



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Biao Zeng, Chao Xiong, Wei Wang, Guo Lin*, Song Cheng*, Jun Chang

Adsorption behavior and mechanism of Hg(II) on highly stable Zn-based metal organic frameworks

Wuhan University of Science and Technology

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Bin Jiang*, Zhihua Dong*, Ang Zhang, Jiangfeng Song, Fusheng Pan
Recent advances in micro-alloyed wrought magnesium alloys: theory and design
Chongqing University

贾明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Dong-lan ZHANG, Jiong WANG*, Yi KONG, You ZOU, Yong DU

First-principles investigation on the stability and electronic
structure of Sc doped θ' /Al interface in Al-Cu alloys

Central South University

贺明星

Chairman

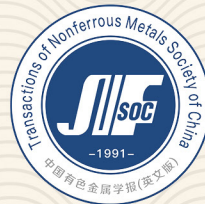


黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Er-tuan ZHAO, Shi-chen SUN, Jin-rui YU, Yu-kun AN, Wen-zhen CHEN, Rui-run CHEN*

Dynamic recrystallization and silicide precipitation behavior of titanium matrix composites under different strain
Shandong University of Technology

賈明星

Chairman



黃伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Fu-bin WANG, Yu-ke LIU, Yun-xiang TONG*, Chong ZHANG, Feng-chun JIANG, Jian-dong WANG

Effect of electropulsing on anisotropy in strength of laser metal deposited Ti-6Al-4V alloy

Harbin Engineering University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Gan LI, Wen-ying QU, Min LUO, Le CHENG, Chuan GUO, Xing-gang LI, Zhen XU,
Xiao-gang HU, Da-quan LI, Hong-xing LU*, Qiang ZHU*

Semi-solid processing of aluminum and magnesium alloys: Status, opportunity, and challenge in China
Southern University of Science and Technology

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Guang Han, Shuming Wen, Han Wang, Qicheng Feng*

Enhanced sulfidization flotation of cuprite by surface modification with hydrogen peroxide

Kunming University of Science and Technology

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Guo-zheng QUAN*, Xue SHENG, Kun YANG, Yan-ze YU, Wei XIONG

Formation mechanism of basin-like depression defect in electric upsetting process of Ni80A superalloy
Chongqing University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

He XIE, Guo-hua WU*, Xiao-long ZHANG*, Zhong-quan LI, Wen-cai LIU, Liang ZHANG¹, Bao-de SUN
Microstructure and mechanical performances of cast Mg-3Nd-0.2Zn-0.5Zr alloy with Y additions
Shanghai Jiao Tong University

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Heng-bin LIAO, Li-ling MO, Cheng-bo LI, Mei-yan ZHAN, Jun DU*

On the grain refinement of Mg-Al binary alloys inoculated by insitu oxidation
South China University of Technology

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Hong-Yi Li*, Xin-Mian Chen, Danqing Li, Yun Guo, Jiang Diao, Bing Xie

Quick valence analysis method of vanadium toward accurate
toxicity assessment of vanadium-containing hazardous wastes

Chongqing University

卢明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

HUANG Run-zhang, XU Guo-fu, WU Qiong, YUAN Meng, WU Chun-ping*

Influence of operation numbers on arc erosion behavior of Ag/Ni electrical contact materials

Central South University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Hua-Qiu DU, Feng LI*, Ye WANG, YuWANG

Micro-structure evolution and plasticizing mechanism of
magnesium alloy interactive alternating forward extrusion

Harbin University of Science and Technology

贾明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Huibin Zhang*, Hang Yu, Junliang Ma, Longfei Wang, Shenghang Xu, Yuehui He, Guoqu Zheng

Improving the oxidation resistance of porous FeAl-based
intermetallics with high boron/yttrium alloying strategy

Zhejiang University of Technology

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Jianwei XU*, Weidong ZENG*, Dadi ZHOU, Shengtong HE, Runchen JIA

Evolution of coordination between α phase and β phase for twophase titanium alloy during hot working
Northwestern Polytechnical University

贾明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Jun-ke ZHANG, Yong-jun SHAO, Ke CHEN, Hua-jie TAN, Rui-chang TAN,
Tian-dong ZHANG, Zhong-fa LIU*

Evidence of Fluid Evolution of the Baoshan Cu-Pb-Zn Polymetallic Deposit: Constraints from
In-situ Sulfur Isotope and Trace Element Compositions of Pyrite
Central South University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Kaimeng WANG, Hongyang JING, Lianyong XU*, Lei ZHAO, Yongdian HAN, Haizhou LI, Kai SONG

Microstructure evolution of a 55Ni-23Cr-13Co nickel-based
superalloy during high-temperature cyclic deformation

Tianjin University

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Liangliang Yuan, Mingxing Guo*, Yong Yan, Weijun Feng, Zanyang Liu, Linzhong Zhuang*

Theoretical design and distribution control of precipitates and
solute elements in Al-Zn-Mg-Cu alloys with a heterostructure

University of Science and Technology Beijing

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Lin Cao, Peng Zhang, Shuangjian Li, Qiwei Wang, Dahai Zeng, Chuanyong Yu, Qingyang Li,
Yuwen Liao, Zhidan Lin*, Wei Li*

Effect of TaN nanoparticles on the microstructure, mechanical
properties and tribological performance of PEEK coating deposited
on titanium by electrophoretic deposition

Jinan University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Peng Li*, Meifeng Cai

Challenges and new insights for the exploitation of deep underground metal mineral resources
University of Science and Technology Beijing

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Peng-fei ZHAO, Guang-shi LI, Wen-li LI, Peng CHENG, Zhong-ya PANG, Xiao-lu XIONG,
Xing-li ZO*, Qian XU, Xiong-gang LU
Progress in Ti_3O_5 : Synthesis, properties and applications
Shanghai University

賈明星

Chairman



黃伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Qian-kun LI, Hong YAN, Rong-shi CHEN*

Effect of rolling reduction on deformation mechanism and twinning behavior of WE43 magnesium alloy
Institute of Metal Research, Chinese Academy of Sciences

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Ran Duan, Yejun Li*, Shu Wang, Yonggang Tong, Horst-Günter Rubahn, Gufei Zhang, Weihong Qi*

Effects of Phosphate Precursors on the Morphology and Oxygen
Evolution Reaction Activity of Nickel-Iron (Oxy)Hydroxide on Nickel Foams
Central South University

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Run-peng LIAO, Pan-jin HU, Shu-ming WEN, Yong-xing ZHENG*, Xian-hui QIU*, Jin-fang LV, Jian LIU

Interaction mechanism of ferrate (VI) with arsenopyrite surface and
its effect on flotation separation of chalcopyrite from arsenopyrite under low alkaline conditions

Kunming University of Science and Technology

賈明星

Chairman

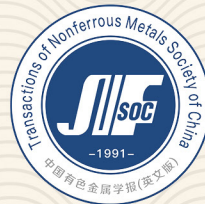


黃伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Shida Xu*, Tianxiao Chen, Jiaqi Liu, Chenrui Zhang

Exponential decay law of acoustic emission and microseismic
activities caused by disturbances associated with multilevel loading and mining blast

Northeastern University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Shu-ci Ma, Xiao-dong Shi, Zhe-xuan Liu, Yi-fan Zhou, Pin-ji Wang, Jiang Zhou*, Shu-quan Liang*

PVDF-HFP Binder for Advanced Aqueous Zinc/Manganese Batteries

Central South University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Shui-qing ZHAN*, Ming-mei JIANG, Jun-feng WANG, Jian-hong YANG

An improved CFD modeling of full dissolution of alumina
particles in aluminum electrolysis cells considering agglomerate formation

Jiangsu University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Shulin Lü, Dijia Zhao, Xiaoyuan Ji*, Wei Guo*

Effects of ultrasonic vibration on microstructure and mechanical properties of Mg98Y1.0Ni0.5Al0.5 alloy containing LPSO structure

Huazhong University of Science and Technology

卢明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Tao-tao ZENG*, Xiao-ling ZHANG, Hai-du NONG, Qing HU, Liang-qin WANG, Ai-jie WANG*

Cd(II) removal efficiency and mechanism by living and autoclaved
bacteria enriched from heavy metals mine soil

University of South China

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Tian-yang YUE, Sheng ZHANG*, Chao-yue WANG, Wei XU, Yi-di XU, YuSheng SHI, Yong ZANG

Effects of selective laser melting parameters on the surface quality
and densification behaviours of pure nickel

University of Science and Technology Beijing

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Tong LU, Zhen-hua DAN, Kai LI, Dan-qing YI, Lian ZHOU*, Hui CHANG*

Hot deformation behavior and dynamic recrystallization
mechanism of Ti-35421 alloy in the beta single field

Nanjing Tech University

卢明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Tong SHEN, Cai-he FAN*, Ze-yi HU, Qin WU, Yu-meng NI, Yu-zhou CEHN

Effect of strain rate on microstructure and mechanical properties of spray-formed Al-Cu-Mg alloy
Hunan University of Technology

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Wenquan Lu, NaiFang Zhang, ZongYe Ding, Qiaodan Hu*, Jianguo Li

Recent progress on apparatus development and in situ observation
of metal solidification processes via synchrotron radiation X-ray imaging: A review
Shanghai Jiao Tong University

卢明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

WU Jie, HUANG Guo-qiang, XUE Song-bai*, XUE Peng, XU Yong*

Investigation on thermal reliabilities of Sn-0.5Ag-0.7Cu-0.1wt.% Al₂O₃/Cu solder joint

Nanjing University of Posts and Telecommunications

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Xiaochun Ma, Siyuan Jin, Ruizhi Wu*, Jiaxiu Wang, Guixiang Wang, Boris Krit, Sergey Betsofen

Corrosion behavior of Mg-Li alloys: A review

Harbin Engineering University

贾明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Xiao-qiang REN, Chao CHEN*, Xiang-kun RAN, Yu-xiang LI, Xin-gang ZHANG

Microstructure evolution of AA5052 joint failure process and
mechanical performance after reconditioning with an additional tubular rivet

Central South University

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Xiaoyu Meng, Hongbo Zhao*, Yisheng Zhang, Shuai Wang, Guohua Gu, Guanzhou Qiu

New Insights into the effects of copper ions on the dissolution
mechanism of Fe containing sphalerite: Experiments and simulations

Central South University

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

XIE Feng*, CHEN Jun-nan, WANG Jian, WANG Wei*

A review of gold leaching in thiosulfate-based solutions

Northeastern University

賈明星

Chairman



黃伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Xue-jing QIU, Jia TANG, Jun TAN*, Hui-ping HU, Xiao-bo JI, Jiu-gang HU*

Selective recovery of Cu(II) through polymer inclusion membranes
mediated with 2-aminomethylpyridine derivatives

Central South University

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Xue-zhao WANG, You-qiang WANG*, Chen-bing NI*, Yu-xin FANG, Xiao YU, Ping ZHANG

Effect of Gd content on microstructure and dynamic mechanical
properties of solution-treated Mg-(x)Gd-3Y-0.5Zr alloy
Qingdao University of Technology

賈明星

Chairman



黃伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Yan Chen, Haoyu Zhang, Fuying Wu, Ze Sun, Jiaguang Zheng, Liuting Zhangg*, Lixin Chen
Mn nanoparticles enhanced dehydrogenation and hydrogenation kinetics of MgH_2 for hydrogen storage
Jiangsu University of Science and Technology

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Yonggang Tong*, Yanlin Cai, Yongle Hu, Hongfeng Huang, Xiancheng Zhang, Hao Zhang

TiC strengthened CoCrNi medium entropy alloy: dissolution and
precipitation of TiC and its effect on microstructure and performance

Changsha University of Science and Technology

谭明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Yuan-yuan Ji, Yun-ze Xu, Bin-bin Zhang, Yashar Behnamian, Da-hai Xia*, Wen-bin Hu

A review of micro-scale and atomic-scale corrosion mechanisms of
the second phases in aluminum alloys

Tianjin University

贾明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Yu-lin CHENG, Tian FENG, Jia-hui LV, Pan-feng HU, Ying-liang CHENG*

Plasma electrolytic oxidation of brass in aluminate electrolyte containing NaH_2PO_4 or Na_2SiO_3
Hunan University

賈明星

Chairman



黃伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

ZHANG Dong-dong, LIU Chu-ming, JIANG Shu-nong*, WAN Ying-chun, CHEN Zhi-yong

Effects of trace Ag on precipitates and mechanical properties of as-extruded Mg-Gd-Y-Zr alloys

Central South University

贺明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Zheng-pei YAN, Ying ZHANG*, Shi-li ZHENG*, Yang ZHANG, Pei SUN,
Ziwei SONG, Faiza SAFDAR, Tao QI

Making Titanium Mineral from Vanadium Titanomagnetite
Concentrates by Hydrogen Reduction and Acid-leaching
University of Chinese Academy of Sciences

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Zhen-guo GUO, Tie-jun MA*, Xia-wei YANG*, Wen-ya LI, Jun TAO, Ju LI, Achilleas VAIRIS

Thermo-physical simulation of deformation behavior and
microstructure evolution for linear friction welding of a near-beta titanium alloy

Northwestern Polytechnical University

賈明星

Chairman



黃伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Zhenxing Wang, Yunjun Yu, Tiantian Ye, Jiangchi Fei*, Jianwei Peng, Yaoyu Zhou

Spatial distribution and environmental risk assessment following
thallium pollution incidents at a Southwest China mining site

South China Institute of Environmental Sciences

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Zhi-min MA, Yong ZHANG, Sheng-dan LIU*, Yun-lai DENG*, Xin-ming ZHANG

Quenching sensitivity and heterogeneous precipitation behavior of AA7136 alloy

Central South University

黄明星

Chairman



黄伯云

Editor-in-Chief

DATE

December 2021



Honorary Certificate

30th Anniversary of Transactions of Nonferrous Metals Society of China

Excellent Paper Award

Zhuhao Wen, Yao Wang, Weimin Chen*, Lijun Zhang, Yong Du
Investigations of the mechanical and diffusion properties in bcc
Ti-Nb-Zr-Sn alloys via a high-throughput method
Jinan University

賈明星

Chairman



黃伯云

Editor-in-Chief

DATE

December 2021