. Electrochimica Acta, 2011, 56, 9609-9618.	5.2	65
45	Hydroxylation of ultra-thin films of î±-Cr2O3(0001) formed on Cr(110). Surface Science, 2001, 471, 43-58.	1.9	63
46	Chloride-induced alterations of the passive film on 316L stainless steel and blocking effect of pre-passivation. Electrochimica Acta, 2020, 329, 135159.	5.2	63
47	Nanoscale Morphology and Atomic Structure of Passive Films on Stainless Steel. Journal of the Electrochemical Society, 2013, 160, C232-C238.	2.9	62
48	Sealing of Hard CrN and DLC Coatings with Atomic Layer Deposition. ACS Applied Materials & Samp; Interfaces, 2014, 6, 1893-1901.	8.0	61
49	Ab initio study of the interaction of chlorides with defect-free hydroxylated NiO surfaces. Corrosion Science, 2009, 51, 941-948.	6.6	60
50	New insight on early oxidation stages of austenitic stainless steel from in situ XPS analysis on single-crystalline Fe–18Cr–13Ni. Corrosion Science, 2018, 140, 205-216.	6.6	60
51	Combined Surface and Electrochemical Study of the Lithiation/Delithiation Mechanism of the Iron Oxide Thin-Film Anode for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2013, 117, 21651-21661.	3.1	59
52	Initial Stages of Growth of Alumina on NiAl(001) at 1025 K. Journal of the American Ceramic Society, 2003, 86, 669-75.	3.8	58
53	In situ scanning tunnelling microscopic study of the initial stages of growth and of the structure of the passive film on Ni(111) in $1\text{\^{A}}$ mM NaOH(aq). Journal of Solid State Electrochemistry, 2005, 9, 337-346.	2.5	58
54	Effect of Platinum on the Growth Rate of the Oxide Scale Formed on Cast Nickel Aluminide Intermetallic Alloys. Oxidation of Metals, 2005, 64, 185-205.	2.1	58

#	Article	IF	Citations
55	Corrosion Protection of Steel with Oxide Nanolaminates Grown by Atomic Layer Deposition. Journal of the Electrochemical Society, 2011, 158, C369.	2.9	58
56	In situ Scanning Tunneling Microscopy Study of the Structure of the Hydroxylated Anodic Oxide Film Formed on Cr(110) Single-Crystal Surfaces. Journal of Physical Chemistry B, 1999, 103, 7896-7905.	2.6	54
57	Chromium and tantalum oxide nanocoatings prepared by filtered cathodic arc deposition for corrosion protection of carbon steel. Surface and Coatings Technology, 2012, 206, 3903-3910.	4.8	53
58	Local decomposition of NiO ultra-thin films formed on Ni(111). Surface Science, 1998, 411, 215-230.	1.9	52
59	In Situ STM Study of the Effect of Chloride on Passive Film on Nickel in Alkaline Solution. Journal of the Electrochemical Society, 2006, 153, B453.	2.9	51
60	Nanostructure and local properties of oxide layers grown on stainless steel in simulated pressurized water reactor environment. Corrosion Science, 2014, 84, 198-203.	6.6	51
61	First principles investigation on the stabilization mechanisms of the polar copper terminated Cu2O(111) surface. Surface Science, 2009, 603, 2087-2095.	1.9	49
62	DFT investigation of 2-mercaptobenzothiazole adsorption on model oxidized copper surfaces and relationship with corrosion inhibition. Applied Surface Science, 2021, 537, 147802.	6.1	47
63	2-Mercaptobenzothiazole corrosion inhibitor deposited at ultra-low pressure on model copper surfaces. Corrosion Science, 2020, 166, 108464.	6.6	44
64	The growth of protective ultra-thin alumina layers on \hat{I}^3 -TiAl(111) intermetallic single-crystal surfaces. Surface Science, 2005, 596, 61-73.	1.9	43
65	Passivation mechanisms and pre-oxidation effects on model surfaces of FeCrNi austenitic stainless steel. Corrosion Science, 2020, 167, 108483.	6.6	43
66	Li-intercalation behaviour of vanadium oxide thin film prepared by thermal oxidation of vanadium metal. Electrochimica Acta, 2006, 51, 5001-5011.	5.2	42
67	Origin of nanoscale heterogeneity in the surface oxide film protecting stainless steel against corrosion. Npj Materials Degradation, 2019, 3, .	5.8	41
68	Atomic Structure of Metastable Pits Formed on Nickel. Electrochemical and Solid-State Letters, 2001, 4, B1.	2.2	40
69	Nanostructural modifications of V2O5 thin films during Li intercalation studied in situ by AFM. Electrochemistry Communications, 2007, 9, 2448-2455.	4.7	38
70	Title is missing!. Oxidation of Metals, 2003, 60, 159-178.	2.1	37
71	In Situ STM Study of the Surface Structure, Dissolution, and Early Stages of Electrochemical Oxidation of the Ag(111) Electrode. Journal of Physical Chemistry C, 2007, 111, 16351-16361.	3.1	37
72	Electrochemical lithiation and passivation mechanisms of iron monosulfide thin film as negative electrode material for lithium-ion batteries studied by surface analytical techniques. Applied Surface Science, 2013, 283, 888-899.	6.1	37

#	Article	IF	Citations
73	Density Functional Theory Study of the Interaction of Cl[sup â^'] with Passivated Nickel Surfaces. Electrochemical and Solid-State Letters, 2003, 6, B47.	2.2	36
74	In Situ Scanning Tunneling Microscopy Study of Grain-Dependent Corrosion on Microcrystalline Copper. Journal of Physical Chemistry C, 2014, 118, 25421-25428.	3.1	36
75	In situ scanning tunneling microscopy study of the intergranular corrosion of copper. Electrochemistry Communications, 2014, 41, 1-4.	4.7	34
76	Low-coverage sulfur induced reconstruction of Ni(111). Surface Science, 1997, 373, 307-317.	1.9	33
77	Adsorption and thermal stability of 2-mercaptobenzothiazole corrosion inhibitor on metallic and pre-oxidized Cu(1 1 1) model surfaces. Applied Surface Science, 2020, 508, 145132.	6.1	33
78	The bonding of diethyl ether, ethanol and their fluorinated analogs to zirconium oxide thin films. Surface Science, 1991, 250, 99-111.	1.9	32
79	Ageing of V2O5 thin films induced by Li intercalation multi-cycling. Journal of Power Sources, 2007, 170, 160-172.	7.8	32
80	The distribution of lithium intercalated in V2O5 thin films studied by XPS and ToF-SIMS. Electrochimica Acta, 2008, 53, 4257-4266.	5.2	32
81	Atomic-scale investigation of the localized corrosion of passivated nickel surfaces. Surface and Interface Analysis, 2002, 34, 139-143.	1.8	31
82	Passivation-Induced Cr and Mo Enrichments of 316L Stainless Steel Surfaces and Effects of Controlled Pre-Oxidation. Journal of the Electrochemical Society, 2020, 167, 141509.	2.9	31
83	The adsorption and coadsorption of sulfur and carbon monoxide on rhenium single crystal surfaces. Surface Science, 1988, 204, 1-25.	1.9	30
84	Breakdown Kinetics at Nanostructure Defects of Passive Films. Electrochemical and Solid-State Letters, 2009, 12, C25.	2,2	30
85	X-ray photoelectron spectroscopy study of thin oxide layers formed on (001)-oriented \hat{I}^2 -NiAl single-crystal surfaces. Surface and Interface Analysis, 2002, 34, 519-523.	1.8	29
86	In Situ STM Study of the Initial Stages of Anodic Oxidation of Cu(111) in the Presence of Sulfates. Journal of the Electrochemical Society, 2003, 150, B316.	2.9	29
87	Effect of Pt Additions on the Sulfur Segregation, Void Formation and Oxide Scale Growth of Cast Nickel Aluminides. Materials Science Forum, 2004, 461-464, 247-254.	0.3	29
88	Corrosion properties of steel protected by nanometre-thick oxide coatings. Corrosion Science, 2014, 82, 208-217.	6.6	29
89	Insight into Lithium Diffusion in Conversion-Type Iron Oxide Negative Electrode. Journal of Physical Chemistry C, 2015, 119, 919-925.	3.1	29
90	Adsorption of sulphur on the (100) face of molybdenum: A complete crystallographic discussion. Surface Science, 1984, 148, 623-634.	1.9	28

#	Article	IF	Citations
91	2-Mercaptobenzimidazole films formed at ultra-low pressure on copper: adsorption, thermal stability and corrosion inhibition performance. Applied Surface Science, 2020, 527, 146814.	6.1	28
92	A theoretical investigation of the adsorption modes of ethene, 1,3-butadiene, 1-butene, and cis- and trans-2-butenes on the unreconstructed (110) surface of platinum. Langmuir, 1989, 5, 734-741.	3.5	27
93	Local passivation of metals at grain boundaries: In situ scanning tunneling microscopy study on copper. Corrosion Science, 2016, 111, 659-666.	6.6	27
94	DFT-Based Cu(111) Cu ₂ O(111) Model for Copper Metal Covered by Ultrathin Copper Oxide: Structure, Electronic Properties, and Reactivity. Journal of Physical Chemistry C, 2020, 124, 17048-17057.	3.1	27
95	Title is missing!. Oxidation of Metals, 2003, 60, 137-157.	2.1	26
96	The effect of Na2S additive in alkaline electrolyte on improved performances of Fe-based air batteries. Electrochimica Acta, 2018, 259, 196-203.	5.2	26
97	Hydrogen–argon plasma pre-treatment for improving the anti-corrosion properties of thin Al2O3 films deposited using atomic layer deposition on steel. Thin Solid Films, 2013, 534, 384-393.	1.8	25
98	Aging-Induced Chemical and Morphological Modifications of Thin Film Iron Oxide Electrodes for Lithium-Ion Batteries. Langmuir, 2014, 30, 3538-3547.	3.5	25
99	Electrochemical and Surface Analysis of the Corrosion Protection of Copper by Nanometer-Thick Alumina Coatings Prepared by Atomic Layer Deposition. Journal of the Electrochemical Society, 2015, 162, C377-C384.	2.9	25
100	Interfacial native oxide effects on the corrosion protection of copper coated with ALD alumina. Electrochimica Acta, 2016, 193, 7-15.	5.2	25
101	The role of surface preparation in corrosion protection of copper with nanometer-thick ALD alumina coatings. Applied Surface Science, 2016, 387, 1054-1061.	6.1	24
102	STM study of sputter-deposited Al clusters in chemical interaction with graphite (0001) surfaces. Surface Science, 1992, 275, 65-74.	1.9	23
103	Initiation of localized corrosion at the nanoscale by competitive dissolution and passivation of nickel surfaces. Electrochimica Acta, 2008, 54, 540-544.	5.2	23
104	Intergranular effects on the local electronic properties of the passive film on nickel. Corrosion Science, 2013, 69, 245-251.	6.6	23
105	Atomic level characterization in corrosion studies. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160414.	3.4	23
106	Brass Surface Nanochemistry: The Role of Alloying Cu with Zn. Journal of Physical Chemistry C, 2008, 112, 7540-7543.	3.1	21
107	Nanoscale Intergranular Corrosion and Relation with Grain Boundary Character as Studied In Situ on Copper. Journal of the Electrochemical Society, 2018, 165, C835-C841.	2.9	21
108	Adsorption of 2-mercaptobenzimidazole Corrosion Inhibitor on Copper: DFT Study on Model Oxidized Interfaces. Journal of the Electrochemical Society, 2020, 167, 161506.	2.9	21

#	Article	IF	CITATIONS
109	Interpretation of fractional-order Bragg reflections with zero intensity in LEED patterns. Surface Science, 1987, 187, 312-326.	1.9	20
110	Surface reconstruction modes of Cu2O(001) surface: A first principles study. Surface Science, 2010, 604, 1516-1523.	1.9	20
111	Local Electronic Properties of the Passive Film on Nickel Studied by Scanning Tunneling Spectroscopy. Journal of the Electrochemical Society, 2012, 159, C351-C356.	2.9	20
112	Grain boundary passivation studied by in situ scanning tunneling microscopy on microcrystalline copper. Journal of Solid State Electrochemistry, 2015, 19, 3501-3509.	2.5	20
113	Stainless steel surface structure and initial oxidation at nanometric and atomic scales. Applied Surface Science, 2019, 494, 8-12.	6.1	20
114	An XPS and ToF-SIMS study of the passive film formed on a model FeCrNiMo stainless steel surface in aqueous media after thermal pre-oxidation at ultra-low oxygen pressure. Applied Surface Science, 2021, 554, 149435.	6.1	20
115	Local Inhibition by 2-mercaptobenzothiazole of Early Stage Intergranular Corrosion of Copper. Journal of the Electrochemical Society, 2020, 167, 161504.	2.9	20
116	XPS study of oxide nucleation and growth mechanisms on a model FeCrNiMo stainless steel surface. Applied Surface Science, 2022, 575, 151681.	6.1	19
117	Ageing mechanisms of conversion-type electrode material studied on iron sulfide thin films. Electrochimica Acta, 2014, 120, 359-368.	5.2	18
118	Enhanced passivity of Cr-Fe-Co-Ni-Mo multi-component single-phase face-centred cubic alloys: design, production and corrosion behaviour. Corrosion Science, 2022, 200, 110233.	6.6	18
119	Atomistic Modeling of Voiding Mechanisms at Oxide/Alloy Interfaces. Journal of Physical Chemistry C, 2009, 113, 9978-9981.	3.1	17
120	Initial stages of oxidation of Cu0.7Zn0.3(111). Surface Science, 2007, 601, 4402-4406.	1.9	16
121	Oxidation of α-brass: A photoelectron spectroscopy study. Surface Science, 2015, 641, 51-59.	1.9	15
122	The influence of the electrolyte on chemical and morphological modifications of an iron sulfide thin film negative electrode. Physical Chemistry Chemical Physics, 2015, 17, 619-629.	2.8	15
123	Corrosion inhibition of locally de-passivated surfaces by DFT study of 2-mercaptobenzothiazole on copper. Npj Materials Degradation, 2021, 5, .	5.8	15
124	Al _{<i>x</i>} Ta _{<i>y</i>} O _{<i>z</i>} Mixture Coatings Prepared Using Atomic Layer Deposition for Corrosion Protection of Steel. Chemical Vapor Deposition, 2013, 19, 194-203.	1.3	14
125	Moir \tilde{A} © Structure of the 2-Mercaptobenzothiazole Corrosion Inhibitor Adsorbed on a (111)-Oriented Copper Surface. Journal of Physical Chemistry C, 2020, 124, 15995-16001.	3.1	14
126	Insight on passivity of high entropy alloys: Thermal stability and ion transport mechanisms in the passive oxide film on CoCrFeMnNi surfaces. Corrosion Science, 2021, 188, 109540.	6.6	14

#	Article	IF	CITATIONS
127	Partial disorder and LEED diagrams. Surface Science, 1983, 129, 312-326.	1.9	13
128	Nanoscale early oxidation mechanisms of model FeCrNi austenitic stainless steel surfaces at room temperature. Corrosion Science, 2021, 190, 109653.	6.6	13
129	Oxidation of a Zr-doped NiAl bondcoat thermochemically deposited on a nickel-based superalloy. Materials at High Temperatures, 2009, 26, 195-198.	1.0	12
130	Modifications and Growth Mechanisms of Ultrathin Aluminum Oxide Films on NiAl in Water. Journal of Physical Chemistry C, 2010, 114, 7132-7140.	3.1	12
131	Corrosion control: general discussion. Faraday Discussions, 2015, 180, 543-576.	3.2	12
132	Combined in situ microstructural study of the relationships between local grain boundary structure and passivation on microcrystalline copper. Electrochimica Acta, 2019, 305, 240-246.	5.2	12
133	Effects of water vapour on 2-mercaptobenzothiazole corrosion inhibitor films deposited on copper. Corrosion Science, 2021, 189, 109565.	6.6	12
134	Can We Enhance Passivity with a Surface Finish? Spectroscopic and Electrochemical Analysis on 316L Stainless Steel. Journal of the Electrochemical Society, 2022, 169, 011505.	2.9	12
135	Reconstruction of TiAl Intermetallic Surfaces: A Combined STM and DFT Study. Journal of Physical Chemistry C, 2011, 115, 3372-3377.	3.1	11
136	Molecular scale insights into interaction mechanisms between organic inhibitor film and copper. Npj Materials Degradation, 2021, 5, .	5.8	11
137	Local Effects of Organic Inhibitor Molecules on Passivation of Grain Boundaries Studied In Situ on Copper. Journal of the Electrochemical Society, 2021, 168, 061501.	2.9	11
138	Xâ€ray photoelectron spectroscopy study of the interaction of ultraâ€thin alumina films on NiAl alloys with NaCl solutions. Surface and Interface Analysis, 2010, 42, 581-587.	1.8	10
139	Interface control of atomic layer deposited oxide coatings by filtered cathodic arc deposited sublayers for improved corrosion protection. Materials Chemistry and Physics, 2014, 147, 895-907.	4.0	10
140	Binary iron-chromium oxide as negative electrode for lithium-ion micro-batteries – spectroscopic and microscopic characterization. Applied Surface Science, 2015, 353, 1170-1178.	6.1	10
141	STM imaging in air with atomic resolution of adsorbates on metal surfaces: $Pt(100)-c(2 \tilde{A}-2)s$. Surface Science, 1992, 262, L59-L64.	1.9	9
142	Preparation and characterization of an electronically conductive and chemically modified ultrafiltration type membrane. Journal of Membrane Science, 2001, 184, 165-173.	8.2	9
143	Structure and Morphology Modifications of Silver Surface in the Early Stages of Sulfide Growth in Alkaline Solution. Journal of Physical Chemistry C, 2012, 116, 7062-7072.	3.1	9
144	Novel nanostructuring of the O/Cu(110) surface by reaction to oxygen. Surface Science, 2012, 606, L26-L30.	1.9	9

9

#	Article	IF	Citations
145	Reactivity to sulphur of clean and pre-oxidised Cu(111) surfaces. Surface Science, 2006, 600, 3540-3543.	1.9	8
146	Structure, Passivation and Localized Corrosion of Metal Surfaces. Modern Aspects of Electrochemistry, 2009, , 1-58.	0.2	8
147	Sulphur segregation on free and oxidized NiAl(001). Surface and Interface Analysis, 2002, 34, 400-404.	1.8	7
148	Short-Time Oxidation of a NiAl(Zr) Bond Coat Thermochemically Deposited on a Nickel-Based Superalloy. Materials Science Forum, 0, 595-598, 95-100.	0.3	7
149	Corrosion scales and passive films: general discussion. Faraday Discussions, 2015, 180, 205-232.	3.2	7
150	Zn effect on STM imaging of brass surfaces. Surface Science, 2016, 644, 148-152.	1.9	7
151	In Situ EC-STM Study and DFT Modeling of the Adsorption of Glycerol on Cu(111) in NaOH Solution. Journal of Physical Chemistry C, 2019, 123, 22228-22238.	3.1	7
152	In situ scanning tunneling microscopy study of 2-mercaptobenzimidazole local inhibition effects on copper corrosion at grain boundary surface terminations. Electrochimica Acta, 2021, 378, 138150.	5.2	7
153	Atomic Scale Insight into Corrosion Inhibition: DFT Study of 2-Mercaptobenzimidazole on Locally De-Passivated Copper Surfaces. Journal of the Electrochemical Society, 2021, 168, 121507.	2.9	7
154	BCC and FCC forms of Eu epitaxially grown on Re surfaces. Journal of Crystal Growth, 1987, 84, 123-125.	1.5	6
155	Dual surface and bulk control by Nb of the penetration of environmental elements in TiAl intermetallic alloys. Acta Materialia, 2008, 56, 3963-3968.	7.9	6
156	Local Degradation Mechanisms by Tarnishing of Protected Silver Mirror Layers Studied by Combined Surface Analysis. Journal of Physical Chemistry B, 2018, 122, 578-586.	2.6	6
157	Partial disorder and LEED diagrams. Surface Science, 1983, 129, 301-311.	1.9	5
158	Effect of High Temperature Oxidation Process on Corrosion Resistance of Bright Annealed Ferritic Stainless Steel. Journal of the Electrochemical Society, 2017, 164, C869-C880.	2.9	5
159	Role of SiC substrate surface on local tarnishing of deposited silver mirror stacks. Applied Surface Science, 2018, 436, 1147-1156.	6.1	5
160	Surface Chemistry and Passivation of Metals and Alloys. , 2019, , 91-120.		5
161	STM and AFM Studies of Passive Films. Materials Science Forum, 1995, 185-188, 221-232.	0.3	4
162	Tuning self-organized O/Cu(110) nanostructures by co-adsorption of sulfur. Surface Science, 2015, 636, L1-L4.	1.9	3

#	Article	IF	CITATIONS
163	Size-dependent reactivity of self-organized nanostructured O/Cu(110) surfaces towardsÂH2S. Surface Science, 2017, 655, 49-54.	1.9	3
164	Advanced protection against environmental degradation of silver mirror stacks for space application. Journal of Materials Science and Technology, 2021, 64, 1-9.	10.7	3
165	STM, LEED and AES investigation of Mo enrichment on NiMo(110) single-crystal alloy surfaces. Surface Science, 1996, 352-354, 9-14.	1.9	2
166	RARE-EARTH CRYSTAL GROWTH FROM THE VAPOR: Eu/Re AND Eu/W. Journal De Physique Colloque, 1984, 45, C9-47-C9-52.	0.2	2
167	Use of Local Electrochemical Methods (SECM, EC-STM) and AFM to Differentiate Microstructural Effects (EBSD) on Very Pure Copper. Corrosion Science and Technology, 2017, 16, 1-7.	0.2	2
168	Theoretical investigation of the mechanisms for olefinic hydrogenation on platinum(110) and platinum(111) surfaces. The Journal of Physical Chemistry, 1990, 94, 8579-8588.	2.9	1
169	Corrosion at the Nanoscale. Nanostructure Science and Technology, 2009, , 377-406.	0.1	1
170	Solid/fluid interface: general discussion. Faraday Discussions, 2015, 180, 81-96.	3.2	1
171	Dynamics of 2D adislands formed by sulfur adsorption on an O/Cu(110) nanotemplate: an STM study. Surface Science, 2017, 655, 55-60.	1.9	1
172	In Situ XPS for Investigating the Effects of Adsorbed Organic Molecules on the Reactivity of Cu with Water. ECS Meeting Abstracts, 2021, MA2021-02, 584-584.	0.0	0
173	(Keynote) Passivity at High Resolution: Insight from the Surface Science Approach. ECS Meeting Abstracts, 2020, MA2020-02, 1258-1258.	0.0	0
174	(Invited) Surface Analytical Study of Adsorption Mechanisms of 2-Mercaptobenzothiazole and 2-Mercaptobenzimidazole Corrosion Inhibitors on Cu. ECS Meeting Abstracts, 2020, MA2020-02, 1287-1287.	0.0	0
175	STM Studies of Thin Anodic Oxide Layers. , 0, , 184-197.		O