

Journal of Metamorphic Mineral Sciences



MINERALOGICAL MAGAZINE

CONTENTS

LETTER

- ZHONGWU WANG AND T. YAGI:
Incorporation of ferric iron in CaSiO_3 perovskite at high pressure 719
- S. A. T. REDFERN:
Equilibrium and kinetic properties of minerals 581
- M. C. WARREN, G. J. ACKLAND, B. B. KARKI AND S. J. CLARK:
Phase transitions in silicate perovskites from first principles 585
- F. AZOUGH, R. FREER, K. WRIGHT AND R. JACKSON:
A computer simulation study of point defects in diopside
and the self-diffusion of Mg and Ca by a vacancy mechanism 599
- S. A. T. REDFERN, K. S. KNIGHT, C. M. B. HENDERSON AND B. J. WOOD:
Fe-Mn cation ordering in fayalite—tephroite ($\text{Fe,Mn}_{x-1}\text{SiO}_3$)
olivines: a neutron diffraction study 607
- L. KERSCHHOFFER, C. DUPAS, M. LIU, T. G. SHARP, W. B. DURHAM AND D. C.
RUBIE:
Polymorphic transformations between olivine, wadsleyite and
ringwoodite: mechanisms of intracrystalline nucleation and the
role of elastic strain 617
- S. A. HAYWARD, E. K. H. SALJE AND J. CHROSCHE:
Local fluctuations in feldspar frameworks 639
- H. J. BRAY, S. A. T. REDFERN AND S. M. CLARK:
The kinetics of dehydration in Ca-montmorillonite: an *in situ*
X-ray diffraction study 647
- N. T. SKIPPER:
Computer simulation of aqueous pore fluids in 2:1 clay minerals 657

continued on back cover

October 1998

Vol. 62, No. 5

PUBLISHED BY THE MINERALOGICAL SOCIETY
41 QUEEN'S GATE LONDON SW7 5HR

MINERALOGICAL MAGAZINE

CONTENTS CONTD.

- M. J. GILLAN, P. J. D. LIIDAN, L. N. KANTOROVICH AND S. P. BATES:
Molecular processes on oxide surfaces studied by first-principles
calculations 669
- J. C. GREENWOOD:
Barian-titanian micas from Ilha da Trindade, South Atlantic 687
- M. GAETA:
Petrogenetic implications of Ba-sanidine in the Lionato Tuff (Colli
Albani Volcanic District, Central Italy) 697
- SATOSHI MATSUBARA, RITSURO MIYAWAKI, AKIRA KATO, KAZUMI YOKOYAMA AND
AKIYOSHI OKAMOTO:
Okayamalite, $\text{Ca}_2\text{B}_2\text{SiO}_7$, a new mineral, boron analogue of
gehlenite 703
- J. BETTERTON, D. I. GREEN, C. JEWSON, J. SPRATT AND P. TANDY:
The composition and structure of jeanbandyite and natanite 707
- J. A. MANDARINO AND J. D. GRICE:
New minerals recently approved by the Commission on New
Minerals and Mineral Names, International Mineralogical
Association 713
- BOOK REVIEWS 725

