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目 次

· 激光成形制造 ·

碳纤维增强复合材料与钛合金激光连接仿真(封面文章)	景若木,徐洁洁,肖荣诗,黄婷 0802101
变倾角激光熔覆成形层高和层宽模型研究	李天奕,石拓,李宽,张荣伟,李建宾,孙业旺,刘广 0802102
基于 355 nm 紫外激光切割柔性覆铜板的工艺参数优化	刘文鑫,陈志城,李岩,陈广玉,黄柳青,罗学涛 0802103
基于声波时频特性和深度学习的铝合金脉冲激光焊接熔透定量评估	罗钟毅,吴頔,王润,董金枋,杨方毅,张培磊,于治水 0802104
基于轻量化DeepLab v3+网络的焊缝结构光图像分割	陈兵,贺晟,刘坚,陈圣峰,路恩会 0802105
GH3230 高温合金绿光飞秒激光的刻蚀特性	黄彩丽,蒋麒,蔺晓超,杨诗瑞,郭鹏,崔梦雅,黄婷 0802106
万瓦级激光-电弧复合焊接焊缝成形特性分析	梁晓梅,杨义成,黄瑞生,田得喜,陈晓宇 0802107

· 激光表面加工 ·

激光参数对 Q235B 钢激光熔凝层耐蚀性的影响	余立冬,边填轩,屈云腾,张贝贝,白杨 0802201
ER9 车轮材料激光熔覆层微观组织及性能研究	杨文斌,李仕宇,肖乾,杨春辉,陈道云,廖晓咏 0802202
镍基高温合金光束耦合纳秒激光铣削表面成型质量研究	陈先游,陈晓晓,章玄华,张文武 0802203
45 钢基体激光熔覆 316L 粉末搭接过程中 Cr 元素分布机制研究	张亚周,葛鸿浩,金宸宇,陈智君,张群莉,姚建华 0802204
回字形扫描路径下高速激光熔覆数值模拟及实验研究	柴蓉霞,田妍,周新建,姜满远,路永锋,刘司宇 0802205
飞机蒙皮激光除漆对基材表面完整性的影响	杨文锋,常学东,胡月,李绍龙,曹宇,李庆 0802206
工艺参数对 20CrMnTi 基激光熔覆 Ni60A-TiC 涂层组织及耐磨性能的影响	任思学,李景彬,史亚盟,温宝琴,王贤斐,李利桥 0802207

激光工艺参数对钛合金表面着色稳定性的影响

..... 周凯,杨灿,杨焕,郑俊健,欧阳德钦,吴旭,李春波 0802208

· 激光增材制造 ·

不同工艺策略对机器人增减材复合制造 316L 不锈钢表面质量和力学性能影响的研究(封底文章)

..... 蔡子豪,朱勇强,韩昌骏,贺韶,何焯,邵志恒,Vyacheslav Trofimov,杨永强 0802301

曲面激光增材制造钛/铝异质材料起始及稳态沉积过程热行为研究

..... 俞皓捷,戴冬华,石新宇,历彦泽,石珂羽,顾冬冬 0802302

多激光粉床熔融成形 GH3536 合金搭接区域组织与性能特征研究

..... 谢寅,滕庆,沈沐宇,李继康,马瑞,白洁,魏青松 0802303

同步纳秒激光辅助电解加工 Ti-6Al-4V 钛合金实验研究

..... 桂豫杰,王玉峰,杨勇,张文武 0802304

激光沉积 Ti65 钛合金的显微组织与各向异性研究

..... 李晓丹,倪家强,殷俊,焦清洋,关峰,刘伟建,杨光,何波 0802305

复合热源钛合金熔丝高质量增材制造工艺研究

..... 冯启高,王琳鑫,王磊,马利杰,汤永凯,李波波 0802306

激光粉末床熔融 TiC 颗粒增强 Inconel 718 复合材料的成形质量及力学性能研究

..... 李惠,张建勳,卢秉恒 0802307

· 激光微纳制造 ·

飞秒激光制备非线性光子晶体研究进展

..... 黎隆富,张乐然,徐力群,李欣,廖常锐,王义平,吴东 0802401

金刚石减反射微纳结构制备技术研究进展

..... 张伟丽,史肖阳,洪瑞金,陈兴凤,冯操,易葵 0802402

基于光学介电微球阵列的激光微纳图案化加工研究

..... 张弋 0802403



封 面 解 读

封面呈现了金属与连续编织碳纤维增强树脂基复合材料的异质接头激光连接原理。当激光照射在金属表面,金属吸收激光能量并将热量向下传递,当足够的热量传递到金属与复合材料结合处时,复合材料表面的树脂发生熔化,熔融树脂会填充在金属和复合材料的界面处,进而形成激光连接接头。

封 底 解 读

封面展现了机器人激光增减材系统以激光增材和铣削减材交替的工艺策略进行复合制造的过程。封面呈现了机器人增减材复合制造的不同阶段。在激光增材制造过程中,零件出现明显的层纹和边缘塌陷现象,铣削减材将增材层加工平整,在铣削平面上继续进行增材成形,直至最终零件制造完成。

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CONTENTS

• Laser Forming Manufacturing •

Simulation Study of Laser Joining for Carbon Fiber Reinforced Plastics and Titanium Alloys (Cover Paper)	
.....	Jing Ruomu, Xu Jiejie, Xiao Rongshi, Huang Ting 0802101
Height and Width Model of Cladding Layer Formed by Laser Cladding with Variable Angle	
.....	Li Tianyi, Shi Tuo, Li Kuan, Zhang Rongwei, Li Jianbin, Sun Yewang, Liu Guang 0802102
Optimization of Process Parameters Based on 355 nm UV Laser Cutting of Flexible Copper Clad Laminates	
.....	Liu Wenxin, Chen Zhicheng, Li Yan, Chen Guangyu, Huang Liuqing, Luo Xuetao 0802103
Quantitative Evaluation of Penetration State in Pulsed Laser Welding of Aluminum Alloys Based on Acoustic-Wave Time-Frequency Characteristics and Deep Learning	
.....	Luo Zhongyi, Wu Di, Wang Run, Dong Jinfang, Yang Fangyi, Zhang Peilei, Yu Zhishui 0802104
Weld Structured Light Image Segmentation Based on Lightweight DeepLab v3+ Network	
.....	Chen Bing, He Sheng, Liu Jian, Chen Shengfeng, Lu Enhui 0802105
Ablation Characteristics of GH3230 Superalloy Using Green Femtosecond Laser	
.....	Huang Caili, Jiang Qi, Lin Xiaochao, Yang Shirui, Guo Peng, Cui Mengya, Huang Ting 0802106
Analysis on Characteristics of Weld Formation with 10 kW Level High Power Laser-Arc Hybrid Welding	
.....	Liang Xiaomei, Yang Yicheng, Huang Ruisheng, Tian Dexi, Chen Xiaoyu 0802107

• Laser Surface Machining •

Effect of Laser Parameters on Corrosion Resistance of Laser Melting Layer on Q235B Steel Surface	
.....	Yu Lidong, Bian Tianxuan, Qu Yunteng, Zhang Beibei, Bai Yang 0802201
Microstructure and Properties of Laser Cladding Coatings for ER9 Wheel Materials	
.....	Yang Wenbin, Li Shiyu, Xiao Qian, Yang Chunhui, Chen Daoyun, Liao Xiaoyong 0802202
Formed Quality of Milled Surfaces of Nickel-Based Superalloy by Beam-Coupled Nanosecond Laser	
.....	Chen Xianyou, Chen Xiaoxiao, Zhang Xuanhua, Zhang Wenwu 0802203
Distribution Mechanism of Cr Element During Laser Cladding Overlapping Process of 316L Powder on 45 Steel Substrate	
.....	Zhang Yazhou, Ge Honghao, Jin Chenyu, Chen Zhijun, Zhang Qunli, Yao Jianhua 0802204
Numerical Simulation and Experimental Study of High-Speed Laser Cladding Under Circular Scanning Path	
.....	Chai Rongxia, Tian Yan, Zhou Xinjian, Jiang Xiaoyuan, Lu Yongfeng, Liu Siyu 0802205

Effect of Laser Paint Removal of Aircraft Skin on Surface Integrity of Substrate	 <i>Yang Wenfeng, Chang Xuedong, Hu Yue, Li Shaolong, Cao Yu, Li Qing</i> 0802206
Effect of Process Parameters on Microstructure and Wear Resistance of 20CrMnTi-Based Laser Cladding Ni60A-TiC Coating	 <i>Ren Sixue, Li Jingbin, Shi Yameng, Wen Baoqin, Wang Xianfei, Li Liqiao</i> 0802207
Influence of Laser Process Parameters on Coloring Stability of Titanium Alloy Surface	 <i>Zhou Kai, Yang Can, Yang Huan, Zheng Junjian, Ouyang Deqin, Wu Xu, Li Chunbo</i> 0802208
• Laser Additive Manufacturing •	
Effects of Different Process Strategies on Surface Quality and Mechanical Properties of 316L Stainless Steel Fabricated via Hybrid Additive-Subtractive Manufacturing (Back Cover Paper)	 <i>Cai Zihao, Zhu Yongqiang, Han Changjun, He Shao, He Ye, Tai Zhiheng, Vyacheslav Trofimov, Yang Yongqiang</i> 0802301
Thermal Behaviors of Initial and Steady State Deposition Processes of Ti/Al Heterogeneous Materials Fabricated by Laser Additive Manufacturing on Curved Surface	 <i>Yu Haojie, Dai Donghua, Shi Xinyu, Li Yanze, Shi Keyu, Gu Dongdong</i> 0802302
Study on Microstructure and Properties of Overlap Region of GH3536 Alloy Processed by Multi-Laser Powder Bed Fusion	 <i>Xie Yin, Teng Qing, Shen Muyu, Li Jikang, Ma Rui, Bai Jie, Wei Qingsong</i> 0802303
Experimental Study on Synchronous Nanosecond Laser-Assisted Electrochemical Processing of Ti-6Al-4V Titanium Alloy	 <i>Gui Yujie, Wang Yufeng, Yang Yong, Zhang Wenwu</i> 0802304
Microstructure and Anisotropy of Laser-Deposited Ti65 Titanium Alloy	 <i>Li Xiaodan, Ni Jiaqiang, Yin Jun, Jiao Qingyang, Guan Feng, Liu Weijian, Yang Guang, He Bo</i> 0802305
Research on High-Quality Additive Manufacturing Process of Titanium Alloy Fuse with Composite Heat Source	 <i>Feng Qigao, Wang Linxin, Wang Lei, Ma Lijie, Tang Yongkai, Li Bobo</i> 0802306
Forming Quality and Mechanical Properties of TiC-Particle-Reinforced Inconel 718 Composites Produced by Laser Powder Bed Fusion	 <i>Li Hui, Zhang Jianxun, Lu Bingheng</i> 0802307
• Laser Micro-Nano Manufacturing •	
Research Progress on Femtosecond Laser Fabrication of Nonlinear Photonic Crystals	 <i>Li Longfu, Zhang Leran, Xu Liqun, Li Xin, Liao Changrui, Wang Yiping, Wu Dong</i> 0802401
Research Progress in Preparation Technology of Diamond Anti-Reflection Micro-Nano Structure	 <i>Zhang Weili, Shi Xiaoyang, Hong Ruijin, Chen Xingfeng, Feng Cao, Yi Kui</i> 0802402
Laser Micro-Nano Patterning Based on Optical Dielectric Microsphere Array	 <i>Zhang Yi</i> 0802403



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