Dongyang Li

List of Publications by Year
in descending order

245 papers	7,060 citations	66343 42 h-index	95266 68 g-index
247 all docs	247 docs citations	247 times ranked	4915 citing authors

#	Article	IF	Citations
1	Influence of surface morphology on corrosion and electronic behavior. Acta Materialia, 2006, 54, 445-452.	7.9	296
2	Mechanical and electrochemical behavior of nanocrystalline surface of 304 stainless steel. Electrochimica Acta, 2002, 47, 3939-3947.	5.2	276
3	Sulfur-Doped Highly Ordered TiO₂ Nanotubular Arrays with Visible Light Response. Journal of Physical Chemistry C, 2008, 112, 5405-5409.	3.1	192
4	Mechanical, electrochemical and tribological properties of nano-crystalline surface of 304 stainless steel. Wear, 2003, 255, 836-845.	3.1	182
5	Variations of work function and corrosion behaviors of deformed copper surfaces. Applied Surface Science, 2005, 240, 388-395.	6.1	174
6	Tribological, mechanical and electrochemical properties of nanocrystalline copper deposits produced by pulse electrodeposition. Nanotechnology, 2006, 17, 65-78.	2.6	152
7	A new type of wear-resistant material: pseudo-elastic TiNi alloy. Wear, 1998, 221, 116-123.	3.1	130
8	Modification of Archardâ€™s equation by taking account of elastic/pseudoelastic properties of materials. Wear, 2001, 251, 956-964.	3.1	125
9	On the correlation between surface roughness and work function in copper. Journal of Chemical Physics, 2005, 122, 064708.	3.0	125
10	Effects of titanium addition on microstructure and wear resistance of hypereutectic high chromium cast iron Feâ€“25wt.%Crâ€“4wt.%C. Wear, 2009, 267, 356-361.	3.1	124
11	Indentation behavior of pseudoelastic TiNi alloy. Scripta Materialia, 1999, 41, 691-696.	5.2	118
12	Generic relation between the electron work function and Young's modulus of metals. Applied Physics Letters, 2011, 99, .	3.3	91
13	Microstructure of high (45wt.%) chromium cast irons and their resistances to wear and corrosion. Wear, 2011, 271, 1426-1431.	3.1	91
14	Microstructure refinement of hypereutectic high Cr cast irons using hard carbide-forming elements for improved wear resistance. Wear, 2013, 301, 695-706.	3.1	91
15	Variations in microstructure of high chromium cast irons and resultant changes in resistance to wear, corrosion and corrosive wear. Wear, 2009, 267, 116-121.	3.1	89
16	Wear and corrosion wear of medium carbon steel and 304 stainless steel. Wear, 2006, 260, 116-122.	3.1	84
17	Computer simulation of solid particle erosion. Wear, 2003, 254, 203-210.	3.1	81
18	Improving the wear resistance of white cast iron using a new concept â€“ High-entropy microstructure. Wear, 2011, 271, 1623-1628.	3.1	71

#	Article	IF	Citations
19	Characterization of hot deformation behavior of an extruded Mgâ€"Znâ€"Mnâ€"Y alloy containing LPSO phase. Journal of Alloys and Compounds, 2015, 644, 814-823.	5.5	68
20	Towards Simplifying the Device Structure of Highâ€Performance Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2000863.	14.9	67
21	Effects of yttrium on microstructure, mechanical properties and high-temperature wear behavior of cast Stellite 6 alloy. Wear, 2003, 255, 535-544.	3.1	64
22	Electron work function: A parameter sensitive to the adhesion behavior of crystallographic surfaces. Applied Physics Letters, 2001, 79, 4337-4338.	3.3	63
23	Mechanical, electrochemical and tribological properties of nanocrystalline surface of brass produced by sandblasting and annealing. Surface and Coatings Technology, 2003, 167, 188-196.	4.8	62
24	Effects of aluminum content and strain rate on strain hardening behavior of cast magnesium alloys during compression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 594, 235-245.	5.6	62
25	The electronic origin of strengthening and ductilizing magnesium by solid solutes. Acta Materialia, 2015, 89, 225-233.	7.9	62
26	Antisolvent Engineering to Optimize Grain Crystallinity and Holeâ€Blocking Capability of Perovskite Films for Highâ€Performance Photovoltaics. Advanced Materials, 2021, 33, e2102816.	21.0	61
27	Experimental studies on tribological properties of pseudoelastic TiNi alloy with comparison to stainless steel 304. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 2773-2783.	2.2	59
28	Effects of the dissolved oxygen and slurry velocity on erosionâ€"corrosion of carbon steel in aqueous slurries with carbon dioxide and silica sand. Wear, 2013, 302, 1609-1614.	3.1	59
29	Tribological behavior of Stellite 21 modified with yttrium. Wear, 2004, 257, 1154-1166.	3.1	58
30	Effects of dislocation on electron work function of metal surface. Materials Science and Technology, 2002, 18, 1057-1060.	1.6	55
31	Effect of graphite content on the wear behavior of Al/2SiC/Gr hybrid nano-composites respectively in the ambient environment and an acidic solution. Tribology International, 2016, 103, 620-628.	5.9	55
32	Electron work functionâ€"a promising guiding parameter for material design. Scientific Reports, 2016, 6, 24366.	3.3	55
33	Experimental studies on relationships between the electron work function, adhesion, and friction for 3d transition metals. Journal of Applied Physics, 2004, 95, 7961-7965.	2.5	54
34	Surface nanocrystallization by sandblasting and annealing for improved mechanical and tribological properties. Nanotechnology, 2005, 16, 2963-2971.	2.6	53
35	Investigation of the role of oxide scale on Stellite 21 modified with yttrium in resisting wear at elevated temperatures. Wear, 2005, 259, 453-458.	3.1	51
36	Effects of Y2O3 addition on microstructure, mechanical properties, electrochemical behavior, and resistance to corrosive wear of aluminum. Tribology International, 2007, 40, 188-199.	5.9	51

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37	Effects of cathodic protection on corrosive wear of 304 stainless steel. Tribology Letters, 2005, 18, 405-410.	2.6	49
38	Z-Scheme Photocatalytic System Utilizing Separate Reaction Centers by Directional Movement of Electrons. Journal of Physical Chemistry C, 2011, 115, 8586-8593.	3.1	49
39	Dependence of the mechanical behavior of alloys on their electron work functionâ€"An alternative parameter for materials design. Applied Physics Letters, 2013, 103, .	3.3	49
40	Catalytic growth of diamond-like carbon on Fe3C-containing carburized layer through a single-step plasma-assisted carburizing process. Carbon, 2017, 122, 1-8.	10.3	49
41	Development of novel tribo composites with TiNi shape memory alloy matrix. Wear, 2003, 255, 617-628.	3.1	48
42	Computational investigation of microstructural effects on abrasive wear of composite materials. Wear, 2005, 259, 6-17.	3.1	46
43	Modification of carbidic austempered ductile iron with nano ceria for improved mechanical properties and abrasive wear resistance. Wear, 2013, 301, 116-121.	3.1	45
44	Interfacial valence electron localization and the corrosion resistance of Al-SiC nanocomposite. Scientific Reports, 2016, 5, 18154.	3.3	44
45	Computer simulation of solid-particle erosion of composite materials. Wear, 2003, 255, 78-84.	3.1	43
46	The correlation between the electron work function and yield strength of metals. Physica Status Solidi (B): Basic Research, 2012, 249, 1517-1520.	1.5	43
47	Electrodeposition of nanocrystalline zinc on steel for enhanced resistance to corrosive wear. Surface and Coatings Technology, 2016, 304, 567-573.	4.8	43
48	Electron work functions of ferrite and austenite phases in a duplex stainless steel and their adhesive forces with AFM silicon probe. Scientific Reports, 2016, 6, 20660.	3.3	42
49	Abrasive wear behavior of D2 tool steel with respect to load and sliding speed under dry sand/rubber wheel abrasion condition. Wear, 2000, 241, 79-85.	3.1	41
50	Nano-tribological behavior of high-entropy alloys CrMnFeCoNi and CrFeCoNi under different conditions: A molecular dynamics study. Wear, 2021, 476, 203583.	3.1	41
51	Effects of prior cold work on corrosion and corrosive wear of copper in HNO3 and NaCl solutions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 394, 266-276.	5.6	40
52	Effect of Ti on the wear behavior of AlCoCrFeNi high-entropy alloy during unidirectional and bi-directional sliding wear processes. Wear, 2021, 476, 203650.	3.1	38
53	Effect of Annealing Treatment on Mechanical Properties of Nanocrystalline Î±-iron: an Atomistic Study. Scientific Reports, 2015, 5, 8459.	3.3	37
54	First-principles analysis on the role of rare-earth doping in affecting nitrogen adsorption and diffusion at Fe surface towards clarified catalytic diffusion mechanism in nitriding. Acta Materialia, 2020, 196, 347-354.	7.9	37

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55	In situmeasurements of simultaneous electronic behavior of Cu and Al induced by mechanical deformation. Journal of Applied Physics, 2006, 99, 073502.	2.5	35
56	Mechanical properties and erosion resistance of ceria nano-particle-doped ultrafine WCâ€“12Co composite prepared by spark plasma sintering. Wear, 2013, 301, 406-414.	3.1	35
57	Variation in electron work function with temperature and its effect on the Youngâ€™s modulus of metals. Scripta Materialia, 2015, 99, 41-44.	5.2	35
58	Bifunctional Ultrathin PCBM Enables Passivated Trap States and Cascaded Energy Level toward Efficient Inverted Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 20103-20109.	8.0	35
59	Beneficial effects of yttrium on the mechanical failure and chemical stability of the passive film of 304 stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 315, 158-165.	5.6	34
60	Effect of surface geometrical configurations induced by microcracks on the electron work function. Acta Materialia, 2005, 53, 3871-3878.	7.9	34
61	Investigation of corrosionâ€“wear synergistic attack on nanocrystalline Cu deposits. Wear, 2007, 263, 363-370.	3.1	34
62	Improvement in the resistance of aluminum with yttria particles to sliding wear in air and in a corrosive medium. Wear, 2001, 251, 1250-1256.	3.1	33
63	Application of an electrochemical scratch technique to evaluate contributions of mechanical and electrochemical attacks to corrosive wear of materials. Wear, 2005, 259, 1490-1496.	3.1	33
64	Is porosity always detrimental to the wear resistance of materials?â€"A computational study on the effect of porosity on erosive wear of TiC/Cu composites. Wear, 2009, 267, 1153-1159.	3.1	33
65	Effect of induction remelting on the microstructure and properties of in situ TiN-reinforced NiCrBSi composite coatings. Surface and Coatings Technology, 2018, 340, 159-166.	4.8	33
66	A microscale dynamical model for wear simulation. Wear, 1999, 225-229, 380-386.	3.1	32
67	Effects of elastic and plastic deformations on the electron work function of metals during bending tests. Philosophical Magazine, 2004, 84, 3717-3727.	1.6	32
68	Understanding the corrosion behavior of isomorphous Cuâ€“Ni alloy from its electron work function. Materials Chemistry and Physics, 2016, 173, 238-245.	4.0	32
69	Fabrication, Geometry, and Mechanical Properties of Highly Ordered TiO₂ Nanotubular Arrays. Journal of Physical Chemistry C, 2009, 113, 7107-7113.	3.1	31
70	Effect of Ti addition on the sliding wear behavior of AlCrFeCoNi high-entropy alloy. Wear, 2020, 462-463, 203493.	3.1	31
71	Indentation behaviour and wear resistance of pseudoelastic Tiâ€“Ni alloy. Materials Science and Technology, 2000, 16, 328-332.	1.6	30
72	Improvement in the corrosion-erosion resistance of 304 stainless steel with alloyed yttrium. Journal of Materials Science, 2001, 36, 3479-3486.	3.7	30

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73	A computational study of frictional heating and energy conversion during sliding processes. Wear, 2005, 259, 1382-1391.	3.1	29
74	Beneficial effects of yttrium on the performance of Mgâ€"3%Al alloy during wear, corrosion and corrosive wear. Tribology International, 2013, 67, 154-163.	5.9	29
75	Corrosive wear resistance of Mgâ€"Alâ€"Zn alloys with alloyed yttrium. Wear, 2013, 302, 1624-1632.	3.1	29
76	The wear performance of yttrium-modified Stellite 712 at elevated temperatures. Tribology International, 2007, 40, 254-265.	5.9	28
77	Abnormal erosionâ€"slurry velocity relationship of high chromium cast iron with high carbon concentrations. Wear, 2011, 271, 1454-1461.	3.1	28
78	Performances of hybrid high-entropy high-Cr cast irons during sliding wear and air-jet solid-particle erosion. Wear, 2013, 301, 390-397.	3.1	28
79	Nanocrystallization effect on the surface electron work function of copper and its corrosion behaviour. Philosophical Magazine Letters, 2008, 88, 137-144.	1.2	27
80	Maximizing the benefit of aluminizing to AZ31 alloy by surface nanocrystallization for elevated resistance to wear and corrosive wear. Tribology International, 2017, 111, 211-219.	5.9	27
81	Wettability, electron work function and corrosion behavior of CoCrFeMnNi high entropy alloy films. Surface and Coatings Technology, 2020, 400, 126222.	4.8	27
82	Investigation of the Synergism of Wear and Corrosion Using an Electrochemical Scratch Technique. Tribology Letters, 2001, 11, 117-120.	2.6	26
83	Wear of hydrotransport lines in Athabasca oil sands. Wear, 2013, 301, 477-482.	3.1	26
84	A finite element model study on wear resistance of pseudoelastic TiNi alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 277, 169-175.	5.6	25
85	Synergistic effects of microstructure and abrasion condition on abrasive wear of compositesâ€"A modeling study. Wear, 2007, 263, 218-227.	3.1	25
86	Application of a simple surface nanocrystallization process to a Cuâ€"30Ni alloy for enhanced resistances to wear and corrosive wear. Wear, 2011, 271, 1224-1230.	3.1	25
87	Electron work function: a novel probe for toughness. Physical Chemistry Chemical Physics, 2016, 18, 4753-4759.	2.8	25
88	Microstructure and Mechanical Properties of Ultrasonic Spot Welded Mg/Al Alloy Dissimilar Joints. Metals, 2018, 8, 229.	2.3	25
89	EFFECT OF GRAIN SIZE ON THE ELECTRON WORK FUNCTION OF Cu AND Al. Surface Review and Letters, 2004, 11, 173-178.	1.1	24
90	Response of the electron work function to deformation and yielding behavior of copper under different stress states. Physica Status Solidi A, 2004, 201, 2005-2012.	1.7	24

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91	New wear-resistant material: Nano-TiN/TiC/TiNi composite. Journal of Materials Science, 2001, 36, 4695-4702.	3.7	23
92	Kelvin Probing Technique: A Promising Method for the Determination of the Yield Strain of a Solid under Different Types of Stress. Physica Status Solidi A, 2002, 191, 427-434.	1.7	23
93	Production of alloyed nanocrystalline surfaces by combined punching, sandblasting and recovery treatments. Scripta Materialia, 2008, 58, 1090-1093.	5.2	23
94	Formation of core (M7C3)-shell (M23C6) structured carbides in white cast irons: A thermo-kinetic analysis. Computational Materials Science, 2018, 154, 111-121.	3.0	23
95	Doping Free and Amorphous NiO_x Film via UV Irradiation for Efficient Inverted Perovskite Solar Cells. Advanced Science, 2022, 9, e2201543.	11.2	23
96	Effects of yttrium on corrosive erosion and dry sand erosion of FeAlCr(Y) diffusion coatings on 1030 steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 277, 18-24.	5.6	22
97	Surface nanocrystallization of Al-plated steel for application in the exhaust system of vehicles. Wear, 2009, 267, 345-349.	3.1	22
98	Nanocrystallization of aluminized surface of carbon steel for enhanced resistances to corrosion and corrosive wear. Electrochimica Acta, 2009, 55, 118-124.	5.2	22
99	A first-principles study on the mechanical and thermodynamic properties of (Nb_{1â^’x}Ti_x)C complex carbides based on virtual crystal approximation. RSC Advances, 2015, 5, 103686-103694.	3.6	22
100	Development of a novel lateral force-sensing microindentation technique for determination of interfacial bond strength. Acta Materialia, 2004, 52, 2037-2046.	7.9	21
101	Spherical indentation for determining the phase transition properties of shape memory alloys. Journal of Materials Research, 2009, 24, 1082-1086.	2.6	20
102	Defect generation in nano-twinned, nano-grained and single crystal Cu systems caused by wear: A molecular dynamics study. Scripta Materialia, 2010, 63, 1116-1119.	5.2	20
103	Surface Nanocrystallization for Bacterial Control. Langmuir, 2010, 26, 10930-10934.	3.5	20
104	Electron work function â€“ a probe for interfacial diagnosis. Scientific Reports, 2017, 7, 9673.	3.3	20
105	Title is missing!. Journal of Materials Science, 1997, 32, 5513-5523.	3.7	19
106	Dynamical simulation of an abrasive wear process. Journal of Computer-Aided Materials Design, 1999, 6, 185-193.	0.7	19
107	Variations in wear loss with respect to load and sliding speed under dry sand/rubber-wheel abrasion condition: a modeling study. Wear, 2001, 250, 59-65.	3.1	19
108	Surface nanocrystallization of stainless steel for reduced biofilm adherence. Nanotechnology, 2008, 19, 335101.	2.6	19

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109	Correlation between the electron work function of metals and their bulk moduli, thermal expansion and heat capacity via the Lennard-Jones potential. Physica Status Solidi (B): Basic Research, 2014, 251, 815-820.	1.5	19
110	Beneficial Effects of the Coreâ€“Shell Structure of Primary Carbides in High-Cr (45Âwt%) White Cast Irons on Their Mechanical Behavior and Wear Resistance. Tribology Letters, 2015, 58, 1.	2.6	19
111	Mechanical characteristics of FeAl2O4 and AlFe2O4 spinel phases in coatings â€“ A study combining experimental evaluation and first-principles calculations. Ceramics International, 2017, 43, 16094-16100.	4.8	19
112	Tailoring M7C3 carbide via electron work function-guided modification. Scripta Materialia, 2021, 190, 168-173.	5.2	19
113	Erosion behavior of aluminide coating modified with yttrium addition under different erosion conditions. Surface and Coatings Technology, 2000, 126, 102-109.	4.8	18
114	Application of a novel lateral force-sensing microindentation method for evaluation of the bond strength of thermal sprayed coatings. Surface and Coatings Technology, 2005, 197, 137-141.	4.8	18
115	Electron work function, adhesion, and friction between 3d transition metals under light loads. Wear, 2005, 259, 1432-1436.	3.1	18
116	Effects of the strain rate of prior deformation on the wearâ€“corrosion synergy of carbon steel. Wear, 2007, 263, 801-807.	3.1	18
117	Effects of Strain Rate of Prior Deformation on Corrosion and Corrosive Wear of AISI 1045 Steel in a 3.5ÂPct NaCl Solution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 1032-1040.	2.2	18
118	Simulation of corrosion-erosion of passive metals using a micro-scale dynamical model. Wear, 2011, 271, 1404-1410.	3.1	18
119	Corrosion and corrosive wear behavior of WCâ€“MgO composites with and without grain-growth inhibitors. Journal of Alloys and Compounds, 2014, 615, 146-155.	5.5	18
120	Can the H/E ratio be generalized as an index for the wear resistance of materials?. Materials Chemistry and Physics, 2022, 275, 125245.	4.0	18
121	Microstructure, mechanical properties, corrosion and wear behavior of high-entropy alloy AlCoCrFeNix ($$x > 0$$the) and medium-entropy alloy ($$x = 0$$). Journal of Materials Science, 2022, 57, 11949-11968.	3.7	18
122	Computer simulation of erosionâ€“corrosion of a non-passive alloy using a micro-scale dynamic model. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 369, 284-293.	5.6	17
123	Understanding effects of Cr content on the slurry erosion behavior of high-Cr cast irons through local property mapping and computational analysis. Wear, 2017, 376-377, 587-594.	3.1	17
124	Electron work function: an indicative parameter towards a novel material design methodology. Scientific Reports, 2021, 11, 11565.	3.3	17
125	Improvement in erosion-corrosion resistance of high-chromium cast irons by trace boron. Wear, 2017, 376-377, 578-586.	3.1	17
126	Effects of yttrium on sliding wear of 304 stainless steel in dilute sulphuric acid and air. Materials Science and Technology, 1999, 15, 1441-1444.	1.6	16

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127	Effects of TiN nano-particles on porosity and wear behavior of TiC/TiNi tribo composite. Journal of Materials Science Letters, 2001, 20, 2249-2252.	0.5	16
128	Effects of yttrium on mechanical properties and chemical stability of passive film of aluminide coating on 1045 steel. Surface and Coatings Technology, 2002, 160, 20-28.	4.8	16
129	Failure Behavior of Plasma-Sprayed Yttria-Stabilized Zirconia Thermal Barrier Coatings Under Three-Point Bending Test via Acoustic Emission Technique. Journal of Thermal Spray Technology, 2017, 26, 116-131.	3.1	16
130	A Novel Biometallic Interface: High Affinity Tip-AssociatedBinding by Pilin-Derived Protein Nanotubes. Journal of Bionanoscience, 2007, 1, 73-83.	0.4	16
131	Benefits of passive element Ti to the resistance of AlCrFeCoNi high-entropy alloy to corrosion and corrosive wear. Wear, 2022, 492-493, 204231.	3.1	16
132	Bridging the Interfacial Contact for Improved Stability and Efficiency of Inverted Perovskite Solar Cells. Small, 2022, 18, e2201694.	10.0	16
133	Protective effect of yttrium additive in lubricants on corrosive wear. Wear, 1999, 225-229, 968-974.	3.1	15
134	Effects of cerium on dry sand erosion and corrosive erosion of aluminide coating on 1030 steel. Journal of Materials Science Letters, 2000, 19, 429-432.	0.5	15
135	Beneficial effects of yttrium on mechanical properties and high-temperature wear behavior of surface aluminized 1045 steel. Wear, 2003, 255, 933-942.	3.1	15
136	A study on the kinetic response of the electron work function to wear. Wear, 2003, 255, 333-340.	3.1	15
137	The effect of wear and corrosion on internal crystalline texture of carbon steel and stainless steel. Wear, 2005, 259, 400-404.	3.1	15
138	Electron work function at grain boundary and the corrosion behavior of nanocrystalline metallic materials. Materials Research Society Symposia Proceedings, 2005, 887, 1.	0.1	15
139	A simple technique of nanocrystallizing metallic surfaces for enhanced resistances to mechanical and electrochemical attacks. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2875-2880.	5.6	15
140	Can severe plastic deformation alone generate a nanocrystalline structure?. Philosophical Magazine Letters, 2010, 90, 349-360.	1.2	15
141	The relationship between the electron work function and friction behavior of passive alloys under different conditions. Applied Surface Science, 2015, 351, 316-319.	6.1	15
142	An electron work function based mechanism for solid solution hardening. Journal of Alloys and Compounds, 2018, 737, 323-329.	5.5	15
143	Effect of recovery treatment on the wear resistance of surface hammered AZ31 Mg alloy. Wear, 2019, 426-427, 981-988.	3.1	15
144	Contribution of cold-work to the wear resistance of materials and its limitation â€" A study combining molecular dynamics modeling and experimental investigation. Wear, 2021, 476, 203642.	3.1	15

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145	Characterization of interfacial bonding using a scanning Kelvin probe. Journal of Applied Physics, 2005, 97, 014909.	2.5	14
146	Bauschinger effect in wear of Cuâ€"40Zn alloy and its variations with the wear condition. Wear, 2011, 271, 1237-1243.	3.1	14
147	Understanding the bond-energy, hardness, and adhesive force from the phase diagram via the electron work function. Journal of Applied Physics, 2014, 116, .	2.5	14
148	Understanding the low corrosion potential and high corrosion resistance of nano-zinc electrodeposit based on electron work function and interfacial potential difference. RSC Advances, 2016, 6, 97606-97612.	3.6	14
149	Instrumented indentation study of bainite/martensite duplex microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 713, 1-6.	5.6	14
150	Influence of UV light irradiation on the corrosion behavior of electrodeposited Ni and Cu nanocrystalline foils. Scientific Reports, 2020, 10, 3049.	3.3	14
151	Beneficial effect of oxygen-active elements on the resistance of aluminide coatings to corrosive erosion and dry erosion. Surface and Coatings Technology, 2000, 130, 57-63.	4.8	13
152	Effect of alloying yttrium on corrosionâ€"erosion behavior of 27Cr cast white iron in different corrosive slurries. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 325, 87-97.	5.6	13
153	Corrosion and corrosive wear of annealed, impact-fractured and slow bending-fractured surface layers of AISI 1045 steel in a 3.5% NaCl solution. Wear, 2005, 259, 383-390.	3.1	13
154	A New Phenomenon Observed in Determining the Wear-Corrosion Synergy During a Corrosive Sliding Wear Test. Tribology Letters, 2008, 29, 45-52.	2.6	13
155	In situ investigation of local corrosion at interphase boundary under an electrochemical-atomic force microscope. Journal of Solid State Electrochemistry, 2015, 19, 337-344.	2.5	13
156	Carbon adsorption on doped cementite surfaces for effective catalytic growth of diamond-like carbon: a first-principles study. Physical Chemistry Chemical Physics, 2017, 19, 32341-32348.	2.8	13
157	Understanding the Effect of Plastic Deformation on Elastic Modulus of Metals Based on a Percolation Model with Electron Work Function. Jom, 2018, 70, 1130-1135.	1.9	13
158	Selective variant growth of coherent precipitate under external constraints. Journal of Phase Equilibria and Diffusion, 1998, 19, 523-528.	0.3	12
159	Mechanical and tribological properties of aluminide coating modified with yttrium. Surface and Coatings Technology, 2002, 161, 210-217.	4.8	12
160	A simple method for determination of the electron work function of different crystallographic faces of copper. Physica Status Solidi A, 2003, 196, 390-395.	1.7	12
161	A closer look at the local responses of twin and grain boundaries in Cu to stress at the nanoscale with possible transition from the Pâ€"H to the inverse Pâ€"H relation. Acta Materialia, 2010, 58, 2677-2684.	7.9	12
162	Baushingerâ€™s Effect in Wear of Materials. Tribology Letters, 2011, 41, 569-572.	2.6	12

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163	Molecular dynamics simulation of Bauschingerâ€™s effect in deformed copper single crystal in different strain ranges. Journal of Applied Physics, 2011, 110, 124911.	2.5	12
164	Influence of Nanotwin Boundary on the Bauschingerâ€™s Effect in Cu: A Molecular Dynamics Simulation Study. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4207-4217.	2.2	12
165	Effect of particle size on the surface activity of TiCâ€“Ni composite coating via the interfacial valence electron localization. RSC Advances, 2016, 6, 18793-18799.	3.6	12
166	Effect of UV light illumination on the corrosion behavior of electrodeposited TiO2-Ni composite foils. Applied Surface Science, 2018, 462, 291-302.	6.1	12
167	Prediction of elastic-contact friction of transition metals under light loads based on their electron work functions. Journal Physics D: Applied Physics, 2007, 40, 5980-5983.	2.8	11
168	The mechanisms of interfacial failure for lateral force-sensing microindentation test: finite element analysis. Acta Materialia, 2008, 56, 6197-6204.	7.9	11
169	The role of minor yttrium in tailoring the failure resistance of surface oxide film formed on Mg alloys. Thin Solid Films, 2016, 615, 29-37.	1.8	11
170	Improve the performance of Cr-free passivation film through nanoelectrodeposition for replacement of toxic Cr 6+ passivation in electrogalvanizing process. Surface and Coatings Technology, 2017, 324, 146-152.	4.8	11
171	Tribological properties of AZ31 alloy pre-deformed at low and high strain rates via the work function. Wear, 2018, 414-415, 126-135.	3.1	11
172	Effect of trace Ni on the resistance of high-Cr cast iron to slurry erosion. Wear, 2019, 426-427, 605-611.	3.1	11
173	Title is missing!. Journal of Materials Science, 2000, 35, 633-641.	3.7	10
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