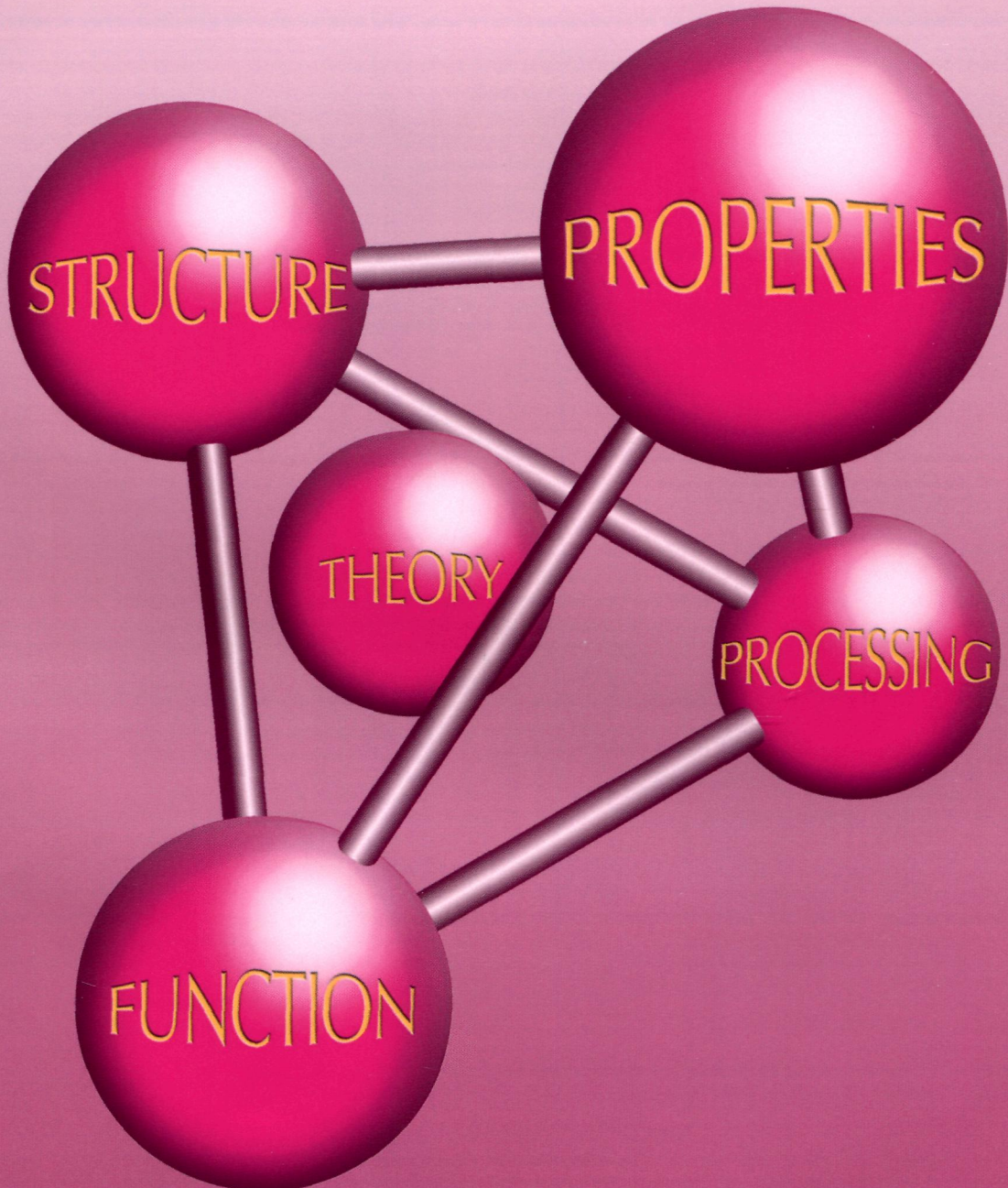




ELSEVIER

Scripta MATERIALIA

A LETTERS JOURNAL



Scripta MATERIALIA

Volume 76
(Published 28 January 2014)

CONTENTS

- | | | |
|--|----|--|
| D. Chen, H. Quan, X. Luo & S. Luo | 1 | 3-D graphene cross-linked with mesoporous MnS clusters with high lithium storage capability |
| K. Cheng, W. Chen, D. Liu, L. Zhang & Y. Du | 5 | Analysis of the Cermak–Rothova method for determining the concentration dependence of ternary interdiffusion coefficients with a single diffusion couple |
| K. Madhav Reddy, A. Hirata, P. Liu, T. Fujita, T. Goto & M.W. Chen | 9 | Shear amorphization of boron suboxide |
| R.Z. Valiev, M.Yu. Murashkin & I. Sabirov | 13 | A nanostructural design to produce high-strength Al alloys with enhanced electrical conductivity |
| J. Wang, X. Wu, T. Li & P.K. Chu | 17 | All-silicon solid films with highly efficient and tunable full-color photoluminescence |
| B. Kim, C.H. Park, H.S. Kim, B.S. You & S.S. Park | 21 | Grain refinement and improved tensile properties of Mg–3Al–1Zn alloy processed by low-temperature indirect extrusion |
| S. Zhou, C. Wu, T. Zhang & Z. Zhang | 25 | Carbon nanotube- and Fe _p -reinforced copper–matrix composites by laser induction hybrid rapid cladding |
| H.F. Garces, B.S. Senturk & N.P. Padture | 29 | <i>In situ</i> Raman spectroscopy studies of high-temperature degradation of thermal barrier coatings by molten silicate deposits |
| H. Fu, Q. Peng, J. Guo, B. Liu & W. Wu | 33 | High-pressure synthesis of a nanoscale YB ₁₂ strengthening precipitate in Mg–Y alloys |
| I.S. Yasnikov, A. Vinogradov & Y. Estrin | 37 | Revisiting the Considère criterion from the viewpoint of dislocation theory fundamentals |
| K.Q. Dang, J.P. Simpson & D.E. Spearot | 41 | Phase transformation in monolayer molybdenum disulphide (MoS ₂) under tension predicted by molecular dynamics simulations |
| I.A. Ovid'ko, A.G. Sheinerman & R.Z. Valiev | 45 | Dislocation emission from deformation-distorted grain boundaries in ultrafine-grained materials |
| Y. Chen, R. Hu, H. Kou, T. Zhang & J. Li | 49 | Precipitation of nanosized DO ₂₂ superlattice with high thermal stability in an Ni–Cr–W superalloy |
| J. Milligan, P. Hendrickx, M.M. Tünçay, E.A. Olevsky & M. Brochu | 53 | Modeling residual porosity in thick components consolidated by spark plasma sintering |

(Continued on inside back cover)

INDEXED IN Current Contents, BIOSIS/CAS Selects, Camb. Sci. Abstr., Eng. Ind. Monthly and Author Ind., IBZ, Energy Res. Abstr., Energy Data Base, Metals Abstr., World Alum. Abstr., and the MSCI. Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®

Printed by Polestar Wheatons Ltd, Exeter, UK

ISSN 1359-6462

Available online at www.sciencedirect.com

ScienceDirect



1359-6462(201404)76:C;1-B

Scripta MATERIALIA

(Contents continued from outside back cover)

G. Pia, M. Mascia & F. Delogu	57	Kinetics of nanoporous Au formation by chemical dealloying
D. Zhang, B. Zheng, Y. Zhou, S. Mahajan & E.J. Laverna	61	Prism stacking faults observed contiguous to a {10-12} twin in a Mg-Y alloy
H. Kura, K. Hata, T. Oikawa, M. Takahashi & T. Ogawa	65	Effect of induced uniaxial magnetic anisotropy on ferromagnetic resonance frequency of Fe-Co alloy nanoparticle/polystyrene nanocomposite
J. Jacimovic, X. Mettan, A. Pisoni, R. Gaal, S. Katrych, L. Demko, A. Akrap, L. Forro, H. Berger, P. Bugnon & A. Magrez	69	Enhanced low-temperature thermoelectrical properties of BiTeCl grown by topotactic method
R. Gu, P.P.S. Leung & A.H.W. Ngan	73	Size effect on deformation of duralumin micropillars – A dislocation dynamics study
J.H. Park, J.K. Kim, B.H. Lee, H.S. Seo & K.Y. Kim	77	Effect of Zr addition on intergranular corrosion of low-chromium ferritic stainless steel
D. Scotto D'Antuono, J. Gaies, W. Golunbskie & M.L. Taheri	81	Grain boundary misorientation dependence of β phase precipitation in an Al-Mg alloy
R. Ahmad, J.-H. Ha & I.-H. Song	85	Synthesis of open-cell particle-stabilized Al ₂ O ₃ foam using Al(OH) ₃ particles