

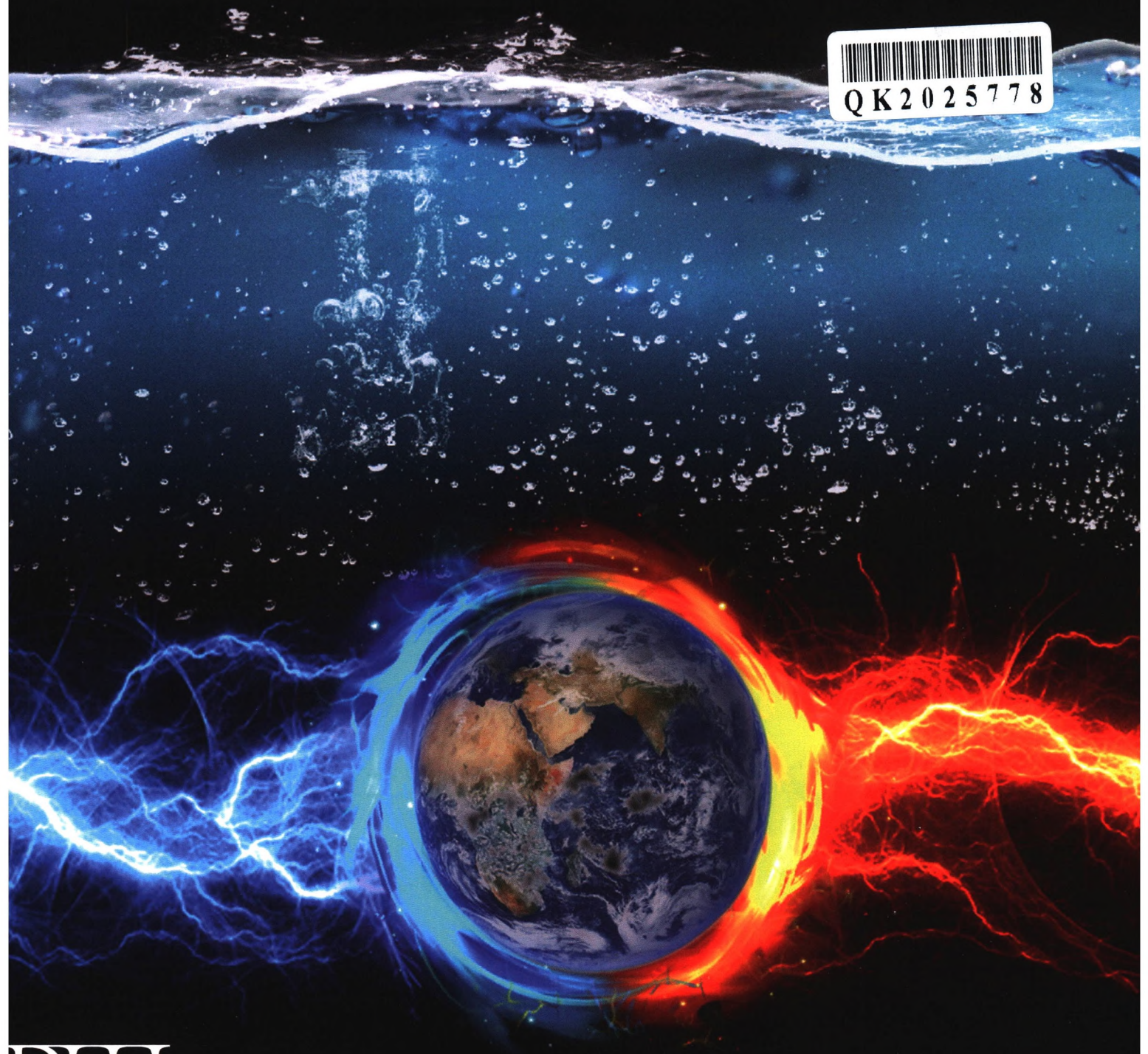
ISSN 1001-0521 · e-ISSN 1867-7185
CN 11-2112/TF · CODEN RARME 8

Volume 39 · Number 4 · April 2020


RARE METALS

www.editorialmanager.com/rmet

稀有金属 (英文版)



PIJ
Project for Enhancing International
Impact of China STM Journals

 Springer

万方数据

HIGHLIGHTS

Towards scalable van der Waals heterostructure arrays

F.-K. Wang · T.-Y. Zhai 327

Realizing ultra-pure red emission with Sn-based lead-free perovskites

O. Voznyy 330

Electrochemical mechanism of high Na-content P2-type layered oxides for sodium-ion batteries

Y. Yang · W.-F. Wei 332

REVIEW PAPERS

A review and perspective on molybdenum-based electrocatalysts for hydrogen evolution reaction

W. Hua · H.-H. Sun · F. Xu · J.-G. Wang 335

Low-thermal-conductivity thermal barrier coatings with a multi-scale pore design and sintering resistance following thermal exposure

W.-W. Zhang · Z.-Y. Wei · L.-Y. Zhang · Y.-Z. Xing · Q. Zhang 352

ORIGINAL PAPERS

Absence of superconductivity in $\text{Nd}_{0.8}\text{Sr}_{0.2}\text{NiO}_x$ thin films without chemical reduction

X.-R. Zhou · Z.-X. Feng · P.-X. Qin · H. Yan · S. Hu · H.-X. Guo · X.-N. Wang · H.-J. Wu · X. Zhang · H.-Y. Chen · X.-P. Qiu · Z.-Q. Liu 368

Boron nitride/agarose hydrogel composites with high thermal conductivities

A. Yazdan · J.-Z. Wang · B.-K. Hu · W.-S. Xie · L.-Y. Zhao · C.-W. Nan · L.-L. Li 375

Dehydrogenation characteristics of ZrC-doped LiAlH_4 with different mixing conditions

Z.-L. Li · F.-Q. Zhai · H.-C. Qiu · Q. Wan · P. Li · X.-H. Qu 383

Lithium-ion cell inconsistency analysis based on three-parameter Weibull probability model

L.-S. Wang · Y.-Y. Fang · T. Zhao · J.-T. Wang · H. Zhang · L. Wang · S.-G. Lu 392

Microstructure and mechanical properties of $\text{Ti}_{44}\text{Al}_{16}\text{Nb}$ alloys with different cerium contents

H.-Z. Fang · R.-R. Chen · X.-Y. Chen · Z.-K. Ma · H.-S. Ding · J.-J. Guo 402

Transient liquid-phase bonding of superalloy K465 using a Ni-Cr-Fe-B-Si amorphous interlayer alloy

J.-D. Liu · B. Li · Y. Sun · T. Jin · X.-F. Sun · Z.-Q. Hu 408

Microstructural dependence of magnetic and magnetostrictive properties in Fe-19 at% Ga

A. Emdadi · S. Hossein Nedjad · H. Badri Ghavifekr · M. Kavanlouei · F. Alijan Farzad Lahiji · V. Ramezankhani 413

Low-cost $\text{Sm}_{0.7}\text{Y}_{0.3}\text{Co}_5$ sintered magnet produced by traditional powder metallurgical techniques

D.-T. Zhang · N.-X. Cai · R.-C. Zhu · W.-Q. Liu · M. Yue 421

Microstructure and wear behavior of AA6061/SiC surface composite fabricated via friction stir processing with different pins and passes

H. Eftekharinia · A.A. Amadeh · A. Khodabandeh · M. Paidar 429

Corrosion behavior of laser-clad coatings fabricated on Ti6Al4V with different contents of TaC addition

L.-F. Hu · J. Li · Y.-H. Lv · Y.-F. Tao 436

A two-step zircon decomposition method to produce zirconium oxychloride: alkali fusion and water leaching

J. Song · J.-F. Fan · J.-C. Liu · R. Liu · J.-K. Qu · T. Qi 448

Cover Picture

W. Hua, et al. A review and perspective on molybdenum-based electrocatalysts for hydrogen evolution reaction

Further articles can be found at link.springer.com

Instructions for Authors for *Rare Met.* are available at www.springer.com/12598

HIGHLIGHTS

Towards scalable van der Waals heterostructure arrays

F.-K. Wang · T.-Y. Zhai 327

Realizing ultra-pure red emission with Sn-based lead-free perovskites

O. Voznyy 330

Electrochemical mechanism of high Na-content P2-type layered oxides for sodium-ion batteries

Y. Yang · W.-F. Wei 332

REVIEW PAPERS

A review and perspective on molybdenum-based electrocatalysts for hydrogen evolution reaction

W. Hua · H.-H. Sun · F. Xu · J.-G. Wang 335

Low-thermal-conductivity thermal barrier coatings with a multi-scale pore design and sintering resistance following thermal exposure

W.-W. Zhang · Z.-Y. Wei · L.-Y. Zhang · Y.-Z. Xing · Q. Zhang 352

ORIGINAL PAPERS

Absence of superconductivity in $\text{Nd}_{0.8}\text{Sr}_{0.2}\text{NiO}_x$ thin films without chemical reduction

X.-R. Zhou · Z.-X. Feng · P.-X. Qin · H. Yan · S. Hu · H.-X. Guo · X.-N. Wang · H.-J. Wu · X. Zhang · H.-Y. Chen · X.-P. Qiu · Z.-Q. Liu 368

Boron nitride/agarose hydrogel composites with high thermal conductivities

A. Yazdan · J.-Z. Wang · B.-K. Hu · W.-S. Xie · L.-Y. Zhao · C.-W. Nan · L.-L. Li 375

Dehydrogenation characteristics of ZrC-doped LiAlH_4 with different mixing conditions

Z.-L. Li · F.-Q. Zhai · H.-C. Qiu · Q. Wan · P. Li · X.-H. Qu 383

Lithium-ion cell inconsistency analysis based on three-parameter Weibull probability model

L.-S. Wang · Y.-Y. Fang · T. Zhao · J.-T. Wang · H. Zhang · L. Wang · S.-G. Lu 392

Microstructure and mechanical properties of $\text{Ti}_{44}\text{Al}_{16}\text{Nb}$ alloys with different cerium contents

H.-Z. Fang · R.-R. Chen · X.-Y. Chen · Z.-K. Ma · H.-S. Ding · J.-J. Guo 402

Transient liquid-phase bonding of superalloy K465 using a Ni-Cr-Fe-B-Si amorphous interlayer alloy

J.-D. Liu · B. Li · Y. Sun · T. Jin · X.-F. Sun · Z.-Q. Hu 408

Microstructural dependence of magnetic and magnetostrictive properties in Fe-19 at% Ga

A. Emdadi · S. Hossein Nedjad · H. Badri Ghavifekr · M. Kavanlouei · F. Alijan Farzad Lahiji · V. Ramezankhani 413

Low-cost $\text{Sm}_{0.7}\text{Y}_{0.3}\text{Co}_5$ sintered magnet produced by traditional powder metallurgical techniques

D.-T. Zhang · N.-X. Cai · R.-C. Zhu · W.-Q. Liu · M. Yue 421

Microstructure and wear behavior of AA6061/SiC surface composite fabricated via friction stir processing with different pins and passes

H. Eftekharinia · A.A. Amadeh · A. Khodabandeh · M. Paidar 429

Corrosion behavior of laser-clad coatings fabricated on Ti6Al4V with different contents of TaC addition

L.-F. Hu · J. Li · Y.-H. Lv · Y.-F. Tao 436

A two-step zircon decomposition method to produce zirconium oxychloride: alkali fusion and water leaching

J. Song · J.-F. Fan · J.-C. Liu · R. Liu · J.-K. Qu · T. Qi 448

Cover Picture

W. Hua, et al. A review and perspective on molybdenum-based electrocatalysts for hydrogen evolution reaction

Further articles can be found at link.springer.com

Instructions for Authors for *Rare Met.* are available at www.springer.com/12598