

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

Volume 38 • Number 6 • June 2019

RARE METALS

www.editorialmanager.com/rmet

稀有金属 (英文版)



Q K 1 9 2 4 4 1 8



Project for Enhancing International
Impact of China STM Journals

万方数据

Springer

RARE METALS (Monthly)

Volume 38 • Number 6 • June 2019

Special Issue: Biomedical Metal Implants

Guest Editors: Shui-Lin Wu · Yan Li

Editorial for rare metals, special issue on biomedical metal implants

S.-L. Wu · Y. Li 475

Role of Cu element in biomedical metal alloy design

E.-L. Zhang · S. Fu · R.-X. Wang · H.-X. Li · Y. Liu · Z.-Q. Ma · G.-K. Liu · C.-S. Zhu · G.-W. Qin · D.-F. Chen 476

New nitinol endovascular stent-graft system for abdominal aortic aneurysm with finite element analysis and experimental verification

X.-C. Zhou · F. Yang · X.-Y. Gong · M. Zhao · Y.-F. Zheng · Z.-L. Sun 495

Biocorrosion properties of Ti–3Cu alloy in F ion-containing solution and acidic solution and biocompatibility

D.-G. Cai · M.-M. Bao · X.-Y. Wang · L. Yang · G.-W. Qin · R.-X. Wang · D.-F. Chen · E.-L. Zhang 503

Effects of clinical dental implant abutment materials and their surface characteristics on initial bacterial adhesion

Y.-S. Huang · H.-H. Huang 512

Corrosion resistance of nanostructured magnesium hydroxide coating on magnesium alloy AZ31: influence of EDTA

X.-L. Fan · Y.-F. Huo · C.-Y. Li · M.B. Kannan · X.-B. Chen · S.-K. Guan · R.-C. Zeng · Q.-L. Ma 520

Microstructure, mechanical and biodegradable properties of a Mg–2Zn–1Gd–0.5Zr alloy with different solution treatments

J.-X. Chen · M. Gao · L.-L. Tan · K. Yang 532

Cell behaviors on surface of pure tantalum with nano-dimpled structure

J.-W. Ma · R. Zan · W.-Z. Chen · J.-H. Ni · X.-N. Zhang 543

Antibacterial ability and cytocompatibility of Cu-incorporated Ni–Ti–O nanopores on NiTi alloy

J.-M. Zhang · Y.-H. Sun · Y. Zhao · Y.-L. Liu · X.-H. Yao · B. Tang · R.-Q. Hang 552

Mechanical properties of AM Ti6Al4V porous scaffolds with various cell structures

H.-D. Zheng · L.-L. Liu · C.-L. Deng · Z.-F. Shi · C.-Y. Ning 561

Preparation of Ti–Nb–Ta–Zr alloys for load-bearing biomedical applications

B.-Q. Li · C.-L. Li · Z.-X. Wang · X. Lu 571

Mg-based absorbable membrane for guided bone regeneration (GBR): a pilot study

W. Peng · J.-X. Chen · X.-F. Shan · Y.-C. Wang · F. He · X.-J. Wang · L.-L. Tan · K. Yang 577

Construction of TiO₂/silane nanofilm on AZ31 magnesium alloy for controlled degradability and enhanced biocompatibility

L. Huang · K. Su · Y.-F. Zheng · K.W.-K. Yeung · X.-M. Liu 588

Cover Picture

D.-G. Cai. et al. Biocorrosion properties of Ti–3Cu alloy in F ion-containing solution and acidic solution and biocompatibility

Further articles can be found at link.springer.com

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

ISSN 1001-0521



RARE METALS (Monthly)

Volume 38 • Number 6 • June 2019

Special Issue: Biomedical Metal Implants

Guest Editors: Shui-Lin Wu · Yan Li

Editorial for rare metals, special issue on biomedical metal implants

S.-L. Wu · Y. Li 475

Role of Cu element in biomedical metal alloy design

E.-L. Zhang · S. Fu · R.-X. Wang · H.-X. Li · Y. Liu · Z.-Q. Ma · G.-K. Liu · C.-S. Zhu · G.-W. Qin · D.-F. Chen 476

New nitinol endovascular stent-graft system for abdominal aortic aneurysm with finite element analysis and experimental verification

X.-C. Zhou · F. Yang · X.-Y. Gong · M. Zhao · Y.-F. Zheng · Z.-L. Sun 495

Biocorrosion properties of Ti–3Cu alloy in F ion-containing solution and acidic solution and biocompatibility

D.-G. Cai · M.-M. Bao · X.-Y. Wang · L. Yang · G.-W. Qin · R.-X. Wang · D.-F. Chen · E.-L. Zhang 503

Effects of clinical dental implant abutment materials and their surface characteristics on initial bacterial adhesion

Y.-S. Huang · H.-H. Huang 512

Corrosion resistance of nanostructured magnesium hydroxide coating on magnesium alloy AZ31: influence of EDTA

X.-L. Fan · Y.-F. Huo · C.-Y. Li · M.B. Kannan · X.-B. Chen · S.-K. Guan · R.-C. Zeng · Q.-L. Ma 520

Microstructure, mechanical and biodegradable properties of a Mg–2Zn–1Gd–0.5Zr alloy with different solution treatments

J.-X. Chen · M. Gao · L.-L. Tan · K. Yang 532

Cell behaviors on surface of pure tantalum with nano-dimpled structure

J.-W. Ma · R. Zan · W.-Z. Chen · J.-H. Ni · X.-N. Zhang 543

Antibacterial ability and cytocompatibility of Cu-incorporated Ni–Ti–O nanopores on NiTi alloy

J.-M. Zhang · Y.-H. Sun · Y. Zhao · Y.-L. Liu · X.-H. Yao · B. Tang · R.-Q. Hang 552

Mechanical properties of AM Ti6Al4V porous scaffolds with various cell structures

H.-D. Zheng · L.-L. Liu · C.-L. Deng · Z.-F. Shi · C.-Y. Ning 561

Preparation of Ti–Nb–Ta–Zr alloys for load-bearing biomedical applications

B.-Q. Li · C.-L. Li · Z.-X. Wang · X. Lu 571

Mg-based absorbable membrane for guided bone regeneration (GBR): a pilot study

W. Peng · J.-X. Chen · X.-F. Shan · Y.-C. Wang · F. He · X.-J. Wang · L.-L. Tan · K. Yang 577

Construction of TiO₂/silane nanofilm on AZ31 magnesium alloy for controlled degradability and enhanced biocompatibility

L. Huang · K. Su · Y.-F. Zheng · K.W.-K. Yeung · X.-M. Liu 588

Cover Picture

D.-G. Cai. et al. Biocorrosion properties of Ti–3Cu alloy in F ion-containing solution and acidic solution and biocompatibility

Further articles can be found at link.springer.com

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

ISSN 1001-0521

