Mineralogical Magazine (2023), **87**, 512–518
doi:10.1180/mgm.2023.21

CAMBRIDGE UNIVERSITY PRESS

IMA Commission on New Minerals, Nomenclature and Classification (CNMNC)

Newsletter 72

Ferdinando Bosi, (Chairman, CNMNC)[1], Frédéric Hatert, (Vice-Chairman, CNMNC)[2], Marco Pasero, (Vice-Chairman, CNMNC)[3]* and Stuart J. Mills, (Secretary, CNMNC)[4]

[1]Dipartimento di Scienze della Terra, Sapienza Università di Roma, Piazzale Aldo Moro 5, 00185 Roma, Italy – ferdinando.bosi@uniroma1.it; [2]Laboratoire de Minéralogie et de Cristallochimie, Université de Liège, Bâtiment B18, Sart Tilman, 4000 Liège, Belgium – fhatert@uliege.be; [3]Dipartimento di Scienze della Terra, Università di Pisa, Via Santa Maria 53, 56126 Pisa, Italy – marco.pasero@unipi.it; and [4]Geosciences, Museums Victoria, PO Box 666, Melbourne, Victoria 3001, Australia – smills@museum.vic.gov.au

The information given here is provided by the IMA Commission on New Minerals, Nomenclature and Classification for comparative purposes and as a service to mineralogists working on new species.

Each mineral is described in the following format:

Mineral name, if the authors agree on its release prior to the full description appearing in press
Chemical formula (ideal formula)
Mineral symbol
Type locality
Full authorship of proposal
E-mail address of corresponding author
Relationship to other minerals
Crystal system, Space group; Structure determined, yes or no
Unit-cell parameters
Strongest lines in the powder X-ray diffraction pattern
Type specimen repository and specimen number
Citation details for the mineral prior to publication of full description

Citation details concern the fact that this information will be published in the *Mineralogical Magazine* on a routine basis, as well as being added month by month to the Commission's website.

It is still a requirement for the authors to publish a full description of the new mineral.

NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

NEW MINERAL PROPOSALS APPROVED IN FEBRUARY 2023

IMA No. **2019-016a**
Tartarosite
C
T
Within a diamond crystal collected at Ries crater, Nördlingen, Germany
Oliver Tschauner*, Chi Ma, Min Wu and John Tse
*E-mail: oliver.tschauner@unlv.edu
A polymorph of graphite and diamond
Cubic: $I2_13$; structure determined
$a = 2.872(1)$ Å
2.031(100), 1.436(25), 1.172(19), 1.015(4), 0.908(15), 0.829(3)
Type material is deposited in the collections of the Museum für Naturkunde, Invalidenstrasse 43, 10115 Berlin, Germany, accession number 2017-08721
How to cite: Tschauner, O., Ma, C., Wu, M. and Tse, J. (2023) Tartarosite, IMA 2019-016a. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-108**
Beryllocordierite-Na
$NaMg_4(Al_5Be)(AlSi_5O_{18})_2 \cdot 2H_2O$
Bcrd-Na
Szklary granitic pegmatite, Mt. Szklana, near the Szklary village, about 6 km N of the Ząbkowice Śląskie town, Poland (50°39' N, 16°50'E)
Adam Pieczka*, Marcin Stachowicz, Sylwia Zelek-Pogudz, Adam Szuszkiewicz, Michaela Vašinová Galiová, Dagmar Galusková, Petr Gadas, Hana Kaňková, Beata Marciniak-Maliszewska, Krzysztof Nejbert, Jakub Kotowski, Grzegorz

***Author for correspondence:** Marco Pasero, Email: marco.pasero@unipi.it
Cite this article: Bosi F., Hatert F., Pasero M. and Mills S.J. (2023) Newsletter 72. *Mineralogical Magazine* **87**, 512–518. https://doi.org/10.1180/mgm.2023.21

Kaproń, Eligiusz Szełęg, Iwona Korybska-Sadło, Bożena Gołębiowska, Mateusz Sęk, Katarzyna M. Stadnicka and Krzysztof Woźniak
*E-mail: pieczka@agh.edu.pl
Chemically and structurally related to cordierite
Orthorhombic: *Cccm*; structure determined
a = 17.0518(1), b = 9.7892(1), c = 9.30423(9) Å
8.530(83), 8.495(74), 4.080(67), 3.379(100), 3.373(58), 3.136 (72), 3.045(54), 1.690(63)
Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue numbers MMUWr IV8114 (holotype), MMUWr IV8115 and MMUWr IV8116 (cotype)
How to cite: Pieczka, A., Stachowicz, M., Zelek-Pogudz, S., Szuszkiewicz, A., Vašinová Galiová, M., Galusková, D., Gadas, P., Kaňková, H., Marciniak-Maliszewska, B., Nejbert, K., Kotowski, J., Kaproń, G., Szełęg, E., Korybska-Sadło, I., Gołębiowska, B., Sęk, M., Stadnicka, K.M. and Woźniak, K. (2023) Beryllocordierite-Na, IMA 2022-108. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-109**
Beryllosachanbińskiite-Na
$NaMn_4(Al_5Be)(AlSi_5O_{18})_2{\cdot}2H_2O$
Bsnb-Na
Szklary granitic pegmatite, Mt. Szklana, near the Szklary village, about 6 km N of the Ząbkowice Śląskie town, Poland (50°39' N, 16°50'E)
Adam Szuszkiewicz*, Sylwia Zelek-Pogudz, Marcin Stachowicz, Michaela Vašinová Galiová, Dagmar Galusková, Petr Gadas, Hana Kaňková, Beata Marciniak-Maliszewska, Krzysztof Nejbert, Bożena Gołębiowska, Iwona Korybska-Sadło, Mateusz Sęk, Eligiusz Szełęg, Katarzyna M. Stadnicka, Krzysztof Woźniak and Adam Pieczka
*E-mail: adam.szuszkiewicz@uwr.edu.pl
Chemically and structurally related to cordierite
Orthorhombic: *Cccm*; structure determined
a = 17.0641(1), b = 9.8103(2), c = 9.3007(2) Å
4.080(85), 3.380(100), 3.375(65), 3.138(54), 3.046(51), 3.042 (41), 3.036(51), 1.690(31)
Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue number MMUWr IV8026
How to cite: Szuszkiewicz, A., Zelek-Pogudz, S., Stachowicz, M., Vašinová Galiová, M., Galusková, D., Gadas, P., Kaňková, H., Marciniak-Maliszewska, B., Nejbert, K., Gołębiowska, B., Korybska-Sadło, I., Sęk, M., Szełęg, E., Stadnicka, K.M., Woźniak, K. and Pieczka, A. (2023) Beryllosachanbińskiite-Na, IMA 2022-109. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-112**
Holubite
$Ag_3Pb_6(Sb_8Bi_3)S_{24}$
Hlb
In the medieval mine dumps of the Old Bohemian Lode, Kutná Hora Ag-Pb-Zn ore district, ca. 60 km E of Prague, Czech Republic (49°58'29" N, 15°16'09" E)
Richard Pažout*, Jakub Plášil, Michal Dušek, Jiří Sejkora and Zdeněk Dolníček
*E-mail: richard.pazout@vscht.cz
Lillianite group
Monoclinic: $P2_1/n$; structure determined
a = 19.374(4), b = 13.201(3), c = 8.651(2) Å, β = 90.11(2)°
3.471(27), 3.465(33), 3.342(100), 3.300(23), 2.941(37), 2.938 (33), 2.782(22), 2.163(27)
Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 10/2022
How to cite: Pažout, R., Plášil, J., Dušek, M., Sejkora, J. and Dolníček, Z. (2023) Holubite, IMA 2022-112. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-113**
Lazerckerite
$Ag_{3.75}Pb_{4.50}(Sb_{7.75}Bi_4)S_{24}$
Lze
In the medieval mine dumps of the Old Bohemian Lode, Kutná Hora Ag-Pb-Zn ore district, ca. 60 km E of Prague, Czech Republic (49°58'29" N, 15°16'09" E)
Richard Pažout*, Jakub Plášil, Michal Dušek, Jiří Sejkora and Gheorghe Ilinca
*E-mail: richard.pazout@vscht.cz
Lillianite group
Monoclinic: $P2_1/n$; structure determined
a = 13.2083(9), b = 19.4595(8), c = 8.405(1) Å, β = 90.032(7)°
3.408(32), 3.407(34), 3.353(100), 3.004(22), 3.003(25), 2.902 (39), 2.901(37), 2.101(29)
Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 11/2022
How to cite: Pažout, R., Plášil, J., Dušek, M., Sejkora, J. and Ilinca, G. (2023) Lazerckerite, IMA 2022-113. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-114**
Vrančiceite
$Cu_{10}Hg_3S_8$
Vrc
In the 16th Century mine dumps on the Vraneč hill, N of the Vrančice village, Bohemia, Czech Republic (49°37'10.71" N, 14°02'51.69" E)
Jiří Sejkora*, Cristian Biagioni, Pavel Škácha and Daniela Mauro
*E-mail: jiri.sejkora@nm.cz
Chemically related to balkanite, danielsite and gortdrumite
Triclinic: $P\bar{1}$; structure determined
a = 7.9681(2), b = 9.7452(3), c = 10.0710(3) Å, α = 77.759(1), β = 76.990(1), γ = 79.422(1)°
3.354(76), 3.111(68), 3.107(60), 2.878(63), 2.833(100), 2.733 (93), 2.705(76), 2.647(71)
Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 42/2022

https://doi.org/10.1180/mgm.2023.21 Published online by Cambridge University Press

How to cite: Sejkora, J., Biagioni, C., Škácha, P. and Mauro, D. (2023) Vrančiceite, IMA 2022-114. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-115**
Tetrahedrite-(Cd)
$Cu_6(Cu_4Cd_2)Sb_4S_{13}$
Ttr-Cd
S1 vein, 7th and 8th level of the Radětice shaft, about 300 m E of the village Radětice, 5 km SE of Příbram, Bohemia, Czech Republic (49°38'20.44" N, 14°05'13.66" E)
Jiří Sejkora*, Cristian Biagioni, Pavel Škácha, Silvia Musetti, Anatoly V. Kasatkin and Fabrizio Nestola
*E-mail: jiri.sejkora@nm.cz
Tetrahedrite group
Cubic: $I\bar{4}3m$; structure determined
a = 10.504(3) Å
3.714(7), 3.032(100), 2.807(6), 2.626(24), 2.476(5), 1.918(7), 1.857(40), 1.584(21)
Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 43/2022, and the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 20025
How to cite: Sejkora, J., Biagioni, C., Škácha, P., Musetti, S., Kasatkin, A.V. and Nestola, F. (2023) Tetrahedrite-(Cd), IMA 2022-115. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-116**
Arsenoústalečite
$Cu_6Cu_6(As_2Te_2)Se_{13}$
Aúč
Ústaleč mine, located 500 m NE of the village Ústaleč, 15 km W of Horažďovice, Bohemia, Czech Republic
Jiří Sejkora*, Cristian Biagioni, Pavel Škácha, Silvia Musetti and Daniela Mauro
*E-mail: jiri.sejkora@nm.cz
Tetrahedrite group
Cubic: $I\bar{4}3m$; structure determined
a = 10.658(2) Å
3.768(6), 3.077(100), 2.848(10), 2.512(7), 1.946(12), 1.884(52), 1.729(7), 1.608(21)
Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 7/2021, and the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 20026
How to cite: Sejkora, J., Biagioni, C., Škácha, P., Musetti, S. and Mauro, D. (2023) Arsenoústalečite, IMA 2022-116. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-119**
Downsite
$K_2(MoO_3)_3(SO_4)\cdot 4H_2O$
Dwn
Freedom #2 mine, Central Mining Area, about 5.6 km NNE of the town of Marysvale, Piute Co., Utah, USA (38°29'43" N, 112°12'55" W)
Xiangping Gu, Hexiong Yang* and Joe Marty
*E-mail: hyang@arizona.edu
Known synthetic analogue
Monoclinic: $C2/m$; structure determined
a = 17.0556(5), b = 10.7947(3), c = 8.8570(2) Å, β = 112.124(3)°
8.276(85), 7.943(100), 7.273(33), 3.342(53), 3.144(36), 3.018 (44), 2.800(29), 2.204(22)
Type material is deposited in the collections of the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue no. 22727 (holotype), and the RRUFF Project, deposition no. R210048 (cotype)
How to cite: Gu, X., Yang, H. and Marty, J. (2023) Downsite, IMA 2022-119. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-120**
Yuchuanite-(Y)
$Y_2(CO_3)_3\cdot H_2O$
Ych-Y
Yushui deposit, ca. 16 km NE of Meizhou City, Guangdong Province, China (24°25'18" N, 116°11'48" E)
Wei Yao, Peng Liu*, Guowu Li, Ningyue Sun, Wenqiang Yang, Chengyao Jiang, Wei Du, Chao Zhang, Wenlei Song, Nigel J. Cook and Jingwen Mao
*E-mail: pengliu@nwu.edu.cn
Chemically close to tengerite-(Y)
Triclinic: $P\bar{1}$; structure determined
a = 6.2134(3), b = 8.9697(3), c = 19.9045(7) Å, α = 91.062(3), β = 90.398(3), γ = 91.832(3)°
5.391(26), 5.054(52), 4.557(32), 4.116(38), 3.343(100), 2.995 (27), 2.093(29), 2.054(28)
Type material is deposited in the collections of the Geological Museum of China, Yangrou Hutong No. 16, Xisi, Beijing 100031, People's Republic of China, catalogue number M16142
How to cite: Yao, W., Liu, P., Li, G., Sun, N., Yang, W., Jiang, C., Du, W., Zhang, C., Song, W., Cook, N.J. and Mao, J. (2023) Yuchuanite-(Y), IMA 2022-120. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-122**
Manganrockbridgeite
$Mn_2^{2+}Fe_3^{3+}(PO_4)_3(OH)_4(H_2O)$
Mrkb
Hagendorf-Süd pegmatite mine (76 metre level), Hagendorf, Oberpfalz, Bavaria, Germany (49°39'01" N, 12°27'35" E)
Ian E. Grey*, Rupert Hochleitner, Anthony R. Kampf, Stephanie Boer, Colin M. MacRae, John D. Cashion, Christian Rewitzer and William G. Mumme
*E-mail: ian.grey@csiro.au
Rockbridgeite group
Monoclinic: $P2_1/m$; structure determined
a = 5.198(4), b = 16.905(6), c = 7.510(12) Å, β = 110.02(3)°
4.880(61), 4.734(32), 3.638(32), 3.458(71), 3.404(30), 3.209 (100), 2.435(70), 1.596(49)
Type material is deposited in the collections of the Mineralogical State Collection, Theresienstraße 39, 80333 München, Germany, catalogue number MSM-38033
How to cite: Grey, I.E., Hochleitner, R., Kampf, A.R., Boer, S., MacRae, C.M., Cashion, J.D., Rewitzer, C. and Mumme, W.G. (2023) Manganrockbridgeite, IMA 2022-122. CNMNC

https://doi.org/10.1180/mgm.2023.21 Published online by Cambridge University Press

Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-123**
Ebnerite
$(NH_4)Zn(PO_4)$
Ebr
Rowley mine (125 foot level), ca. 20 km NW of Theba, Maricopa Co., Arizona, USA (33°02'57" N, 113°01'49.59" W)
Anthony R. Kampf*, Xiangping Gu, Hexiong Yang and Joe Marty
*E-mail: akampf@nhm.org
Known synthetic analogue
Hexagonal: $P6_3$; structure determined
$a = 10.6705(2)$, $c = 8.7140(2)$ Å
6.35(50), 4.629(84), 4.364(68), 4.094(52), 3.179(100), 2.673(78), 2.239(45), 1.715(39)
Cotype material is deposited in the collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76275 and 76276, the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue no. 22729, and the RRUFF Project, deposition no. R210032
How to cite: Kampf, A.R., Gu, X., Yang, H. and Marty, J. (2023) Ebnerite, IMA 2022-123. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-124**
Guangyuanite
$Pb_3Cl_3(Se^{4+}O_3)(OH)$
Gyn
El Dragón mine, Antonio Quijarro Province, Potosí Department, Bolivia (19°49'15" S, 65°55'00" W)
Hexiong Yang*, Xiangping Gu, James A. McGlasson and Ronald B. Gibbs
*E-mail: hyang@arizona.edu
New structure type
Orthorhombic: *Pnma*; structure determined
$a = 11.0003(5)$, $b = 10.6460(5)$, $c = 7.7902(3)$ Å
5.489(64), 4.150(62), 3.235(84), 3.178(83), 3.149(100), 2.787(48), 2.523(71), 1.957(48)
Type material is deposited in the collections of the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue no. 22714 (holotype), and the RRUFF Project, deposition no. R210013 (cotype)
How to cite: Yang, H., Gu, X., McGlasson, J.A. and Gibbs, R.B. (2023) Guangyuanite, IMA 2022-124. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-128**
Lasmanisite
$Ag_{12}Pb_{13}Mn_{11}Sb_{44}S_{96}$
Lmn
Bear Basin Mines, Buena Vista Mining District, King Co., Washington, USA (47°38'22" N, 121°29'10" W)
Dan Topa*, Berthold Stoeger, Frank Keutsch, Uwe Kolitsch and Chris Stanley
*E-mail: dan.topa@nhm-wien.ac.at
Structurally related to quatrandorite
Orthorhombic: $P2_12_12_1$; structure determined
$a = 13.0507(7)$, $b = 16.2463(9)$, $c = 19.3650(10)$ Å
3.33(78), 3.32(68), 2.934(53), 2.838(100), 2.053(41), 2.031(38), 2.000(37), 1.734(34)
Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum, Burgring 7, 1010 Wien, Austria, catalogue number O 2510
How to cite: Topa, D., Stoeger, B., Keutsch, F., Kolitsch, U. and Stanley, C. (2023) Lasmanisite, IMA 2022-128. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

NEW MINERAL PROPOSALS APPROVED IN MARCH 2023

IMA No. **2022-129**
Manganoschafarzikite
$MnSb_2O_4$
Msfz
Långban deposit, Filipstad district, Värmland, Sweden (59° 51'19" N, 14°15'53" E, 215 m a.s.l.)
Jörgen Langhof*, Henrik Friis, Dan Holtstam, Andreas Karlsson and Muriel Erambert
*E-mail: jorgen.langhof@nrm.se
The Mn^{2+} analogue of schafarzikite
Tetragonal: $P4_2/mbc$; structure determined
$a = 8.65159(8)$, $c = 5.97175(8)$ Å
4.30(22), 3.24(100), 2.72(26), 2.45(20), 1.976(28), 1.767(17), 1.680(18), 1.441(15)
Type material is deposited in the collections of the Department of Geosciences, Swedish Museum of Natural History, Box 50007, SE-10405 Stockholm, Sweden, collection number GEO-NRM #19339699, and the Natural History Museum, University of Oslo, PO 1172, Blindern, 0318 Oslo, Norway, collection number KNR 44410
How to cite: Langhof, J., Friis, H., Holtstam, D., Karlsson, A. and Erambert, M. (2023) Manganoschafarzikite, IMA 2022-129. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-130**
Natromolybdite
$Na_2MoO_4{\cdot}2H_2O$
Nmyb
Arsenatnaya fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka peninsula, Far-Eastern Region, Russia (55°41' N, 160°14' E, 1200 m a.s.l.)
Igor V. Pekov*, Sergey N. Britvin, Natalia N. Koshlyakova, Atali A. Agakhanov, Dmitry I. Belakovskiy, Nikita V. Chukanov, Dmitry A. Ksenofontov and Pavel S. Zhegunov
*E-mail: igorpekov@mail.ru
Known synthetic analogue
Orthorhombic: *Pbca*
$a = 8.483(1)$, $b = 10.577(2)$, $c = 13.842(2)$ Å
6.92(100), 4.243(20), 4.206(32), 3.618(31), 3.310(31), 3.169(49), 3.067(21), 2.987(30)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5948/1

https://doi.org/10.1180/mgm.2023.21 Published online by Cambridge University Press

How to cite: Pekov, I.V., Britvin, S.N., Koshlyakova, N.N., Agakhanov, A.A., Belakovskiy, D.I., Chukanov, N.V., Ksenofontov, D.A. and Zhegunov, P.S. (2023) Natromolybdite, IMA 2022-130. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-132**
Letnikovite-(Ce)
$(Na\square)Ca_2Ce_2[Si_7O_{17}(OH)]F_4(H_2O)_4$
Lkv-Ce
Moraine of Darai-Pioz glacier, Alai mountain range, Tien-Shan, Rashtskiy (formerly Garmskiy) district, Tajikistan (39°30' N, 70°40' E)
Atali A. Agakhanov*, Elena Sokolova, Fernando Cámara, Vladimir Y. Karpenko, Frank C. Hawthorne, Leonid A. Pautov, Anatoly V. Kasatkin, Igor V. Pekov and Vitaliya A. Agakhanova
*E-mail: atali99@mail.ru
New structure type
Monoclinic: *C*2/*m*; structure determined
a = 7.4726(3), *b* = 22.9196(9), *c* = 13.9360(6) Å, β = 105.550(5)°
3.527(67), 3.357(54), 3.221(58), 3.140(100), 3.048(60), 2.896(65), 2.242(50), 1.882(56)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5924/1
How to cite: Agakhanov, A.A., Sokolova, E., Cámara, F., Karpenko, V.Y., Hawthorne, F.C., Pautov, L.A., Kasatkin, A.V., Pekov, I.V. and Agakhanova, V.A. (2023) Letnikovite-(Ce), IMA 2022-132. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-133**
Kalyuzhnyite-(Ce)
$NaKCaSrCeTi(Si_8O_{21})OF(H_2O)_3$
Kalu-Ce
Moraine of Darai-Pioz glacier, Alai mountain range, Tien-Shan, Rashtskiy (formerly Garmskiy) district, Tajikistan (39°30' N, 70°40' E)
Atali A. Agakhanov*, Elena Sokolova, Vladimir Y. Karpenko, Frank C. Hawthorne, Leonid A. Pautov, Anatoly V. Kasatkin, Igor V. Pekov and Vitaliya A. Agakhanova
*E-mail: atali99@mail.ru
New structure type
Monoclinic: *P*2/*c*; structure determined
a = 18.647(4), *b* = 11.214(2), *c* = 14.642(3) Å, β = 129.55(3)°
3.978(24), 3.423(22), 3.332(33), 3.026(100), 2.963(40), 2.895(24), 2.591(28), 2.344(33)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5923/1
How to cite: Agakhanov, A.A., Sokolova, E., Karpenko, V.Y., Hawthorne, F.C., Pautov, L.A., Kasatkin, A.V., Pekov, I.V. and Agakhanova, V.A. (2023) Kalyuzhnyite-(Ce), IMA 2022-133. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-134**
Vielleaureite-(Ce)
$Mn^{2+}Ce(MgAlMn^{2+})(Si_2O_7)(SiO_4)F(OH)$
Vlr-Ce
Coustou mine, Aure valley, near the Vielle-Aure village, Hautes Pyrénées, France
Alain Ragu, Luca Bindi, Paola Bonazzi and Christian Chopin*
*E-mail: chopin@geologie.ens.fr
Epidote supergroup
Monoclinic: $P2_1/m$; structure determined
a = 8.824(1), *b* = 5.7131(9), *c* = 10.003(2) Å, β = 112.823(6)°
5.18(25), 4.67(20), 3.485(35), 2.881(100), 2.858(40), 2.708(25), 2.693(30), 2.600(55)
Type material is deposited in the collections of the Musée de Minéralogie, Ecole des Mines de Paris, 60 Boulevard Saint-Michel, 75006 Paris, France, catalogue number ENSMP 83943 (holotype), and the Museum National d'Histoire Naturelle, 61 rue Buffon, 75005 Paris, France, catalogue number MNHN_MIN_223.001 (cotype)
How to cite: Ragu, A., Bindi, L., Bonazzi, P. and Chopin, C. (2023) Vielleaureite-(Ce), IMA 2022-134. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-135**
Anorthoyttrialite-(Y)
$Y_4(SiO_4)(Si_3O_{10})$
Aytt-Y
Stetind pegmatite, Tysfjord, Nordland, Norway (68°10'15.20" N, 16°33'10.65" E)
Thomas Malcherek*, Jochen Schlüter and Tomas Husdal
*E-mail: thomas.malcherek@uni-hamburg.de
Known synthetic analogue
Triclinic: $P\bar{1}$; structure determined
a = 6.6107(4), *b* = 6.7139(3), *c* = 12.2034(9) Å, α = 94.819(3), β = 90.583(3), γ = 91.742(3)°
3.053(100), 2.935(41), 2.987(34), 2.752(26), 2.229(26), 2.132(50), 1.829(69), 1.806(29)
Type material is deposited in the collections of the Museum of Nature – Mineralogy, Grindelallee 48, 20146 Hamburg, Germany, catalogue number no-007
How to cite: Malcherek, T., Schlüter, J. and Husdal, T. (2023) Anorthoyttrialite-(Y), IMA 2022-135. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-137**
Montpelvouxite
$AgPb_{16}Sb_{27}As_{18}S_{84}$
Mpv
Jas Roux, La Chapelle-en-Valgaudemar, Gap, Hautes-Alpes, Provence-Alpes-Côte d'Azur, France (44°44'45" N, 6°19'18" E)
Dan Topa*, Berthold Stoeger, Uwe Kolitsch and Chris Stanley
*E-mail: dan.topa@nhm-wien.ac.at
Related to zinkenite
Triclinic: $P\bar{1}$; structure determined
a = 8.5563(4), *b* = 21.868(1), *c* = 22.107(1) Å, α = 119.106(2), β = 100.079(2), γ = 91.000(2)°
10.94(26), 10.93(32), 10.88(18), 3.41(100), 3.39(92), 3.34(22), 2.798(23), 2.139(44)
Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches

https://doi.org/10.1180/mgm.2023.21 Published online by Cambridge University Press

Museum, Burgring 7, 1010 Vienna, Austria, catalogue number O 2596
How to cite: Topa, D., Stoeger, B., Kolitsch, U. and Stanley, C. (2023) Montpelvouxite, IMA 2022-137. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-138**
Jimkrieghite
$Ca(C_2H_3O_3)_2$
Jkg
Pusch Ridge, Santa Catalina Mountains, north of Tucson, Pima Co., Arizona, USA (32°21'42" N, 110°57'30" W, 975 m a.s.l.)
Hexiong Yang*, Xiangping Gu, Warren Lazar, Ronald B. Gibbs and Robert T. Downs
*E-mail: hyang@arizona.edu
Chemically related to lazaraskeite and stanevansite
Orthorhombic: *Pbca*; structure determined
$a = 9.0172(1)$, $b = 9.7076(1)$, $c = 15.3554(2)$ Å
6.063(89), 5.839(41), 4.851(39), 4.115(27), 3.883(31), 3.605(50), 3.191(100), 2.125(23)
Type material is deposited in the collections of the University of Arizona Alfie Norville Gem and Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue no. 22728 (holotype), and the RRUFF Project, deposition no. R220012 (cotype)
How to cite: Yang, H., Gu, X., Lazar, W., Gibbs, R.B. and Downs, R.T. (2023) Jimkrieghite, IMA 2022-138. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-139**
Heflikite
$Ca_2(Al_2Sc)(Si_2O_7)(SiO_4)O(OH)$
Hfk
In a serpentinite quarry, 1 km west of the Jordanów Śląski village, near Sobótka, Lower Silesia, Poland (50°52'16" N, 16°50'18" E)
Adam Pieczka*, Roy Kristiansen, Marcin Stachowicz, Magdalena Dumańska-Słowik, Bożena Gołębiowska, Mateusz Sęk, Krzysztof Nejbert, Jakub Kotowski, Beata Marciniak-Maliszewska, Adam Szuszkiewicz, Eligiusz Szełęg and Krzysztof Woźniak
*E-mail: pieczka@agh.edu.pl
Epidote supergroup
Monoclinic: $P2_1/m$; structure determined
$a = 8.9383(9)$, $b = 5.6830(5)$, $c = 10.190(1)$ Å, $\beta = 115.4(1)°$
3.513(41), 2.933(19), 2.913(100), 2.841(41), 2.706(31), 2.681(23), 2.617(46), 2.412(22)
Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue number MMUWr IV8120 (holotype), and the Natural History Museum, University of Oslo, Box 1172, Blindern, Oslo, Norway, catalogue number KNR 44407 (cotype)
How to cite: Pieczka, A., Kristiansen, R., Stachowicz, M., Dumańska-Słowik, M., Gołębiowska, B., Sęk, M., Nejbert, K., Kotowski, J., Marciniak-Maliszewska, B., Szuszkiewicz, A., Szełęg, E. and Woźniak, K. (2023) Heflikite, IMA 2022-139. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-140**
Sardashtite
$Ag_9Cu_{2.5}Pb_{41}Sb_{36.5}As_7S_{112}$
Sard
Barika gold deposit, 17 km east of the city of Sardasht, Sardasht County, West Azerbaijan Province, Iran
Dan Topa*, Berthold Stoeger, Uwe Kolitsch, Frank Keutsch and Chris Stanley
*E-mail: dan.topa@nhm-wien.ac.at
Related to owyheeite
Monoclinic: $P2_1/n$; structure determined
$a = 8.2038(3)$, $b = 27.1002(10)$, $c = 22.7885(9)$ Å, $\beta = 90.185(1)°$
3.45(100), 3.23(89), 3.20(62), 2.893(53), 2.885(49), 2.822(36), 2.815(59), 2.051(87)
Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum, Burgring 7, 1010 Vienna, Austria, catalogue number O 2597
How to cite: Topa, D., Stoeger, B., Kolitsch, U., Keutsch, F. and Stanley, C. (2023) Sardashtite, IMA 2022-140. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-141**
Hochleitnerite
$Mn_2Ti_3(PO_4)_4O_2(H_2O)_2{\cdot}14H_2O$
Hln
Hagendorf Süd pegmatite mine (64 to 76 m level), Oberpfalz, northeast Bavaria, Germany (49°39'01" N, 12°27'35" E)
Ian E. Grey*, Erich Keck, Anthony R. Kampf, Colin M. MacRae, Robert W. Gable, William G. Mumme, Alexander M. Glenn and Cameron Davidson
*E-mail: ian.grey@csiro.au
Isostructural with benyacarite and pleysteinite
Orthorhombic: *Pbca*; structure determined
$a = 10.5513(3)$, $b = 20.6855(7)$, $c = 12.4575(4)$ Å
10.32(51), 7.51(55), 6.24(72), 5.23(43), 3.747(52), 3.141(100), 2.881(59), 2.619(60)
Type material is deposited in the collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 76277
How to cite: Grey, I.E., Keck, E., Kampf, A.R., MacRae, C.M., Gable, R.W., Mumme, W.G., Glenn, A.M. and Davidson, C. (2023) Hochleitnerite, IMA 2022-141. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-142**
Wenlanzhangite-(Y)
$Y_2V_2^{3+}V_2^{4+}(SiO_4)_2O_4(OH)_4$
Wlz-Y
Yushui deposit, ca. 16 km northeast of Meizhou City, Guangdong Province, China (24°25'18" N, 116°11'48" E)
Peng Liu, Guowu Li*, Ningyue Sun, Wei Yao, Hong Yu, Wenqiang Yang and Nigel J. Cook
*E-mail: liguowu@cugb.edu.cn
Chemically and structurally related to jingwenite-(Y)
Triclinic: $P\bar{1}$; structure determined
$a = 5.9632(7)$, $b = 9.599(1)$, $c = 9.9170(9)$ Å, $\alpha = 90.033(8)$, $\beta = 98.595(9)$, $\gamma = 90.003(9)°$

9.806(65), 5.024(63), 4.799(57), 4.310(64), 2.702(100), 2.701 (61), 2.611(84), 2.610(89)
Type material is deposited in the collections of the Geological Museum of China, Yangrou Hutong No. 16, Xisi, Beijing 100031, People's Republic of China, catalogue number GMCTM 2202
How to cite: Liu, P., Li, G., Sun, N., Yao, W., Yu, H., Yang, W. and Cook, N.J. (2023) Wenlanzhangite-(Y), IMA 2022-142. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-143**
Škáchaite
$CaCo(CO_3)_2$
Škác
Hydrothermal vein B117, between fifth and sixth level of the shaft No. 6 – Brod, near Příbram, Příbram ore district, Bohemia, Czech Republic (49°40'05" N, 14°01'14" E)
Jiří Sejkora*, Jakub Plášil, Zdeněk Dolníček and Radek Škoda
*E-mail: jiri.sejkora@nm.cz
Dolomite group
Trigonal: $R\bar{3}$; structure determined
$a = 4.818(2)$, $c = 16.093(7)$ Å
3.704(13), 2.896(100), 2.409(15), 2.197(11), 2.019(17), 1.812 (19), 1.792(16), 1.391(9)
Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Prague 9, Czech Republic, catalogue number P1P 52/2022
How to cite: Sejkora, J., Plášil, J., Dolníček, Z. and Škoda, R. (2023) Škáchaite, IMA 2022-143. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

IMA No. **2022-144**
Interliveingite
$AgPb_{18}As_{25}S_{56}$
Iliv
Lengenbach quarry, Binntal, Wallis, Switzerland (46°21'54" N, 8°13'15" E)
Dan Topa*, Berthold Stoeger, Frank Keutsch, Uwe Kolitsch and Chris Stanley
*E-mail: dan.topa@nhm-wien.ac.at
Liveingite group
Monoclinic: $P2_1$; structure determined
$a = 8.4090(4)$, $b = 7.9114(4)$, $c = 70.016(3)$ Å, $\beta = 93.287(2)°$
3.648(66), 3.420(62), 2.983(79), 2.976(100), 2.738(74), 2.735 (58), 2.331(64), 2.102(89)
Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum, Burgring 7, 1010 Wien, Austria, catalogue number O 1845
How to cite: Topa, D., Stoeger, B., Keutsch, F., Kolitsch, U. and Stanley, C. (2023) Interliveingite, IMA 2022-144. CNMNC Newsletter 72; *Mineralogical Magazine*, **87**, https://doi.org/10.1180/mgm.2023.21

NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN MARCH 2023

Voting proposal 23-A: Discreditation of platarsite

Proposal 23-A is accepted, and platarsite is discredited as it corresponds to a S-rich variety of sperrylite.

https://doi.org/10.1180/mgm.2023.21 Published online by Cambridge University Press