

Philosophical Magazine

First published in 1798

Structure and Properties of Condensed Matter



Taylor & Francis
Taylor & Francis Group

Philosophical Magazine

Contents

Issue 34

Acknowledgements

Thanks to 2012 Reviewers 4175

Part A: Materials Science

Positron annihilation study of ageing precipitation in deformed Fe–Cu–B–N–C
S. Zhang, H. Schut, J. Kohlbrecher, G. Langelaan, E. Brück, S. van der Zwaag and N.H. van Dijk 4182

Parallel three-dimensional Monte Carlo simulations for effects of precipitates and sub-boundaries on abnormal grain growth of Goss grains in Fe–3%Si steel
C.-S. Park, T.-W. Na, J.-K. Kang, B.-J. Lee, C.-H. Han and N.-M. Hwang 4198

Role of heterogeneities in Staebler–Wronski effect
S.C. Agarwal 4213

Sintering behaviour and microstructures of nanostructured ZnO–ZnS core–shell powder by spark plasma sintering
W.H. Nam, Y.S. Lim, W.-S. Seo and J.Y. Lee 4221

Linking high- and low-temperature plasticity in bulk metallic glasses: thermal activation, extreme value statistics and kinetic freezing
P.M. Derlet and R. Maaß 4232

High pressure structural investigation on LaGa
M. Sekar, N.V. Chandra Shekar, S. Chandra, P.Ch. Sahu, R. Babu, A.K. Sinha, A. Upadhyay and M.N. Singh 4264

Surface modification of Makrofol-DE induced by α -particles
M.F. Zaki, A.M. Abdul-Kader, A. Nada and B.A. El-Badry 4276

Changes in valence, coordination and reactivity that occur upon oxidation of fresh metal surfaces
O. Olatunji-Ojo and C.D. Taylor 4286

Issue 35

Part A: Materials Science

Anisotropy in hexagonal close-packed structures: improvements to crystal plasticity approaches applied to magnesium alloy
A.L. Oppedal, H. El Kadiri, C.N. Tomé, S.C. Vogel and M.F. Horstemeyer 4311

Influence of grain boundaries on the deformation resistance: insights from an investigation of deformation kinetics and microstructure of copper after predeformation by ECAP
J. Bach, J.P. Liebig, H.W. Höppel and W. Blum 4331

Grain size effect on twin density in as-deposited nanocrystalline Cu film
F. Wu, Y.T. Zhu and J. Narayan 4355

