



## Transactions of Nonferrous Metals Society of China

中国有色金属学报(英文版)

December 2018

Volume 28 Number 12

www.tnmsc.cn f-ysxb@csu.edu.cn

## **CONTENTS**

## **Structural Materials**

Strengthening mechanisms based on reinforcement distribution uniformity for particle reinforced aluminum
matrix composites·······Gang CHEN, Jia WAN, Ning HE, Hong-ming ZHANG, Fei HAN, Yu-min ZHANG (2395) Flow stress and dynamic recrystallization behavior of Al–9Mg–1.1Li–0.5Mn alloy during hot compression
processXi-hong CHEN, Cai-he FAN, Ze-yi HU, Jian-jun YANG, Wen-li GAO (2401)
Variations in stir zone and thermomechanically affected zone of dissimilar friction stir weld of AA5083 and
AA6082 alloys
N. B. MALEDI, I-L. TSAI, RAPHAEL OLIVEIRA FERREIRA, Z. LIU (2410)
Enhanced strengthening by two-step progressive solution and aging treatment in AM50–4%(Zn,Y) magnesium
alloyShuai DAI, Feng WANG, De-zhi MA, Zhi WANG, Zheng LIU, Ping-li MAO (2419)
Shear behavior of AZ80 Mg alloy using experimental, theoretical and numerical techniques
A. BANAFSHI, F. FERESHTEH-SANIEE (2427)
Microstructure—fracture toughness relationships and toughening mechanism of TC21 titanium alloy with lamellar
microstructure·····Zhi-feng SHI, Hong-zhen GUO, Jian-wei ZHANG, Jian-ning YIN (2440)
Hot tensile deformation behavior and globularization mechanism of bimodal microstructured Ti-6Al-2Zr-
1Mo-1V alloy······Hui-jun ZHAO, Bao-yu WANG, Dong-ying JU, Guo-jin CHEN (2449)
Bonding strength of Invar/Cu clad strips fabricated by twin-roll casting process
Peng CHEN, Hua-gui HUANG, Ce JI, Xu ZHANG, Zhong-hua SUN (2460)
Functional Materials
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti
Microstructure and remarkably improved hydrogen storage properties of Mg <sub>2</sub> Ni alloys doped with metal elements of Al, Mn and Ti————————————————————————————————————
Microstructure and remarkably improved hydrogen storage properties of Mg2Ni alloys doped with metal elements of Al, Mn and Ti

Leaching of cuprite through NH <sub>4</sub> OH in basic systems············A. ARACENA, F. PÉREZ, D. CARVAJAL (2545)
Synthesis of novel silica-supported chelating resin containing tert-butyl 2-picolyamino-N-acetate and its
properties for selective adsorption of copper from simulated nickel electrolyte
Cai-xia WANG, Hui-ping HU, Xue-jing QIU, Ze-ying CHENG, Lu-jia MENG, Li ZHU (2553)
Enhanced selectivity of hydrolytic precipitation of Zn from Zn-Ni sulfate solution via chelation of Ni
Mostafa Aghazadeh-Ghomi, Javad Moghaddam, Naghi Parvini Ahmadi (2566)
Effects of AlN hydrolysis on fractal geometry characteristics of residue from secondary aluminium dross using
response surface methodologyYong ZHANG, Zhao-hui GUO, Zi-yu HAN, Xi-yuan XIAO (2574)
Initial corrosion behavior of pure zinc in simulated tropical marine atmosphere
Qi YIN, Zhen-yao WANG, Chen PAN (2582)
Simultaneous determination of trace Cu <sup>2+</sup> , Cd <sup>2+</sup> , Ni <sup>2+</sup> and Co <sup>2+</sup> in zinc electrolytes by oscillopolarographic second
derivative wavesJuan DU, Hong-qiu ZHU, Yong-gang LI, Tai-ming ZHANG, Chun-hua YANG (2592)
Effect of different processing parameters on interfacial heat-transfer behavior in high-pressure die-casting process
Volatility-volume relationship of Chinese copper and aluminum futures market
Bai-sheng SHI, Xue-hong ZHU, Hong-wei ZHANG, Yi ZENG (2607)
The Total Contents of Volume 28 (2018)(I)
Editorial Committee of Transactions of Nonferrous Metals Society of China ······ (Inside front cover)
Information for Contributors (Inside back cover)
The End of Volume 28, 2018
Managing Editor: Wei-ping CHEN

Serial parameter: CN43-1239/TG\*1991\*m\*A4\*224\*en\*P\*\$50.00\*1000\*24\*2018-12