

中国激光

Chinese Journal of Lasers

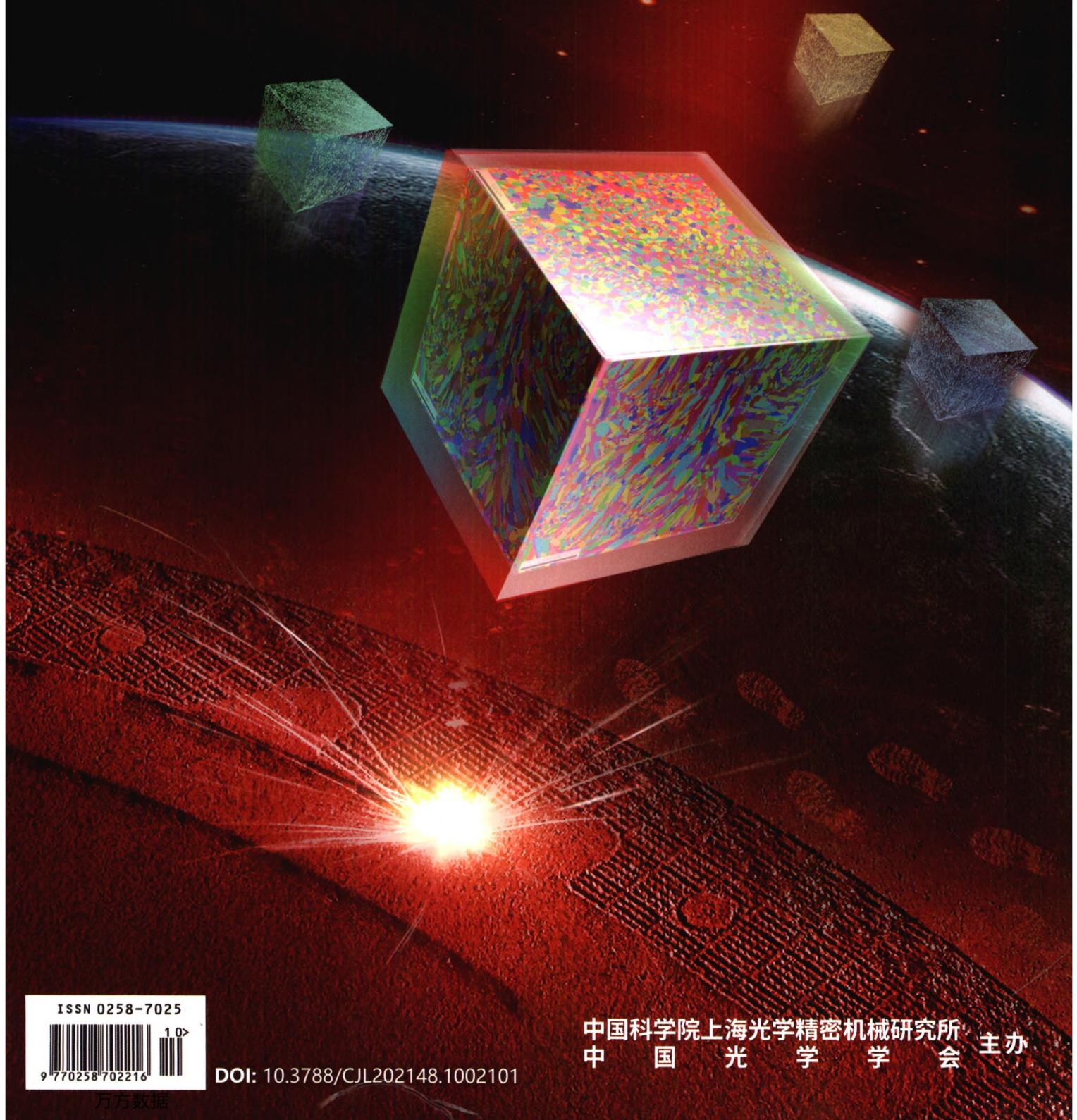
[总第538期]

前沿激光制造

第48卷 | 第10期

Vol. 48 | No.10

2021.5(下)



ISSN 0258-7025



9 770258 702216

万方数据

DOI: 10.3788/CJL202148.1002101

中国科学院上海光学精密机械研究所
中国光学学会 主办

中国激光

第48卷 第10期 2021年5月

(总第 538 期)

目 次

• 激光材料加工 •

封面解读

本封面展现了激光选区熔化铝合金的成形过程及其晶粒形态的各向异性特征。激光选区熔化技术利用高能激光束将铝合金粉末逐层熔合、凝固。在凝固前沿，热量沿垂直于固/液界面的不同方位从液相传入固相，形成了垂直于界面的温度梯度，促使熔池内的液态金属在凝固过程中沿温度梯度方向形成柱状晶，从而表现出晶粒形态的各向异性。微观组织的各向异性通常会对材料的物理、化学和力学性能产生影响，是材料研究中的一项重要内容。

Chinese Journal of Lasers

Vol. 48, No. 10 (Series No. 538) May 2021

CONTENTS

· Laser Material Processing ·

Microstructures and Fracture Toughness of Annealed AlSi10Mg Alloy Formed by Selective Laser Melting (Cover Paper)	Tang Pengjun, Yan Taiqi, Li Peiyong, et al. 1002101
Electromagnetic-Assisted Single-Pass Laser Welding of a 30-mm Thick Plate	Chen Genyu, Wang Jingru, Qi Yi, et al. 1002102
Microstructures and Mechanical Properties of TA15 Titanium Alloy Forgings Repaired by Point-Mode Forging and Laser Repairing	Xi Mingzhe, Zhou Haoyang, Chen Shuai, et al. 1002103
Simulation on Thermal Stress Cycle in Laser Cladding of H13 Steel Ni-Based Coating	Li Jinhua, An Xuejia, Yao Fangping, et al. 1002104
Comparison of Structure and Performance of Laser Welded Joints of SiC _p /Al Composite Materials	Sun Wenhao, Fan Yongqiang, Zhang Guotao, et al. 1002105
Effect of Layer Thickness on Forming Quality and Efficiency of AlSi10Mg Alloy Fabricated by Selective Laser Melting	Yan Taiqi, Chen Bingqing, Tang Pengjun, et al. 1002106
Effects of Laser Offset on Microstructure and Properties of NiTi/Copper Laser-Welded Joint	Gu Fan, Sun Qian, Huangfu Yuanxiang, et al. 1002107
Study on Error Compensation for Laser Bending of Single-Curved Surface	Gu Jieyan, Yan Chongjing, Zhang Chichao, et al. 1002108
Numerical Simulation on Laser Quenching of Stainless Steels with Grain Heterogeneity	Chen Zhengwei, Li Chang, Gao Xing, et al. 1002109
Influence of Lap Ratio on Temperature Field and Residual Stress Distribution of 42CrMo Laser Cladding	An Xianglong, Wang Yuling, Jiang Fulin, et al. 1002110
Laser Surface Texturing Process and Its Mechanism for Brass Material	Mao Yazhou, Yang Jianxi, Xu Wenjing 1002111
Process Parameters of Direct Writing Polyimide by 1064 nm Fiber Laser	Wang jin, Zhou Rudong, Zhang Ning, et al. 1002112
Detection and Control of Morphology Deviation in Laser Deposition Manufacturing	Qin Lanyun, Xie Yongkai, Yang Guang, et al. 1002113
Conformal Discrete Layering of Multivariant Twisted Structure Based on Inside-Laser Powder Feeding	Wang Mingyu, Shi Shihong, Shi Tuo, et al. 1002114
Thermal-Mechanical Coupling of Regional Scanning Based on Characteristic Regions in Laser Additive Manufacturing	Yang Guang, Li Yuhang, Zhou Siyu, et al. 1002115
Effects of Heat Treatment on Microstructure, Mechanical Properties, and Anisotropy of Laser Melting Deposited TC4	Wang Puqiang, Wang Yuyue, Wu Mengjie, et al. 1002116
Femtosecond Laser Etching of Aluminum Film on Tedlar Composite Surfaces	Shang Kaiwen, Wu Gan, Liu Xiaoli, et al. 1002117
Comparative Study on Cavitation-Resistance and Mechanism of Stellite-6 Coatings Prepared with Supersonic Laser Deposition and Laser Cladding	Sun Jingyong, Yan Yuliang, Li Bo, et al. 1002118
Microstructure and Corrosion Resistance of Laser B ₄ C/Cr Alloyed Layer of GCr15 Steel	Tong Bingqian, Li Zhenxing, Zhang Qunli, et al. 1002119
Effect of Grain Size on Mechanical Properties of Double Laser-Beam Bilateral Synchronous Welding Joint	Chen Dan, Liu Ting, Zhao Yanqiu, et al. 1002120
Simulation and Experimental Research on the GH3536 Molten Pool Laser Cladding on Inclined Substrate	Wang Pengfei, Yang Kun, Chen Mingzhi, et al. 1002121
Microstructure and Properties of Iron-Based Alloys Coatings Prepared by High-Speed Laser Cladding	Xu Yifei, Sun Yaoning, Wang Guojian, et al. 1002122
Microstructure and Tensile Properties of SiC Reinforced Aluminum Matrix Composite Prepared by Selective Laser Melting	Zou Tianchun, Zhu He, Chen Minying, et al. 1002123
· Laser Micromachining ·	
Back Strike and Its Protection of Laser Machining of Microholes on Thin-Walled Cavity	Wang Bin, Liu Yuezhuan, Wang Yufeng, et al. 1002201

XX

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中国激光

CHINESE JOURNAL OF LASERS

半月刊

“中国科技期刊卓越行动计划”入选期刊



封面故事



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万方数据

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