

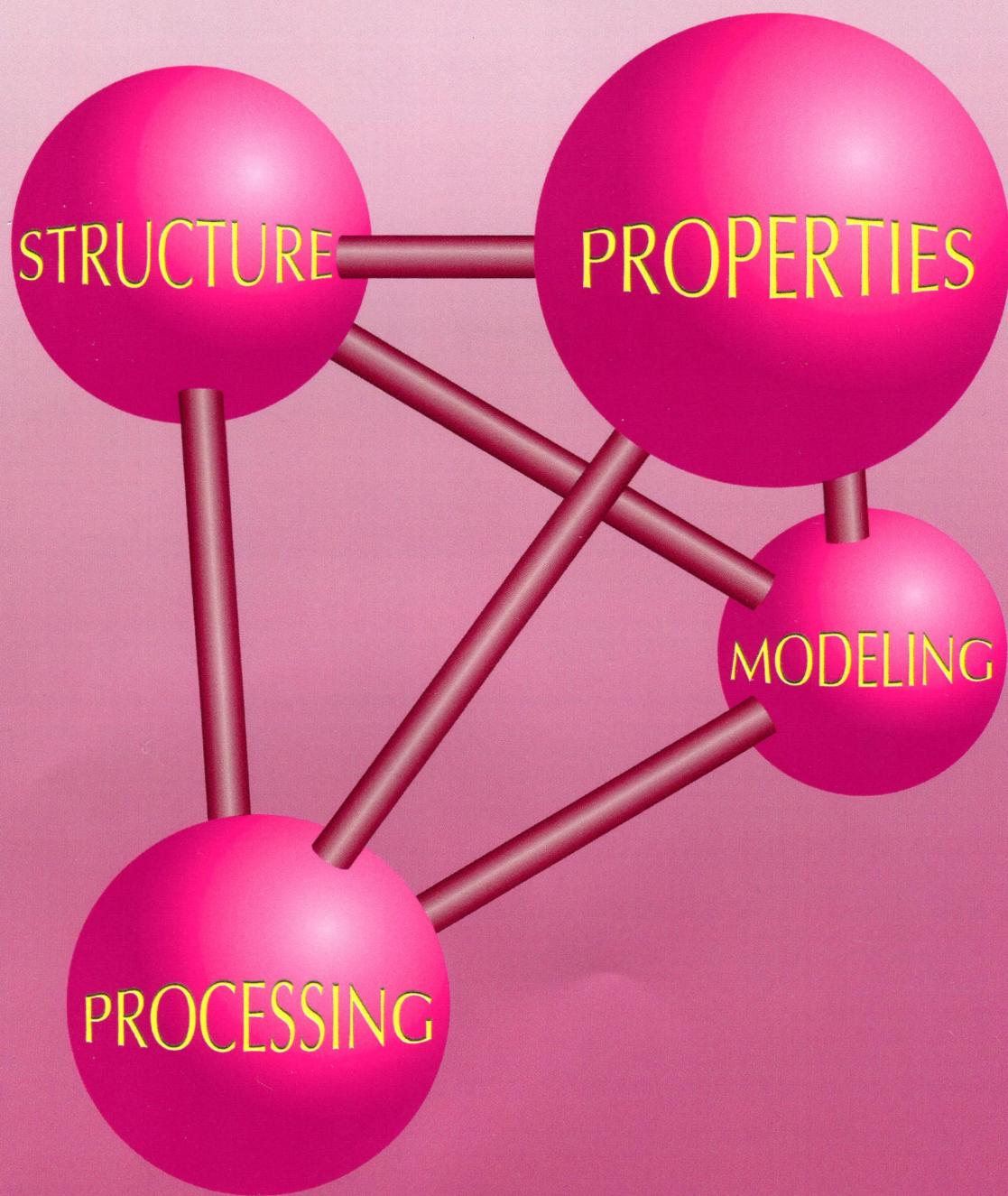


Volume 93, 15 December 2014

ISSN 1359-6462

Scripta MATERIALIA

A LETTERS JOURNAL



Scripta MATERIALIA

Volume 93
(Published 7 October 2014)

CONTENTS

Y. Hu, X. Feng, J. Zhai, T. Wen, T. Lai, S. Song & Z. Song	1	2015 Acta Materialia Gold Medal Award
J.-G. Jung, S.H. Park, H. Yu, Y.M. Kim, Y.-K. Lee & B.S. You	2	2015 Acta Biomaterialia Gold Medal Award
Z. Zhang, N. Duan, B. Wang, Y. Huo, B. Zhang, X. Zhang & F. Ye	4	Superlattice-like Ge ₈ Sb ₉₂ /Ge thin films for high speed and low power consumption phase change memory application
F. Pei, C.L. Briant, H. Kesari, A.F. Bower & E. Chason	8	Improved mechanical properties of Mg–7.6Al–0.4Zn alloy through aging prior to extrusion
C.S. Tiwary, S. Kashyap & K. Chattopadhyay	12	Deformation and crack mechanisms of nanotwinned cadmium telluride under cyclic nanoindentations
Y. Su, S. Tian, H. Yu & L. Yu	16	Kinetics of Sn whisker nucleation using thermally induced stress
J.P. Hadorn, T.T. Sasaki, T. Nakata, T. Ohkubo, S. Kamado & K. Hono	20	Development of alloys with high strength at elevated temperatures by tuning the bimodal microstructure in the Al–Cu–Ni eutectic system
X.S. Wei, W. Xu & K. Xia	24	Effect of pre-compressive treatment on creep behavior of a {0 1 1}-oriented single-crystal Ni-based superalloy
Z.D. Sha, L.C. He, S. Xu, Q.X. Pei, Z.S. Liu, Y.W. Zhang & T.J. Wang	28	Solute clustering and grain boundary segregation in extruded dilute Mg–Gd alloys
G. Bernard-Granger, K. Favier, M. Soulier, C. Navone, M. Boidot, B. Deniau, P. Grondin, J. Leforestier & J. Simon	32	Metastable orthorhombic phases at ambient pressure in mechanically milled pure Ti and Ti–Mg
N. Nepal, R. Goswami, S.B. Qadri, N.A. Mahadik, F.J. Kub & C.R. Eddy Jr.	36	Effect of aspect ratio on the mechanical properties of metallic glasses
T.Q. Phan, I.-F. Lee, L.E. Levine, J.Z. Tischler, Y. Huang, A.G. Fox, T.G. Langdon & M.E. Kassner	40	Thermoelectric properties of an N-type silicon–germanium alloy related to the presence of silica nodules dispersed in the microstructure
	44	Growth of AlN/Pt heterostructures on amorphous substrates at low temperatures via atomic layer epitaxy
	48	X-ray microbeam measurements of long-range internal stresses in commercial-purity aluminum processed by multiple passes of equal-channel angular pressing

(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 Henry Ling Ltd., Dorchester, United Kingdom

ISSN 1359–6462

Available online at www.sciencedirect.com

ScienceDirect



1359-6462(20141215)93:C;1-Y

Scripta MATERIALIA

(Contents continued from outside back cover)

- N. Chawake, L.D. Pinto, A.K. Srivastav,
K. Akkiraju, B.S. Murty & R.S. Kottada 52 On Joule heating during spark plasma sintering of metal powders
- Y. Zhao, I.-C. Choi, M.-Y. Seok, U. Ramamurty,
J.-Y. Suh & J.-i. Jang 56 Hydrogen-induced hardening and softening of Ni–Nb–Zr amorphous alloys:
Dependence on the Zr content
- G.S. Was, Z. Jiao, E. Getto, K. Sun,
A.M. Monterrosa, S.A. Maloy, O. Anderoglu,
B.H. Sencer & M. Hackett 60 Corrigendum to “Emulation of reactor irradiation damage using ion beams”
[Scripta Mater. 88 (2014) 33–36]
- H.Y. Zhang, G.P. Zheng & J.H. Yang 61 Corrigendum to “Computer simulation of the strong surface effects on de-
formation behaviors of metallic glass nanowires” [Scripta Mater. 90–91 (2014)
57–60]