174 180/mis



VOLUME 29 · NO 14
JULY 28, 2014

A publication of the

CAMBRIDGE UNIVERSITY PRESS

MATERIALS RESEARCH SOCIETY® Advancing materials. Improving the quality of life.

Journal of MATERIALS RESEARCH

Volume 29, Number 14, July 28, 2014

INVITED FEATURE REVIEW

1489–1499	Damage-tolerant Zr–Cu–Al-based bulk metallic glasses with record-breaking fracture toughness	Jian Xu, Evan Ma
ARTICLES		
1500–1512	Effect of electropulsing treatment on the microstructure, texture, and mechanical properties of cold-rolled Ti–6Al–4V alloy	Xiaoxin Ye, Guoyi Tang, Guolin Song, Jie Kuang
1513–1521	Fracture transitions in iron: Strain rate and environmental effects	Eric Hintsala, Claire Teresi, Andrew J. Wagner, K. Andre Mkhoyan, William Gerberich
1522–1527	Novel synthesis route to graphene using iron nanoparticles	Rajen B. Patel, Chi Yu, Tsengming Chou, Zafar Iqbal
1528–1536	Optical analysis of room temperature magnetron sputtered ITO films by reflectometry and spectroscopic ellipsometry	Tivadar Lohner, K. Jagadeesh Kumar, Péter Petrik, Aryasomayajula Subrahmanyam, István Bársony
1537–1545	Synthesis and design of ${\sf PSf/TiO_2}$ composite membranes for reduction of chromium (VI): Stability and reuse of the product and the process	M.S. Jyothi, Mahesh Padaki, R. Geetha Balakrishna, Ranjith Krishna Pai
1546–1555	Static and dynamic hydrophobicity of alumina-based porous ceramics impregnated with fluorinated oil	Yuta Tsuruki, Munetoshi Sakai, Toshihiro Isobe, Sachiko Matsushita, Akira Nakajima
1556–1564	Synergistic effect of binary ligands on nucleation and growth/size effect of nanocrystals: Studies on reusability of the solvent	Chandan H.R., Saravanan V., Ranjith Krishna Pai, R. Geetha Balakrishna
1565–1572	Adsorbents with sustainable CO_2 capture capacity prepared from carboxymethylcellulose	Qiong Wu, Wei Li, Linlin Dai, Yanjiao Wu, Shouxin Liu
1573–1578	Hidden energy dissipation mechanism in nacre	Zaiwang Huang, Zhiliang Pan, Haoze Li, Qiuming Wei, Xiaodong Li