

焊接学报

第32卷 第5期 2011年5月25日出版

目 次

专题论文

钛合金激光焊接接头塑性损伤行为分析	张建勋, 宋旭, 董丽娜	(1)
一种峰值电流控制的全桥软开关弧焊逆变器	陈延明, 陈辉华, 张城, 等	(5)
Ti-Al-Si-Mg 对 SiC_p/Al 基复合材料等离子弧原位焊接焊缝组织和性能的影响	雷玉成, 胡文祥, 薛厚禄, 等	(9)
铝合金双脉冲 MIG 焊熔宽控制	黄健康, 石环, 卢立晖, 等	(13)
焊接工艺对压铸镁合金 CO_2 激光焊缝气孔率的影响	张婧, 单际国, 温鹏, 等	(17)
纯铁表面喷丸处理对镍扩散性能的影响	王越田, 盛光敏, 孙建春, 等	(21)
基于时频分析的奥氏体焊缝超声检测信号处理	王炳方, 韩赞东, 原可义, 等	(25)
铁/铝扩散偶界面反应层生长机理分析	吴铭方, 司乃潮, 王敬, 等	(29)
拘束控制铝合金焊接面外变形行为分析	肖晓明, 彭云, 张建勋, 等	(33)
基于数学建模的铝合金双脉冲 MIG 焊专家数据库设计	陈小峰, 林放, 魏仲华, 等	(37)
AZ31B 镁合金电阻点焊接头断裂形式分析	敖三三, 罗震, 步贤政, 等	(41)
钢轨窄间隙弧焊焊枪自动纠偏系统	刘正文, 郑军, 季关钰, 等	(45)
大功率光纤激光焊焊缝跟踪偏差测量新方法	高向东, 游德勇, Katayama Seiji	(49)
红外探测器焊点可靠性有限元分析	孟庆端, 吕衍秋, 鲁正雄, 等	(53)
$\text{SnCuNi}-x\text{Pr}$ 焊点组织和性能分析	罗家栋, 薛松柏, 曾广, 等	(57)
核电 SA508-3 钢焊接连续冷却转变曲线的分析	迟露鑫, 麻永林, 邢淑清, 等	(61)
微量银对 $\text{Sn}0.7\text{Cu}$ 铱料物理性能及钎焊工艺性能的影响	赵快乐, 闫焉服, 唐坤, 等	(65)
钟罩型电子束焊接接头的疲劳寿命分析	杨波, 杨新华, 付玮, 等	(69)
氩弧熔敷原位合成 TiC_p/Al 基复合涂层组织及性能分析	孟君威, 史晓萍, 王振廷, 等	(73)
一种结构焊接变形数值分析方法	陈章兰, 熊云峰	(77)
双电极焊条 TE4303 单弧焊接分析	李立英, 邹增大, 韩彬, 等	(81)
不锈钢车体非熔透激光搭接焊热源模型	史春元, 顾国晨, 王洪潇, 等	(85)
焊条性能神经网络非线性组合智能预测模型	黄俊, 徐越兰	(89)
Ti_3Al 激光焊接接头 EBSD 试样的制备	宋志华, 吴爱萍, 邹贵生, 等	(93)
1 000 MPa 级高强钢焊接热影响区组织和韧性	吴昌忠, 陈怀宁, 范闽宁, 等	(97)
自保护药芯焊丝工艺性评价	刘海云, 栗革新, 史耀武	(101)
08MnNiVR 大型储罐钢的自动埋弧焊接头性能	李建军, 刘光云, 杜则裕, 等	(105)
专题综述		
国际钎焊技术最新进展	熊华平, 李红, 毛唯, 等	(108)
英文摘要		(I)

[期刊基本参数] CN23-1178/TG * 1980 * m * A4 * 112 * zh * P * ¥15.00 * 5800 * 28 * 2011 - 05

责任编辑: 齐秀滨

TRANSACTIONS OF THE CHINA WELDING INSTITUTION

Vol. 32 No. 5 May 2011

CONTENTS

Analysis on plastic damage evolution of laser welded joint of titanium alloy	ZHANG Jianxun, SONG Xu, DONG Lina (1)
Full-bridge soft-switching arc welding inverter based on peak current control	CHEN Yanming, CHEN Huihua, ZHANG Cheng, et al (5)
Influence of Ti-Al-Si-Mg on microstructures and mechanical properties of plasma arc in-suit welded joint of SiC _p /Al MMCs	LEI Yucheng, HU Wenxiang, XUE Houli, et al (9)
Weld width control of double pulsed MIG welding for aluminum alloy	HUANG Jiankang, SHI Yu, LU Lihui, et al (13)
Effects of welding parameters on weld porosity during CO ₂ laser welding of die-cast magnesium alloys	ZHANG Jing, SHAN Jiguo, WEN Peng, et al (17)
Effect of high-energy shot peening on diffusion behavior of nickel in iron	WANG Yuetian, SHENG Guangmin, SUN Jianchun, et al (21)
Signal processing in ultrasonic test of austenitic welds based on time-frequency analysis	WANG Bingfang, HAN Zandong, YUAN Keyi, et al (25)
Analysis on growth mechanism on interfacial interlayer on Fe/Al couple	WU Mingfang, SI Naichao, WANG Jing, et al (29)
Investigation of out-of-plane welding distortion in aluminum alloy welding with external restraint	XIAO Xiaoming, PENG Yun, ZHANG Jianxun, et al (33)
Double-pulsed MIG expert database based on mathematical modeling	CHEN Xiaofeng, LIN Fang, WEI Zhonghua, et al (37)
Analysis on failure modes of AZ31B magnesium alloy joint of resistance spot welding	AO Sansan, LUO Zhen, BU Xianzheng, et al (41)
Automatic offset correction system of narrow gap arc welding torch for rail	LIU Zhengwen, ZHENG Jun, JI Guanyu, et al (45)
A new approach to measure deviation of seam tracking in high-power fiber laser welding	GAO Xiangdong, YOU Deyong, KATAYAMA Seiji (49)
Finite element analysis on reliability of indium soldered joint in infrared focal plane array detector	MENG Qingduan, LÜ Yanqiu, LU Zhengxiong, et al (53)
Microstructures and solderability of SnCuNi-xPr lead-free solder	LUO Jiadong, XUE Songbai, ZENG Guang, et al (57)
Analysis on continuous cooling transformation curves of simulated heat affected zone for SA508-3 steel in nuclear power	CHI Luxin, MA Yonglin, XING Shuqing, et al (61)
Effect of content of Ag on physical properties and solderability of Sn0.7Cu solder	ZHAO Kuaile, YAN Yanfu, TANG Kun, et al (65)
Analysis of fatigue life of electron beam welding seam with bell shape	YANG Bo, YANG Xinhua, FU Wei, et al (69)
Microstructure and properties of TiC _p /Al composite coating by argon arc cladding	MENG Junsheng, SHI Xiaoping, WANG Zhenzhang, et al (73)
Numerical analysis on deformation of welded construction	CHEN Zhanglan, XIONG Yunfeng (77)
Analysis on single arc welding with twin electrode of TE4303	LI Liying, ZOU Zengda, HAN Bin, et al (81)
Heat source model for partial penetration lap laser welding of stainless steel railway vehicles	SHI Chunyuan, GU Guochen, WANG Hongxiao, et al (85)
Nonlinear combination neural network model of intelligent prediction on electrode properties	HUANG Jun, XU Yuelan (89)
Metallographic sample preparation of Ti ₃ Al alloy laser welded joints for EBSD	SONG Zhihua, WU Aiping, ZOU Guisheng, et al (93)
Microstructure and toughness of HAZ in 1 000 MPa grade high strength steel joint	WU Changzhong, CHEN Huaining, FAN Minning, et al (97)
Evaluation on operational performance of self-shielded flux cored wire	LIU Haiyun, LI Zhuoxin, SHI Yaowu (101)
Properties of 08MnNiVR large storage tank steel joints by automatic submerged arc welding	LI Jianjun, LIU Guangyun, DU Zeyu, et al (105)
Reviews on latest advances in brazing and soldering technologies	XIONG Huaping, LI Hong, MAO Wei, et al (108)