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IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) – Newsletter 72

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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 X-ray powder 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 *European Journal of Mineralogy* 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.

1 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.: Tartarosite, IMA 2019-016a, in: CNMNC Newsletter

72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 village of Szklary, about 6 km north of the town of Ząbkowice Śląskie, 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 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.: Beryllocordierite-Na, IMA 2022-108, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 village of Szklary, about 6 km north of the town of Ząbkowice Śląskie, 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.: Beryllosachanbińskiite-Na, IMA 2022-109, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 east 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, $\beta = 90.11(2)°$
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.: Holubite, IMA 2022-112, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 east 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, $\beta = 90.032(7)°$

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.: Lazerckerite, IMA 2022-113, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-114

Vrančiceite

$Cu_{10}Hg_3S_8$

Vrc

In the 16th century mine dumps on Vraneč hill, north of the village of Vrančice, 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, $\alpha = 77.759(1)$, $\beta = 76.990(1)$, $\gamma = 79.422(1)°$

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

How to cite: Sejkora, J., Biagioni, C., Škácha, P., and Mauro, D.: Vrančiceite, IMA 2022-114, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-115

Tetrahedrite-(Cd)

$Cu_6(Cu_4Cd_2)Sb_4S_{13}$

Ttr-Cd

S1 vein, seventh and eight level of the Radětice shaft, about 300 m east of the village of Radětice, 5 km southeast 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.: Tetrahedrite-(Cd), IMA 2022-115, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-116

Arsenoústalečite

$Cu_6Cu_6(As_2Te_2)Se_{13}$

Aúč

Ústaleč mine, located 500 m northeast of the village of Ústaleč, 15 km west 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.: Arsenoústalečite, IMA 2022-116, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-119

Downsite

$K_2(MoO_3)_3(SO_4) \cdot 4H_2O$

Dwn

Freedom no. 2 mine, Central Mining Area, about 5.6 km north-northeast 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, $\beta = 112.124(3)°$

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 number 22727 (holotype), and the RRUFF Project, deposition number R210048 (cotype)

How to cite: Gu, X., Yang, H., and Marty, J.: Downsite, IMA 2022-119, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-120

Yuchuanite-(Y)

$Y_2(CO_3)_3 \cdot H_2O$

Ych-Y

Yushui deposit, ca. 16 km northeast of the city of Meizhou, 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 of tengerite-(Y)

Triclinic: $P\bar{1}$; structure determined

$a = 6.2134(3)$, $b = 8.9697(3)$, $c = 19.9045(7)$ Å, $\alpha = 91.062(3)$, $\beta = 90.398(3)$, $\gamma = 91.832(3)°$

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.: Yuchuanite-(Y), IMA 2022-120, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-122

Manganrockbridgeite

$Mn_2^{2+}Fe_3^{3+}(PO_4)_3(OH)_4(H_2O)$

Mrkb

Hagendorf-Süd pegmatite mine (76 m level), Hagendorf, Upper Palatinate, 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, $\beta = 110.02(3)°$

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 Munich, 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.: Manganrockbridgeite, IMA 2022-122, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-123

Ebnerite

$(NH_4)Zn(PO_4)$

Ebr

Rowley mine (125-foot level), ca. 20 km northwest 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 number 22729; and the RRUFF Project, deposition number R210032

How to cite: Kampf, A. R., Gu, X., Yang, H., and Marty, J.: Ebnerite, IMA 2022-123, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 number 22714 (holotype), and the RRUFF Project, deposition number R210013 (cotype)
How to cite: Yang, H., Gu, X., McGlasson, J. A., and Gibbs, R. B.: Guangyuanite, IMA 2022-124, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 Wien, Burgring 7, 1010 Vienna, Austria, catalogue number O 2510
How to cite: Topa, D., Stoeger, B., Keutsch, F., Kolitsch, U., and Stanley, C.: Lasmanisite, IMA 2022-128, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

2 New mineral proposals approved in March 2023

IMA no. 2022-129

Manganoschafarzikite
$MnSb_2O_4$
Msfz
Långban deposit, district of Filipstad, 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, 10405 Stockholm, Sweden, collection number GEO-NRM 19339699, and the Natural History Museum, University of Oslo, P.O. 1172, Blindern, 0318 Oslo, Norway, collection number KNR 44410
How to cite: Langhof, J., Friis, H., Holtstam, D., Karlsson, A., and Erambert, M.: Manganoschafarzikite, IMA 2022-129, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 Federal District, 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
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.: Natromolybdite,

IMA 2022-130, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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, district of Rashtskiy (formerly Garmskiy), 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: $C2/m$; structure determined
$a = 7.4726(3)$, $b = 22.9196(9)$, $c = 13.9360(6)$ Å, $\beta = 105.550(5)°$
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.: Letnikovite-(Ce), IMA 2022-132, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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, district of Rashtskiy (formerly Garmskiy), 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: $P2/c$; structure determined
$a = 18.647(4)$, $b = 11.214(2)$, $c = 14.642(3)$ Å, $\beta = 129.55(3)°$
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.: Kalyuzhnyite-(Ce), IMA 2022-133, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 village of Vielle-Aure, 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, $\beta = 112.823(6)°$
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, École 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.: Vielleaureite-(Ce), IMA 2022-134, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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, $\alpha = 94.819(3)$, $\beta = 90.583(3)$, $\gamma = 91.742(3)°$
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 007

How to cite: Malcherek, T., Schlüter, J., and Husdal, T.: Anorthoyttrialite-(Y), IMA 2022-135, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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, $\alpha = 119.106(2)$, $\beta = 100.079(2)$, $\gamma = 91.000(2)°$
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 Museum Wien, Burgring 7, 1010 Vienna, Austria, catalogue number O 2596
How to cite: Topa, D., Stoeger, B., Kolitsch, U., and Stanley, C.: Montpelvouxite, IMA 2022-137, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue number 22728 (holotype), and the RRUFF Project, deposition number R220012 (cotype)
How to cite: Yang, H., Gu, X., Lazar, W., Gibbs, R. B., and Downs, R. T.: Jimkrieghite, IMA 2022-138, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 village of Jordanów Śląski, 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.: Heflikite, IMA 2022-139, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 Wien, Burgring 7, 1010 Vienna, Austria, catalogue number O 2597

How to cite: Topa, D., Stoeger, B., Kolitsch, U., Keutsch, F., and Stanley, C.: Sardashtite, IMA 2022-140, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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), Upper Palatinate, 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.: Hochleitnerite, IMA 2022-141, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 the city of Meizhou, 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.: Wenlanzhangite-(Y), IMA 2022-142, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

IMA no. 2022-143

Škáchaite

$CaCo(CO_3)_2$

Škác

Hydrothermal vein B117, between the fifth and sixth level of 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.: Škáchaite, IMA 2022-143, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

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 Wien, Burgring 7, 1010 Wien, Austria, catalogue number O 1845

How to cite: Topa, D., Stoeger, B., Keutsch, F., Kolitsch, U., and Stanley, C.: Interliveingite, IMA 2022-144, in: CNMNC Newsletter 72, Eur. J. Mineral., 35, https://doi.org/10.5194/ejm-35-285-2023, 2023.

3 Nomenclature/classification proposals approved in March 2023

3.1 Voting proposal 23-A: discreditation of platarsite

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