

序号	论文名称	期刊名称	卷、期、页	作者
1.	Role of welding residual strain and ductility dip cracking on corrosion fatigue behavior of Alloy 52/52M dissimilar metal weld in borated and lithiated high-temperature water	Journal of Materials Science & Technology	42 (2020) 163-174	Gao J, Tan JB, Jiao M, Wu XQ, Tang LC, Huang YF
2.	Effects of 405 stainless steel on crevice corrosion behavior of Alloy 690 in high-temperature pure water	Journal of Materials Science & Technology	47 (2020) 76-87	Ning FQ, Tan JB, Wu XQ
3.	On the localised corrosion of carbon steel induced by the in-situ local damage of porous corrosion products	Journal of Materials Science & Technology	54 (2020) 95-104	L. Pang, Z.B. Wang, Y.G. Zheng, X.M. Lai, X. Han
4.	Inhibition of galvanic corrosion in Al/Cu coupling model by synergistic combination of 3-Amino-1,2,4-triazole-5-thiol and Cerium Chloride	Journal of Materials Science & Technology	44 (2020) 102-115	Udoh I I, Shi H W, Soleymanibrojeni M, Liu F C, Han E H
5.	Multi-stimuli-triggered and self-repairable fluorocarbon organic coatings with urea-formaldehyde microcapsules filled with fluorosilane	Journal of Materials Science & Technology	45 (2020) 70-83	Paul C. Uzoma, Fuchun Liu, En-Hou Han
6.	Influence of the lithium content on the negative difference effect of Mg-Li alloys	Journal of Materials Science & Technology	57 (2020) 138-145	C.Q. Li, D.K. Xu, Z.R. Zhang, E.H. Han
7.	Anisotropic corrosion behavior of hot-rolled Mg-8 wt.%Li alloy	Journal of Materials Science & Technology	53 (2020) 102-111	Baojie Wang, Kai Xu, Daokui Xu, Xiang Cai, Yanxin Qiao, Liyuan Sheng
8.	Retarding the precipitation of η phase in Fe-Ni based alloy through grain boundary engineering	Journal of Materials Science & Technology	47 (2020) 152-161	H. L. Hu, M. J. Zhao, L. J. Rong
9.	δ -ferrite transformation mechanism and its effect on mechanical properties of 316H weld metal	Journal of Materials Science & Technology	57 (2020) 33-42	L.L. Zhao, S.T. Wei, D. Wu, D.B. Gao, S.P. Lu
10.	Modeling motion and growth of multiple dendrites during solidification based on vector-valued phase field and two-phase flow models	Journal of Materials Science & Technology	58 (2020) 171-187	Jiankun Ren, Yun Chen, Yanfei Cao, Mingyue Sun, Bin Xu, Dianzhong Li
11.	Microstructure evolutions and interfacial bonding behavior of Ni-based superalloys during solid state plastic deformation bonding	Journal of Materials Science & Technology	46 (2020) 1-11	Jian Yang Zhang, Bin Xu, Naeemul Haq Tariqd, Ming Yue Sun, Dian Zhong Li, Yi Yi Li
12.	Dynamic recrystallization behavior and interfacial bonding mechanism of 14Cr ferrite steel during hot deformation bonding	Journal of Materials Science & Technology	43 (2020) 92-103	Liyang Zhou, Wenxiong Chen, Shaobo Feng, Mingyue Sun, Bin Xu, Dianzhong Li

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13.	Understanding crystallographic orientation dependent dissolution rates of 90Cu-10Ni alloy: New insights based on AFM/SKPFM measurements and coordination number/electronic structure calculations	Corrosion Science	164 (2020) 108320	Ma A L, Zhang L J, Engelberg D, Hu Q M, Guan S K, Zheng Y G
14.	Significantly enhanced resistance to SRB-influenced corrosion via designing a Fe-based amorphous coating with high dose corrosion-resistant and antibacterial elements	Corrosion Science	164 (2020) 108305	Zhang L M, Yan M C, Zhang S D, Zhu L Y, Umoh A J, Ma A L, Zheng Y G, Wang J Q
15.	A new method to obtain the repassivation time of passive materials based on the single particle impingement	Corrosion Science	170 (2020) 108717	Z.B. Wang, C. Sun, L.L. Li, M. Roostaei, V. Fattahpour, M. Mahmoudi, H.B. Zeng, Y.G. Zheng, J.-L. Luo
16.	Corrosion of phase and phase boundary in proton-irradiated 308L stainless steel weld metal in simulated PWR primary water	Corrosion Science	165 (2020) 108401	Xiaodong Lin, Qunjia Peng, Jinna Mei, En-Hou Han, Wei Ke, Lijie Qiao, Zhijie Jiao
17.	Effect of post-irradiation annealing on microstructure and corrosion of proton-irradiated 308L stainless steel weld metal	Corrosion Science	175 (2020) 108887	Xiaodong Lin, En-Hou Han, Qunjia Peng, Wei Ke, Zhijie Jiao
18.	Silicon enhances high temperature oxidation resistance of SIMP steel at 700 °C	Corrosion Science	167 (2020) 108519	Zhang L L, Yan W, Shi Q Q, Li Y F, Shan Y Y, Yang K
19.	On the critical flow velocity for erosion-corrosion of Ni-based alloys in a saline-sand solution	Wear	458-459 (2020) 203417	J.Z. Yi, H.X. Hu, Z.B. Wang, Y.G. Zheng
20.	In-situ growth of graphene on 90Cu10Ni by electron beam irradiation during EBSD and its anti-corrosion property	Surface & Coatings Technology	398 (2020) 126076	Yi X N, Ma A L, Zhang L M, Zheng Y G
21.	Mechanical and corrosion properties in 3.5% NaCl solution of cold sprayed Al-based coatings	Surface & Coatings Technology	385 (2020) 125372	Zhichao Zhang, Fuchun Liu, En-Hou Han, Long Xu
22.	Effect of grain boundary character distribution on hydrogen embrittlement in Fe-Ni based alloy	Materials Science & Engineering A	780 (2020) 139201	H. L. Hu, M. J. Zhao, L. J. Rong
23.	Influence of Mn on the negative natural aging effect in 6082 Al alloy	Materials Science & Engineering A	793 (2020) 139874	Cui Z J, Jiang H C, Zhang D, Song Y Y, Yan D S, Rong L J

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24.	Tensile deformation damage behavior of a high deformability pipeline steel with a ferrite and bainite microstructure	Materials Science & Engineering A	793 (2020) 139889	Tu X Y, Shi X B, Shan Y Y, Yan W, Shi Q Q, Li Y F, Li C S, Yang K
25.	Fretting wear between Alloy 690 and 405 stainless steel in high temperature pressurized water with different normal force and displacement	Journal of Nuclear Materials	529 (2020) 151930	Hongliang Ming, Xingchen Liu, Jiang Lai, Jianqiu Wang, Lixia Gao, En-Hou Han
26.	Environmentally assisted fatigue behavior of 308L weld metal in borated and lithiated high-temperature water	Journal of Nuclear Materials	539 (2020) 152365	Gao J, Zhang ZY, Tan JB, Wu XQ, Han EH, Ke W
27.	Corrosion fatigue model of austenitic stainless steels used in pressurized water reactor nuclear power plant	Journal of Nuclear Materials	541 (2020) 152407	Tan JB, Zhang ZY, Zheng H, Wang X, Gao J, Wu XQ, Han EH, Yang SL, Huang PT
28.	Effect of Ni interlayer on cavitation erosion resistance of NiTi cladding by tungsten inert gas (TIG) surfacing process	Acta Metallurgica Sinica (English Letters)	33 (2020) 415-424	Z.P. Shi, Z.B. Wang, J.Q. Wang, Y.X. Qiao, H.N. Chen, T.Y. Xiong, Y.G. Zheng
29.	Can the prior cathodic polarisation treatment remove the air-formed surface film and is it necessary for the potentiodynamic polarisation test?	Acta Metallurgica Sinica (English Letters)	33 (2020) 839-845	Z.R. Ye, Z.C. Qiu, Z.B. Wang, Y.G. Zheng, R. Yi, X. Zhou
30.	Ultra-thin laminated metal composites with ultra-high strength and excellent soft magnetic properties	Acta Metallurgica Sinica (English letters)	33 (2020) 385-390	Le Zhang, Wei Wang, Xiaofei Xiao, M. Babar Shahzad, Yiyin Shan, Ke Yang
31.	Effect of Cr content on microstructure and properties of Mo _{0.5} VNbTiCr _x high-entropy alloys	Journal of Alloys and Compounds	818 (2020) 153352	C. Xiang, H.M. Fu, Z.M. Zhang, E.-H. Han, H.F. Zhang, J.Q. Wang, G.D. Hu
32.	Characterization of oxide dispersoids and mechanical properties of 14Cr-ODS FeCrAl alloys	Journal of Alloys and Compounds	814 (2020) 152282	Wu S J, Li J, Li W H, Liu S
33.	Impacts of aging treatments on the microstructural evolutions, mechanical properties and strengthening mechanism in 1Cr15Ni36W3Ti	Journal of Alloys and Compounds	847 (2020) 156510	Li H Z, Zhang W N, Li M, Gao M, Ma Y C, Liu K

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34.	Variations of galvanic currents and corrosion forms of 2024/Q235/304 tri-metallic couple with multivariable cathode/anode area ratios: Experiments and modeling	Electrochimica Acta	359 (2020) 136947	Linjun Shi , Yingwei Song, Pingping Zhao, Haitao Wang, Kaihui Dong, Dayong Shan, En-Hou Han
35.	Water in confinement of epoxy layer and hydroxylated (001) γ -alumina: An atomistic simulation view	Journal of Molecular Liquids	307 (2020) 112976	Soleymanibrojeni M, Shi H W, Liu F C, Han E H
36.	Microstructural evolution and mechanical properties of ultrafine-grained ferritic-martensitic steel during thermal aging	Metallurgical and Materials Transactions A	51 (2020) 5154-5168	Shenghu Chen, Xiaojie Jin, Lijian Rong
37.	δ -Ferrite formation and its effect on the mechanical Properties of heavy-section AISI 316 stainless steel casting	Metallurgical and Materials Transactions A	51 (2020) 2998-3008	Qiyu Wang, Shenghu Chen, Lijian Rong
38.	Formation Mechanism of Microstructural Non-uniformity in the Hot Working of Commercial-scale Electro-slag Remelted Alloy 690 Ingots	Metallurgical and Materials Transactions A	49 (2020) 3996-4007	Wang M, Yi H Y, Zhao X, Zhang L, Ma Y C, Liu K
39.	Multistep evolution of β_0 phase during isothermal annealing of Ti-42Al-5Mn alloy: Formation of Laves phase	Intermetallics	126 (2020) 106932	Tang H J, Li X B, Ma Y C, Chen B, Xing W W, Zhao P X, Shu L, Zhang M S, Liu K
40.	First-principles study of hydrogen trapping behavior in face centered cubic metals (M=Ni, Cu and Al) with monovacancy	International Journal of Hydrogen Energy	45 (2020) 25555-25566	Xing W W, Chen X Q, Li X B, Ma Y C, Chen B, Liu K
41.	Characteristics and transformation of primary carbides during austenitization in Cr4Mo4V bearing steel	Materials Characterization	169 (2020) 110636	Weifeng Liu, Yanfei Cao, Yifeng Guo, Bin Xu, Mingyue Sun, Dianzhong Li
42.	Evolution of interfacial characteristics and mechanical properties for 316LN stainless steel joints manufactured by hot-compression bonding	Journal of Materials Processing Technology	283 (2020) 116733	Bijun Xie, Mingyue Sun, Bin Xu, Chunyang Wang, Jianyang Zhang, Longzhe Zhao, Dianzhong Li, Yiyi Li
43.	In-situ monitoring of pitting corrosion of Q235 carbon steel by electrochemical noise: wavelet and recurrence quantification analysis	Journal of Electroanalytical Chemistry	879 (2020) 114776	Zhang Z, Li XF, Zhao ZY, Bai PK, Liu B, Tan JB, Wu XQ

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44.	Cavitation erosion and corrosion behavior of NiTi cladding with Cu and Nb interlayers	Journal of Materials Engineering and Performance	29 (2020) 3840-3851	Z.P. Shi, Z.B. Wang, F.G. Chen, Y.X. Qiao, L.M. Zhang, T.Y. Xiong, Y.G. Zheng
45.	Atomistic simulations of Epoxy/Water/Aluminum systems using the ReaxFF method	Computational Materials Science	173 (2020) 109424	Soleymanibrojeni M, Shi H W, Liu F C, Han E H
46.	Microcontainer-based waterborne epoxy coatings for AA2024-T3: Effect of nature and number of polyelectrolyte multilayers on active protection performance	Materials Chemistry and Physics	241 (2020) 122404	Udoh I I, Shi H W, Liu F C, Han E H
47.	Comparative study on the adsorption behaviors of O and Cl on Fe(110) surfaces with different Cr content	Materials Today Communications	24 (2020) 101122	X.R. Yin, H.T. Wang, S. Sun E.-H. Han
48.	Improved High-Temperature Oxidation Properties for Mn-Containing Beta-Gamma TiAl with W Addition	Oxidation of Metals	93 (2020) 433-448	Zhao P X, Li X B, Tang H J, Ma Y C, Chen B, Xing W W, Liu K, Yu J
49.	Effect of Heat Treatments on Microstructural Evolution and Tensile Properties of 15Cr12MoVWN Ferritic/Martensitic Steel	Metals	10 (2020) 1271	Ma T W, Hao X C, Wang P
50.	A novel laminated metal composite with superior interfacial bonding composed of ultrahigh strength maraging steel and 316L stainless steel	Journal of Iron and Steel Research International	27(4) (2020) 433-439	Le Zhang, Wei Wang, Xiaofei Xiao, M. Babar Shahzad, Yiyin Shan, Ke Yang
51.	Design and preliminary characterization of a novel carbide-free 9Cr-ODS martensitic steel	Fusion Engineering and Design	160(6) (2020) 111824	Wang G Q, Li Y F, Zhang J R, Bao F Y, Yan W, Shi Q Q, Shi X B, Shan Y Y, Yang K
52.	Microstructure evolution and mechanical properties of 316H weld metal during aging	Materials Science and Technology	36(7) (2020) 793-804	S.T. Wei, L.L. Zhao, D.B. Gao, S.P. Lu
53.	Impact Toughness Anisotropy of TA31 Titanium Alloy Cylindrical Shell after Ring Rolling	Materials	13 (2020) 4332	Haiyang Jiang, Jianyang Zhang, Bijun Xie, Zhangxun He, Hao Zhang, Bing Wang, Bin Xu, Yuxi Wu, Mingyue Sun
54.	The role of carbon steel corrosion process on CaCO ₃ scaling in deoxidized oilfield injection water	Chemistryselect	5 (2020) 1-7	L. Pang, Y.G. Zheng, M. Chang, Z.B. Wang

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55.	Effects of laser scanning speed on microstructure, microhardness, and corrosion behavior of laser cladding Ni ₄₅ coatings	Journal of Chemistry	(2020) 1438473	Y.X. Qiao, J. Huang, D. Huang, J. Chen, W. Liu, Z.B. Wang, Z.B. Zheng
56.	The Effects of Sand Particles on the Synergy of Cavitation Erosion-Corrosion of MIG Welding Stainless Steel Coating in Saline	Scanning	(2020) 8876406	Pan H D, Tao J, E M, Hu H X, Wang Z B
57.	Adsorption and dissociation of water on halogen pre-adsorbed Ni(111) and Ni-Cr(111) surfaces: A DFT study	Solid State Communications	321 (2020) 114040	X.R. Yin, X.F. Sun, H.T. Wang, E.-H. Han
58.	Effects of solvation and applied potential on the adsorption behaviors of H, O, OH and H ₂ O on Fe(110) surface	Surface Science	691 (2020) 121504	X.R. Yin, H.T. Wang, E.-H. Han
59.	Atomistic insights into interfacial reactions of FeCr ₂ O ₄ oxide film in high temperature water	International Journal of Electrochemical Science	15 (2020) 8662-8673	H.T. Wang, J.W. Ding, R.F. Zhang, E.-H. Han
60.	A Simple Method for Measuring Plastic Properties of Power Hardening Metals via the Indentation Curve with a Large Depth	Advances in Materials Science and Engineering	4 (2020) 7372807	Ying Kan, Yiwen Wu, Liping Ren, Huaining Chen
61.	Study on microbiologically influenced corrosion resistance of stainless steels with weld seams	Frontiers in Materials	7(5) (2020) 1-11	Shi X B, Yang K, Yan M C, Yan W, Shan Y Y
62.	Corrosion-Resistant Cross-Linked Cyanate Ester Coatings Doped by Graphene Oxide for Use in High-Temperature Marine Environments	ACS Applied Nano Materials	3 (2020) 12008-12016	Junwei Chang, Zhenyu Wang, En-Hou Han, Qian Liu, Shuai Wang
63.	690 合金在模拟核电高温高压水中的电化学及原位划伤行为研究	金属学报	56 (2020) 1474	邴晓慧, 王俭秋, 韩恩厚, 郭延军, 郑会, 杨双亮
64.	不锈钢堆焊层稀释率对核电接管安全端试环焊接接头组织和力学性能的影响	金属学报	56 (2020) 1057-1066	张茂龙, 鲁艳红, 陈胜虎, 戎利建, 陆皓
65.	含 1.4%Cu 的 HSLA 钢的组织 and 力学性能	金属学报	56 (2020) 1343-1354	杜瑜宾, 胡小锋, 张守清, 宋元元, 姜海昌, 戎利建
66.	海洋平台用 Ni-Cr-Mo-B 超厚钢板的截面效应	金属学报	56 (2020) 1227-1238	张守清, 胡小锋, 杜瑜宾, 姜海昌, 庞辉勇, 戎利建

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67.	ODS 钢在 600 和 700 °C 静态 Pb-Bi 共晶中的腐蚀行为及机理	金属学报	56 (2020) 1366-1376	包飞洋, 李艳芬, 王光全, 张家榕, 严伟, 石全强, 单以银, 杨柯, 许斌, 宋丹戎, 严明宇, 魏学栋
68.	9-12%Cr 马氏体耐热钢中微量 B 元素的择优分布行为及其对微观组织与力学性能的影响	金属学报	56 (2020) 53-65	杨柯, 梁焯, 严伟, 单以银
69.	新型多层金属复合材料的制备与性能	金属学报	56 (2020) 351-360	张乐, 王威, M.Babar Shahzad, 单以银, 杨柯
70.	新型含铜管线钢—提高管线耐微生物腐蚀性能的新途径	金属学报	56 (2020) 385-399	杨柯, 史显波, 严伟, 曾云鹏, 单以银, 任毅
71.	我国压水堆用材料与异材焊接	材料科学与工艺	28(3) (2020) 1-8	李依依, 陆善平
72.	电化学噪声原位监测应力腐蚀开裂的研究现状与进展	中国腐蚀与防护学报	40(3) (2020) 223-229	张震, 吴欣强, 谭季波
73.	抗氢合金 J75 中低 Σ CSL 晶界的形成与演化	稀有金属材料与工程	49 (2020) 131-137	胡红磊, 赵明久, 戎利建
74.	高 Cr 镍基合金脱氮反应热力学与动力学研究	稀有金属材料与工程	49 (2020) 3803-3808	王旻, 张龙, 杨亚倩, 高明, 丁磊磊, 马颖澈, 刘奎
75.	Hf 元素对 ODS-FeCrAl 合金微观组织及性能的影响	原子能科学技术	54(4) (2020) 648-656	吴飒建, 李静, 刘实
76.	严酷环境下飞机典型结构异种材料电偶腐蚀特点与防护对策	装备环境工程	17(5) (2020) 52-55	史洪微, 崔常京, 韦涛, 陈群志, 刘福春, 韩恩厚
77.	异种铝合金电阻点焊接头全场残余应力研究	机械工程学报	56(6) (2020) 84-90	毛镇东, 阚盈, 姜云禄, 韩晓辉, 陈怀宁
78.	随焊加载冷源或位移控制载荷的无应力焊接方法	焊接学报	41(1) (2020) 91-96	管建军, 杨男, 钟宏远, 陈怀宁, 陈静, 石晓爱
79.	核用马氏体耐热钢焊接性研究	焊接技术	49(10) (2020) 8-11	魏世同, 陆善平

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80.	大锻件均质化构筑成形研究进展	科学通报	65(27) (2020) 3043-3058	孙明月, 徐斌, 谢碧君, 张健杨, 赵龙哲, 李殿中
81.	GW93 镁合金点蚀过程的原位监测及点蚀机制	中国材料进展	39(2) (2020) 85-91	宋影伟, 樊志民, 董凯辉, 单大 勇, 韩恩厚
82.	含 Bi 笔头用易切削不锈钢的微观组织及力学性能	材料热处理学报	41 (2020)93-97	宋元元, 吴宪吉, 孔凡亚, 戎利 建
83.	含不同易切削元素的笔头用易切削不锈钢微观组织的研究	中国制笔	157 (2020)4-7	宋元元, 孔凡亚, 李红军, 戎利 建