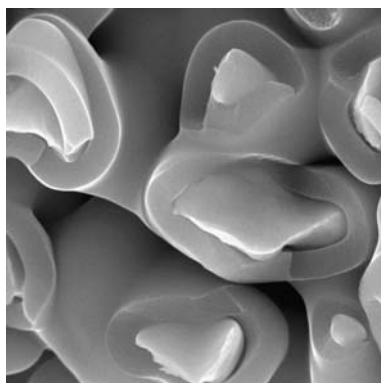




Cover photograph:
H. Störmer et al. p. 797

Editor

Deutsche Gesellschaft
für Materialkunde e. V.

DGM

Managing Editors

M. Rühle
G. Petzow
Max-Planck-Institut für Metall-
forschung, Heisenbergstr. 3
D-70569 Stuttgart, Germany

P. P. Schepp
DGM e. V., Senckenberganlage 10
D-60325 Frankfurt, Germany

Editorial Office

Viola Küstner
R. W. M. Segar
Max-Planck-Institut für Metallforschung
Heisenbergstr. 3
D-70569 Stuttgart, Germany
Tel.: +49 711 689 34 17
Fax: +49 711 689 36 53
E-mail: ijmr@mf.mpg.de

All correspondence concerning papers un-
der review or already in production should
be addressed to the **Editorial Office**.

Guest Editor:

Joachim Bill
with special thanks to:
Melanie Henschke

HANSER

Carl Hanser Verlag GmbH & Co. KG
D-81631 Munich, Germany
<http://www.hanser.de>
E-mail: info@hanser.de
Distribution: 0 89/9 98 30-1 02
Advertising: 0 89/9 98 30-2 15



J. Riethmueller, G. Dehm, E. E. Affeldt, E. Arzt Microstructure and mechanical behavior of Pt-modified NiAl diffusion coatings	689
H.-J. Kleebe, G. Gregori, F. Babonneau, Y. D. Blum, D. B. MacQueen, S. Masse Evolution of C-rich SiOC ceramics Part I. Characterization by integral spectroscopic techniques: Solid-state NMR and Raman spectroscopy	699
G. Gregori, H.-J. Kleebe, Y. D. Blum, F. Babonneau Evolution of C-rich SiOC ceramics Part II. Characterization by high lateral resolution techniques: electron energy-loss spectroscopy, high-resolution TEM and energy-filtered TEM	710
A. Müller, P. Gerstel, N. Bunjes, F. Berger, W. Sigle, K. Müller, M. Weinmann Nanostructured SiC/BN/C ceramics derived from mixtures of B ₃ N ₃ H ₆ and [HSi(Me)C≡C] _n	721
J. A. Golczewski Thermodynamic analysis of structural transformations induced by annealing of amorphous Si–C–N ceramics derived from polymer precursors	729
A. Pisch, J. Wang, J.-L. Jorda Thermodynamic modelling of the Ce–Ni system	737
H. J. Seifert, Pankaj Nerikar, Hans Leo Lukas Thermodynamic assessment of the Ce–O system in solid state from 60 to 67 mol.% O	744
A. Leineweber, J. Aufrecht, E. J. Mittemeijer Phase transformations of iron nitrides at low temperatures (< 700 K) – application of mechanical mixtures of powders of nitrides and iron . . .	753
L. Zou, M. De Guire, R. Wang Effect of organic self-assembled monolayers on the deposition and adhesion of hydroxyapatite coatings on titanium	760
Wenqing Zhang Reconstruction and structural transition at metal/diamond interfaces. . .	768



P. Šajgalík, M. Hnatko, Š. Lojanová, Z. Lenčėš, H. Pálková, J. Dusza Microstructure, hardness, and fracture toughness evolution of hot-pressed SiC/Si ₃ N ₄ nano/micro composite after high-temperature treatment	772
G. Rixecker, K. Biswas High-temperature plasticity of SiC sintered with Lu ₂ O ₃ –AlN additives .	778
P. Majewski Interaction of functionalised surfaces on silica with dissolved metal cations in aqueous solutions	784
M. V. Rao, S. Sturm, F. Phillipp, M. Zinkevich XRD and TEM study of NiO–LSGM reactivity	789
H. Störmer, E. Ivers-Tiffée, C. Schnitter, D. Gerthsen Microstructure and dielectric properties of nanoscale oxide layers on sintered capacitor-grade niobium and V-doped niobium powder compacts	794

T. S. L. Narasimhan, D. Kath, E. Wessel, T. Markus, K. Hilpert Knudsen effusion mass spectrometric studies of the Al–Ni system: Thermodynamic properties over {AlNi + Al ₃ Ni ₂ } and {Al ₃ Ni ₂ + Al ₃ Ni}	802
Y. Qiu, P. Gerstel, L. Jiang, P. Lipowsky, L. P. Bauermann, J. Bill Aqueous solution deposition of indium hydroxide and indium oxide columnar type thin films.	808
W. A. Oates, L. Bencze, T. Markus, K. Hilpert Thermodynamic properties of B2-AlFeNi alloys: modelling of the B2-AlFe and B2-AlNi phases	812

Regular Articles

H. Schmidt, R. E. Fotsing, G. Borchardt, C. Schmalzried, R. Telle Kinetics of precipitate formation in (Ti _x W _y Cr _z)B ₂ solid solutions: influence of Cr concentration and Co impurities.	821
N. Dewobroto, N. Bozzolo, P. Barberis, F. Wagner On the mechanisms governing the texture and microstructure evolution during static recrystallization and grain growth of low alloyed zirconium sheets (Zr702)	826
A. K. Sengupta, R. K. Bhagat, A. Laik, G. B. Kale, T. Jarvis, S. Majumdar, H. S. Kamath Out-of-pile chemical compatibility of Pb–Bi eutectic alloy with Graphite	834
M. U. Farooq, U. Klement, G. Nolze Microstructural characterisation of a Co–Cr–Mo laser clad applied on railway wheels.	838
C. Qiu, S. M. Opalka, G. B. Olson, D. L. Anton The Na–H system: from first-principles calculations to thermodynamic modeling.	845

Notifications

Personal	854
Conferences.	856
Imprint	856

Editorial

Dear Reader,

Starting with the April issue (04/06) the title and subtitle of our journal have been exchanged. The name of our journal is now

International Journal of MATERIALS RESEARCH Zeitschrift für METALLKUNDE

We believe this change will increase the international visibility of our journal and we hope that this alteration will be supported by you. The new title should also indicate that it is a journal which covers all classes of materials and the research done with them. All articles will be published in the English language.

The citation of the journal (formerly Z. Metallkd.) will now be

Int. J. Mat. Res.

Furthermore, the submission, reviewing and editing will be handled by the Editorial Manager system (<https://www.editorialmanager.com/ijmr/>).

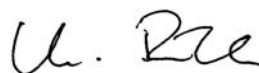
Of course, the volume-numbering of the journal will be contiguous with the numbers of Z. Metallkd.: in 2006 it will be Vol 97.

The journal has also been available electronically in full-text since January 2006 at www.ijmr.de.

We are looking forward to a bright future for the International Journal of MATERIALS RESEARCH.

On behalf of the Editorial Board

For Carl Hanser Verlag



Manfred Rühle



Wolfgang Beisler