

## SCOPE OF THE JOURNAL

*Mineralogical Magazine* is an international journal of mineral sciences, published six times a year, which covers the fields of mineralogy, crystallography, geochemistry, petrology, environmental geology and economic geology. The journal has been published continuously since the founding of the Society in 1876 and is a leading journal in its field. As well as research papers the journal also includes book reviews.

## SUBMISSION OF MANUSCRIPTS

Authors wishing to submit a paper to *Mineralogical Magazine* should first consult the Society's Notes for Authors Submitting Papers to the *Mineralogical Magazine* which can be found on the web site at <https://www.cambridge.org/MGM>. All manuscripts are to be submitted online at <http://www.editorialmanager.com/minmag>

All authors are allowed, free of charge, an e-print of their papers published in the journal.

## JOIN THE MINERALOGICAL SOCIETY TODAY

If you are a regular reader of *Mineralogical Magazine* consider joining the Society and receiving your own copy six times a year at very modest cost. Membership currently starts at £55 per annum. For this, you will receive bi-monthly copies of *Elements*, our international membership magazine (in full colour) on mineralogy, geochemistry and petrology as well as online access to *Mineralogical Magazine*, *Clay Minerals* and *Elements*. You may also opt to pay an additional premium in order to continue receiving paper copies of our journals. Full details on how to join the Society and an application form can be found on the Society's web site at [www.minersoc.org](http://www.minersoc.org). Membership of the Society introduces you to a vibrant community of those interested in the mineral sciences. Through membership of one or more of the Society's eight special interest groups you can take an active part in the Society's numerous scientific meetings and conferences as described on the website.

## MINERALOGICAL SOCIETY JOURNALS

### **Mineralogical Magazine**

International journal of mineral sciences which covers the fields of mineralogy, crystallography, geochemistry, petrology, environmental geology and economic geology. This journal is available primarily as an e-journal.

### **Clay Minerals**

International journal of clay minerals and fine particle science, published four times a year, including research papers about clays, clay minerals and related materials, natural or synthetic. The journal includes papers on Earth processes, soil science, geology/mineralogy, chemistry/material science, colloid/surface science and applied science and technology. The journal is available primarily as an e-journal.

## COPYRIGHT

For both the paper and electronic versions, copyright of all papers accepted shall be assigned to The Mineralogical Society before publication, except where Crown Copyright is reserved.

Typeset by Nova Techset Private Limited, Bengaluru and Chennai, India

Printed by Henry Ling Ltd., Dorchester, Dorset, UK

Published by Cambridge University Press, Shaftesbury Road, Cambridge, UK

YASUYUKI BANNO, MICHIAKI BUNNO and KATSUHIRO TSUKIMURA: A reinvestigation of holotype wadalite from Tadano, Fukushima Prefecture, Japan	1023
IGOR V. PEKOV, NATALIA V. ZUBKOVA, DMITRY A. KSENOFONTOV, NIKITA V. CHUKANOV, VASILII O. YAPASKURT, OKSANA V. KOROTCHENKOVA, ILYA I. CHAIKOVSKIY, VLADIMIR M. BOCHAROV, SERGEY N. BRITVIN and DMITRY YU. PUSHCHAROVSKY: Redefinition of satimolite	1033
DANIEL ATENCIO, MARCELO B. ANDRADE, LUCA BINDI, PAOLA BONAZZI, MATTEO ZOPPI, CHRIS J. STANLEY and ROY KRISTIANSEN: Kenoplumbomicrolite, $(\text{Pb}, \square)_2\text{Ta}_2\text{O}_6[\square, (\text{OH}), \text{O}]$ , a new mineral from Ploskaya, Kola Peninsula, Russia	1049
ELENA S. ZHITOVA, OLEG I. SIDRA, DMITRY I. BELAKOVSKY, VLADIMIR V. SHILOVSKIKH, ANTON A. NUZHDAEV and REZEDA M. ISMAGILOVA: Ammoniovoltaite, $(\text{NH}_4)_2\text{Fe}_5^{2+}\text{Fe}_3^{3+}\text{Al}(\text{SO}_4)_{12}(\text{H}_2\text{O})_{18}$ , a new mineral from the Severo-Kambalny geothermal field, Kamchatka, Russia	1057
OLEG I. SIDRA, EVGENY V. NAZARCHUK, EVGENIYA A. LUKINA, ANATOLY N. ZAITSEV and VLADIMIR V. SHILOVSKIKH: Belousovite, $\text{KZn}(\text{SO}_4)\text{Cl}$ , a new sulfate mineral from the Tolbachik volcano with apophyllite sheet-topology	1079
ANTHONY R. KAMPE, JAKUB PLÁŠIL, ANATOLY V. KASATKIN, JOE MARTY and JIŘÍ ČEJKA: Markeyite, a new calcium uranyl carbonate mineral from the Markey mine, San Juan County, Utah, USA	1089
FRANK C. HAWTHORNE: Long-range and short-range cation order in the crystal structures of carlfrancisite and mcgovernite	1101
ELIN TOLLEFSEN, GABRIELLE STOCKMANN, ALASDAIR SKELTON, CARL-MAGNUS MÖRTH, CHRISTOPHE DUPRAZ and ERIK STURKELL: Chemical controls on ikaite formation	1119
HENRIK FRIIS: Discreditation of tombarthite-(Y)	1131
LUCA BINDI, FRANK N. KEUTSCH and GIOVANNI O. LEPORE: Structural and chemical study of weishanite, $(\text{Au}, \text{Ag}, \text{Hg})$ , from the Keystone mine, Colorado, USA	1141
SYLVIA E. BERG, VALENTIN R. TROLL, CHRIS HARRIS, FRANCES M. DEEGAN, MORTEN S. RIISHUUS, STEFFI BURCHARDT and MICHAEL KRUMBHOLZ: Exceptionally high whole-rock $\delta^{18}\text{O}$ values in intra-caldera rhyolites from Northeast Iceland	1147
PAOLO FULIGNATI: Hydrothermal fluid evolution in the 'Botro ai Marmi' quartz-monzonitic intrusion, Campiglia Marittima, Tuscany, Italy. Evidence from a fluid-inclusion investigation	1169
MARIE-LOLA PASCAL, MICHEL FONTEILLES, VÉRONIQUE TOURNIS, BENOÎT BAPTISTE, JEAN-LOUIS ROBERT and JEAN-CLAUDE BOULLIARD: Ba-, Si- and vacancy-rich phlogopites from the talc-bearing sulfide ore deposit of La Creuse, Beaujolais, France	1187
OLEG I. SIDRA, DIANA O. NEKRASOVA, RICK TURNER, ANATOLY N. ZAITSEV, NIKITA V. CHUKANOV, YURY S. POLEKHOVSKY, JOHN SPRATT and MIKE S. RUMSEY: Somersetite, $\text{Pb}_8\text{O}(\text{OH})_4(\text{CO}_3)_5$ , a new complex hydrocerussite-related mineral from the Mendip Hills, England	1211
<i>CNMNC Newsletter 45</i>	
U. HALENIUS, F. HATERT, M. PASERO and S. J. MILLS: New minerals and nomenclature modifications approved in 2018	1225