



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

### Newsletter 67

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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 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 web site.**

**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 APRIL 2022

IMA No. **2021-087a**

Fluorsigaiite

Fsig

$\text{Ca}_2\text{Sr}_3(\text{PO}_4)_3\text{F}$

Saima peralkaline complex, ca. 50 km northeast of Fengcheng City, Liaoning Province, China (40°58'20.6" N, 124°16'27.8" E)

Bin Wu, Xiang-ping Gu\*, Can Rao, Ru-cheng Wang, Fu-jun Zhong and Jian-jun Wan

\*E-mail: [guxp2004@163.com](mailto:guxp2004@163.com)

Apatite supergroup

Hexagonal:  $P6_3/m$ ; structure determined

$a = 9.6101(2)$ ,  $c = 7.1311(1)$  Å

3.563(15), 3.275(15), 3.144(19), 2.876(100), 2.861(96), 2.772(27), 1.991(16), 1.895(23)

Type material is deposited in the mineralogical collections of the Geological Museum of China, No. 16, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number M16130

How to cite: Wu, B., Gu, X., Rao, C., Wang, R., Zhong, F. and Wan, J. (2022) Fluorsigaiite, IMA 2021-087a. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

IMA No. **2021-114**

Bounahasite

Bnhs

$\text{Cu}^+\text{Cu}_2^+(\text{OH})_3\text{Cl}_2$

Bou Nahas Mine (Bou N'hass Mine), Oumjrane mining area, Tinghir Province, Morocco (30°39'53" N, 5°06'48" W)

\*Author for correspondence: Marco Pasero, Email: [marco.pasero@unipi.it](mailto:marco.pasero@unipi.it)

Cite this article: Miyawaki R., Hatert F., Pasero M. and Mills S.J. (2022) Newsletter 67. *Mineralogical Magazine* **86**, 849–853. <https://doi.org/10.1180/mgm.2022.56>

Inna Lykova\*, Ralph Rowe, Glenn Poirier, Henrik Friis and Kate Helwig

\*E-mail: [ilykova@nature.ca](mailto:ilykova@nature.ca)

New structure type

Monoclinic:  $P2_1/n$ ; structure determined

$a = 8.5924(1)$ ,  $b = 6.41886(9)$ ,  $c = 10.4118(2)$  Å,  $\beta = 111.804(2)^\circ$   
7.71(70), 5.34(22), 3.856(100), 2.673(36), 2.665(30), 2.350(71),  
2.130(17), 2.062(17)

Type material is deposited in the mineralogical collections of the Canadian Museum of Nature, PO Box 3443, Station "D", Ottawa, Ontario K1P 6P4, Canada, catalogue number CMNMC 89874

How to cite: Lykova, I., Rowe, R., Poirier, G., Friis, H. and Helwig, K. (2022) Bounahasite, IMA 2021-114. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### IMA No. 2021-115

Haywoodite

Hyw

$[\text{Pb}(\text{H}_2\text{O})_{10}][\text{Zn}_{12}(\text{OH})_{20}(\text{H}_2\text{O})(\text{SO}_4)_3]$

Redmond mine, Haywood Co., North Carolina, USA (35° 40'55" N, 83°00'56" W)

Anthony R. Kampf\*, Jason B. Smith, John M. Hughes, Chi Ma and Christopher Emproto

\*E-mail: [akampf@nhm.org](mailto:akampf@nhm.org)

Structurally related to lahnsteinite, namuwite and osakaite

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

$a = 8.3530(2)$ ,  $b = 13.2769(7)$ ,  $c = 18.2744(13)$  Å,  $\alpha = 92.427(8)$ ,  
 $\beta = 90.419(6)$ ,  $\gamma = 108.214(4)^\circ$

10.62(100), 7.26(45), 6.04(40), 3.306(48), 3.219(53), 2.731(51),  
2.652(93), 2.402(37)

Cotype material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76205, 76206 and 76207

How to cite: Kampf, A.R., Smith, J.B., Hughes, J.M., Ma, C. and Emproto, C. (2022) Haywoodite, IMA 2021-115. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### IMA No. 2021-116

Sarrochite

Sarr

$[\text{Ca}_4(\text{H}_2\text{O})_{38}][\text{Mo}_8\text{P}_2\text{Fe}_3^+\text{O}_{37}(\text{OH})]$

Su Seinargiu mine, Sarroch, Cagliari, Sardinia, Italy (39°04'53" N, 8°58'36" E)

Stuart J. Mills\*, Anthony R. Kampf, Paolo Orlandi and Jason R. Price

\*E-mail: [smills@museum.vic.gov.au](mailto:smills@museum.vic.gov.au)

Structurally related to mendozavilite

Trigonal:  $P\bar{3}m1$ ; structure determined

$a = 10.908(1)$ ,  $c = 28.570(6)$  Å  
13.81(20), 9.13(100), 7.85(13), 6.74(18), 3.640(15), 3.136(13),  
3.020(19), 2.868(26)

Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 76204

How to cite: Mills, S.J., Kampf, A.R., Orlandi, P. and Price, J.R. (2022) Sarrochite, IMA 2021-116. CNMNC Newsletter 67;

*Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### IMA No. 2021-117

Kabalovite

Kbv

$\text{Fe}_2^3+\text{Fe}_4^3+(\text{PO}_4)_6$

Halamish Wadi, Hatrurim basin, south Negev desert, Israel (31°09'47" N, 35°17'57" E)

Sergey N. Britvin, Mikhail N. Murashko, Maria G. Krzhizhanovskaya, Natalia S. Vlasenko, Oleg S. Vereshchagin, Yevgeny Vapnik and Evgeny A. Vasiliev

\*E-mail: [sbritvin@gmail.com](mailto:sbritvin@gmail.com)

Howardevansite group

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

$a = 6.365(1)$ ,  $b = 7.988(1)$ ,  $c = 9.325(2)$  Å,  $\alpha = 105.436(4)$ ,  
 $\beta = 108.194(3)$ ,  $\gamma = 101.515(3)^\circ$

4.329(19), 3.115(34), 3.012(26), 2.983(100), 2.952(73), 2.891(19),  
2.808(21), 2.530(18)

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 5737/1

How to cite: Britvin, S.N., Murashko, M.N., Krzhizhanovskaya, M.G., Vlasenko, N.S., Vereshchagin, O.S., Vapnik, Y. and Vasiliev, E.A. (2022) Kabalovite, IMA 2021-117. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### IMA No. 2021-119

Argentopolybasite-T2ac

Aplb-T2ac

$\text{Ag}_{16}\text{Sb}_2\text{S}_{11}$

Kremnica deposit, Žiar nad Hronom Co., Banská Bystrica Region, Slovakia (48°43'01" N, 18°53'52" E - type locality); Šibeničný vrch, near Nová Baňa, Žarnovica Co., Banská Bystrica Region, Slovakia (48°24'49" N, 18°38'14" E - cotype locality); Arykevaam deposit, Anadyr' District, Chukotka Autonomous Okrug, Russia (66°43'00.8" N, 172°02'13.2" E - cotype locality)

Martin Števkó\*, Tomáš Mikuš, Jiří Sejkora, Jakub Plášil, Emil Makovický, Jozef Vlasáč and Anatoly Kasatkin

\*E-mail: [msminerals@gmail.com](mailto:msminerals@gmail.com)

Polybasite group

Trigonal:  $P321$ ; structure determined

$a = 15.0646(5)$ ,  $c = 12.2552(5)$  Å  
12.169(40), 3.162(100), 3.045(54), 2.881(45), 2.691(23), 2.547(22),  
2.426(28), 1.886(22)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum in Prague, Cirkusová 1740, 19300 Praha 9, Czech Republic, catalogue numbers P1P 59/2021 (holotype) and P1P 60/2021 (cotype from Nová Baňa), and the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5818/1 (cotype from Arykevaam)

How to cite: Števkó, M., Mikuš, T., Sejkora, J., Plášil, J., Makovický, E., Vlasáč, J. and Kasatkin, A. (2022) Argentopolybasite-T2ac, IMA 2021-119. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2021-120

Fluorpyromorphite

Fpym

 $\text{Pb}_5(\text{PO}_4)_3\text{F}$ 

Sukhoviyazskoe deposit, southern slope of Sukhoviyaz Mt., Ufaley District, ca. 2.5 km SW of the city of Verkhniy Ufaley, Chelyabinsk Oblast, Southern Urals, Russia (56°01'55" N, 60°10'57" E)

Anatoly V. Kasatkin\*, Jakub Plášil, Radek Škoda, Nikita V. Chukanov, Fabrizio Nestola, Atali A. Agakhanov and Aleksey M. Kuznetsov

\*E-mail: [anatoly.kasatkin@gmail.com](mailto:anatoly.kasatkin@gmail.com)

Apatite supergroup

Hexagonal:  $P6_3/m$  $a = 9.779(5)$ ,  $c = 7.241(9)$  Å

4.236(25), 3.337(30), 3.189(28), 2.931(100), 2.806(20), 1.943(18), 1.838(49), 1.534(20)

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 5819/1

How to cite: Kasatkin, A.V., Plášil, J., Škoda, R., Chukanov, N.V., Nestola, F., Agakhanov, A.A. and Kuznetsov, A.M. (2022) Fluorpyromorphite, IMA 2021-120. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2022-001

Kenorozhdestvenskayaite-(Fe)

Kroz-Fe

 $\text{Ag}_6(\text{Ag}_4\text{Fe}_2)\text{Sb}_4\text{S}_{12}\square$ 

Yindongpo mine, Weishancheng ore field, Tongbai County, Nanyang, Henan Province, China (32°33'02" N, 113°25'25" E) Kai Qu\*, Weizhi Sun, Xiangpin Gu, Zeqiang Yang, Xianzhang Sima, Chao Tang, Guang Fan and Yanjuan Wang

\*E-mail: [qukai\\_tcs@foxmail.com](mailto:qukai_tcs@foxmail.com)

Tetrahedrite group

Cubic:  $I\bar{4}3m$ ; structure determined $a = 10.7119(6)$  Å

7.574(28), 4.373(9), 3.092(100), 2.678(43), 2.525(12), 2.101(12), 1.894(27), 1.615(15)

Type material is deposited in the mineralogical collections of the Geological Museum of China, No. 16, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number M16132

How to cite: Qu, K., Sun, W., Gu, X., Yang, Z., Sima, X., Tang, C., Fan, G. and Wang, Y. (2022) Kenorozhdestvenskayaite-(Fe), IMA 2022-001. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2022-002

Oxyttrotrobetafite-(Y)

Oyb-Y

 $\text{Y}_2\text{Ti}_2\text{O}_6\text{O}$ 

Souri Valley, Komono, Mie Prefecture, Japan (35°00'35" N, 136°27'33" E)

Daisuke Nishio-Hamane, Koichi Momma, Masayuki Ohnishi and Sachio Inaba

\*E-mail: [hamane@issp.u-tokyo.ac.jp](mailto:hamane@issp.u-tokyo.ac.jp)

Pyrochlore supergroup

Cubic:  $Fd\bar{3}m$ ; structure determined $a = 10.121(3)$  Å

2.918(100), 2.527(18), 2.321(13), 1.788(53), 1.525(46), 1.162(13), 1.132(8), 1.033(9)

Type material is deposited in the mineralogical collections of the National Museum of Nature and Science, 4-1-1 Amakubo, Tsukuba, Ibaraki 305-0005, Japan, specimen number NSM-M49380

How to cite: Nishio-Hamane, D., Momma, K., Ohnishi, M. and Inaba, S. (2022) Oxyttrotrobetafite-(Y), IMA 2022-002. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2022-003

Loomisite

Lmi

 $\text{Ba}[\text{Be}_2\text{P}_2\text{O}_8]\cdot\text{H}_2\text{O}$ 

Big Chief mine, near Keystone, Pennington Co., South Dakota, USA (43°51'54" N, 103°22'54" W)

Hexiong Yang\*, Xiangping Gu, Ronald B. Gibbs and Michael M. Scott

\*E-mail: [hyang@arizona.edu](mailto:hyang@arizona.edu)

Chemically related to minjiangite

Monoclinic:  $Pn$ ; structure determined $a = 7.629(2)$ ,  $b = 9.429(2)$ ,  $c = 4.762(1)$  Å,  $\beta = 91.272(5)^\circ$ 

4.259(39), 3.813(29), 3.068(44), 2.897(100), 2.869(65), 2.816(54), 2.385(58), 2.045(35)

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem and Mineral Museum, 15 N Church Ave, Tucson, AZ 85701, USA, catalogue no. 22710 (holotype), and the RRUFF Project, deposition no. R210017 (cotype)

How to cite: Yang, H., Gu, X., Gibbs, R.B. and Scott, M.M. (2022) Loomisite, IMA 2022-003. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2022-005

Nazarchukite

Nzr

 $\text{Ca}_2\text{NiFe}_2^{3+}(\text{PO}_4)_4$ 

Daba-Siwaqa complex, Transjordan plateau, Jordan (31°21'52" N, 36°10'55" E)

Sergey N. Britvin\*, Mikhail N. Murashko, Maria G. Krzhizhanovskaya, Oleg S. Vereshchagin, Natalia S. Vlasenko, Yevgeny Vapnik and Vladimir N. Bocharov

\*E-mail: [sbritvin@gmail.com](mailto:sbritvin@gmail.com)

Isostructural with itelmenite

Orthorhombic:  $Pbca$ ; structure determined $a = 9.320(3)$ ,  $b = 8.748(3)$ ,  $c = 29.261(9)$  Å

4.33(51), 3.831(98), 3.597(49), 3.370(100), 3.025(89), 2.934(71), 2.879(80), 2.475(45)

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 5827/1

How to cite: Britvin, S.N., Murashko, M.N., Krzhizhanovskaya, M.G., Vereshchagin, O.S., Vlasenko, N.S., Vapnik, Y. and Bocharov, V.N. (2022) Nazarchukite, IMA 2022-005. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## NEW MINERAL PROPOSALS APPROVED IN MAY 2022

## IMA No. 2020-036b

Wodegongjieite

Wgj

 $\text{KCa}_3(\text{Al}_7\text{Si}_9)\text{O}_{32}$ 

Cr-11 orebody, Luobusa ophiolite, ca. 200 km ESE of Lhasa, Tibet, China (29°11'N, 92°18'E, 5300 m asl)

Fahui Xiong\*, Xiangzhen Xu, Enrico Mugnaioli, Mauro Gemmi, Richard Wirth, Jingsui Yang and Edward S. Grew

\*E-mail: [xiongfahui@126.com](mailto:xiongfahui@126.com)

Related to kokchetavite and dmisteinbergite

Hexagonal:  $P6/mcc$ ; structure determined $a = 10.2(2)$ ,  $c = 14.9(3)$  Å

4.42(73), 3.80(91), 3.73(68), 3.26(49), 2.85(100), 2.55(71), 2.20(17), 2.12(26)

Type material is deposited in the mineralogical collections of the Chinese Geological Museum, Xisiyangrouhutong 15th, Xicheng district, Beijing, China, catalogue number M16104

How to cite: Xiong, F., Xu, X., Mugnaioli, E., Gemmi, M., Wirth, R., Yang, J. and Grew, E.S. (2022) Wodegongjieite, IMA 2020-036b. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2021-095a

Cuprozsheshengite

Czh

 $\text{Pb}_4\text{CuZn}_2(\text{AsO}_4)_2(\text{PO}_4)_2(\text{OH})_2$ 

Sanguozhuang Village, Tangdan Town, Dongchuan District, Kunming City, Yunnan Province, China (26°07'36" N, 103°00'19" E); Laochang mine, Gejiu ore field, Gejiu City, Yunnan Province, China

Ningyue Sun, Ian E. Grey, Guowu Li\*, Christian Rewitzer, Yuan Xue, W. Gus Mumme, Hongtao Shen, Jinhua Hao, Colin M. MacRae, Alan Riboldi-Tunnicliffe, Stephanie Boer, Tim Williams and Anthony R. Kampf

\*E-mail: [liguowu@cugb.edu.cn](mailto:liguowu@cugb.edu.cn)

Dongchuanite group

Triclinic:  $P\bar{1}$ ; structure determined $a = 4.7977(8)$ ,  $b = 8.5789(8)$ ,  $c = 10.3855(9)$  Å,  $\alpha = 97.270(8)$ ,  $\beta = 101.90(1)$ ,  $\gamma = 91.49(1)^\circ$ 

6.110(21), 4.641(30), 3.441(100), 3.267(34), 3.054(89), 2.948(61), 2.817(44), 2.321(20)

Type material is deposited in the mineralogical collections of the Geological Museum of China, Xisi, Yangrou hutong No. 15, Xicheng District, Beijing, People's Republic of China, catalogue no. M16127 (holotype), the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76191 and 76192, and the Crystal Structure Laboratory, China University of Geosciences, Beijing 100083, People's Republic of China, catalogue no. DC4 (cotypte)

How to cite: Sun, N., Grey, I.E., Li, G., Rewitzer, C., Xue, Y., Mumme, W.G., Shen, H., Hao, J., MacRae, C.M., Riboldi-Tunnicliffe, A., Boer, S., Williams, T. and Kampf, A.R. (2022) Cuprozsheshengite, IMA 2021-095a. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2022-007

TolstykHITE

Tls

 $\text{Au}_3\text{S}_4\text{Te}_6$ 

Gaching, Maletoyvayam deposit, southwestern Koryak Highland, central Kamchatka volcanic belt, Far-Eastern region, Russia (60°19'51.87" N, 164°46'25.65" E)

Anatoly V. Kasatkin\*, Fabrizio Nestola, Jakub Plášil, Jiří Sejkora, Anna Vymazalová and Radek Škoda

\*E-mail: [anatoly.kasatkin@gmail.com](mailto:anatoly.kasatkin@gmail.com)

The S analogue of maletoyvayamite

Triclinic:  $P\bar{1}$  $a = 8.977(5)$ ,  $b = 9.023(2)$ ,  $c = 9.342(6)$  Å,  $\alpha = 94.03(3)$ ,  $\beta = 110.03(3)$ ,  $\gamma = 104.27(4)^\circ$ 

8.59(18), 2.90(100), 2.66(6), 2.23(13), 2.14(9), 2.03(9), 1.89(21), 1.72(7)

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 5795/1

How to cite: Kasatkin, A.V., Nestola, F., Plášil, J., Sejkora, J., Vymazalová, A. and Škoda, R. (2022) TolstykHITE, IMA 2022-007. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2022-008

Gysinite-(La)

Gys-La

 $\text{PbLa}(\text{CO}_3)_2(\text{OH})\cdot\text{H}_2\text{O}$ 

Saima peralkaline complex, ca. 50 km northeast of Fengcheng City, Liaoning Province, China (40°58'20.6" N, 124°16'27.8" E) Bin Wu, Xiangping Gu\*, Can Rao, Rucheng Wang, Xingqing Xing, Jianjun Wan and Fujun Zhong

\*E-mail: [guxp2004@163.com](mailto:guxp2004@163.com)

Ancylite group

Orthorhombic:  $Pm\bar{c}n$ ; structure determined $a = 5.0655(2)$ ,  $b = 8.5990(3)$ ,  $c = 7.3901(4)$  Å  
5.596(21), 4.349(100), 3.732(68), 2.984(61), 2.667(21), 2.363(47), 2.090(29), 2.028(21)

Type material is deposited in the mineralogical collections of the Geological Museum of China, No. 16 Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue no. M16133

How to cite: Wu, B., Gu, X., Rao, C., Wang, R., Xing, X., Wan, J. and Zhong, F. (2022) Gysinite-(La), IMA 2022-008. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

## IMA No. 2022-009

Scandio-winchite

Swnc

 $\square(\text{NaCa})(\text{Mg}_4\text{Sc})(\text{Si}_8\text{O}_{22})(\text{OH})_2$ 

In a serpentinite quarry ca. 1 km west of the Jordanów Śląski village (former Jordansmühl), near Sobótka, ca. 30 km south of Wrocław, Lower Silesia, Poland (50°52'16" N, 16°50'18" E) Adam Pieczka, Marcin Stachowicz, Sylwia Zelek-Pogudza, Bożena Gołębiowska, Krzysztof Nejbert, Jakub Kotowski, Beata Marciniak-Maliszewska, Adam Szuszkiewicz, Eligiusz Szełęg, Katarzyna M. Stadnicka and Krzysztof Woźniak



\*E-mail: [pieczka@agh.edu.pl](mailto:pieczka@agh.edu.pl)

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined

$a = 9.864(2)$ ,  $b = 18.163(3)$ ,  $c = 5.305(2)$  Å,  $\beta = 104.41(3)^\circ$

8.455(100), 3.405(45), 3.291(25), 3.137(62), 2.724(86), 2.608(27), 2.542(48), 2.345(27)

Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue number MMUWr IV8118

How to cite: Pieczka, A., Stachowicz, M., Zelek-Pogudz, S., Gołębiewska, B., Nejbert, K., Kotowski, J., Marciniak-Maliszewska, B., Szuszkiewicz, A., Szełęg, E., Stadnicka, K.M. and Woźniak, K. (2022) Scandio-winchite, IMA 2022-009. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### IMA No. 2022-010

Chihmingite

Cim

$NiAl_2O_4$

Ugelvik peridotite body, Otrøy Island, Norway (62°42'07.41" N, 6°42'06.57" E)

Shyh-Lung Hwang, Pouyan Shen, Tzen-Fu Yui, Hao-Tsu Chu, Yoshiyuki Iizuka, Hans-Peter Schertl and Dirk Spengler

\*E-mail: [slhwang@gms.ndhu.edu.tw](mailto:slhwang@gms.ndhu.edu.tw)

Spinel supergroup

Cubic:  $Fd\bar{3}m$

$a = 8.059(5)$  Å

4.646(m), 2.848(m), 2.434(s), 2.022(vs), 1.554(s), 1.424(vs), 1.162(s)

Type material is deposited in the mineralogical collections of the National Museum of Natural Science, No. 1, Guanqian Rd., North Dist., Taichung City 404605, Taiwan, catalogue number NMNS-P023511

How to cite: Hwang, S.-L., Shen, P., Yui, T.-F., Chu, H.-T., Iizuka, Y., Schertl, H.-P. and Spengler, D. (2022) Chihmingite, IMA 2022-010. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### IMA No. 2022-011

Zheshengite

Zh

$Pb_4ZnZn_2(AsO_4)_2(PO_4)_2(OH)_2$

Sanguozhuang Village, Tangdan Town, Dongchuan District, Kunming City, Yunnan Province, China (26°07'36" N, 103°00'19" E)

Guowu Li\*, Ningyue Sun, Hongtao Shen, Yuan Xue and Jinhua Hao

\*E-mail: [liguowu@cugb.edu.cn](mailto:liguowu@cugb.edu.cn)

Dongchuanite group

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

$a = 4.7727(4)$ ,  $b = 8.4864(6)$ ,  $c = 10.4053(7)$  Å,  $\alpha = 97.083(6)$ ,  $\beta = 101.002(7)$ ,  $\gamma = 93.072(6)^\circ$

4.642(58), 4.094(35), 3.444(100), 3.108(72), 2.997(66), 2.806(34), 2.389(42), 2.318(33)

Type material is deposited in the mineralogical collections of the Geological Museum of China, Xisi, No. 15 Yangrou Hutong, Xicheng District, Beijing, People's Republic of China, catalogue no. M16134 (holotype), and the Crystal Structure Laboratory, China University of Geosciences, Beijing 100083, People's Republic of China, catalogue no. DC5 (cotype)

How to cite: Li, G., Sun, N., Shen, H., Xue, Y. and Hao, J. (2022) Zheshengite, IMA 2022-011. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### IMA No. 2022-012

Hanahanite

Hnh

$[Zn_8(OH)_{14}(SO_4)] \cdot 3H_2O$

Redmond mine, Haywood Co., North Carolina, USA (35°40'55" N, 83°00'56" W)

Anthony R. Kampf\*, Jason B. Smith, John M. Hughes, Chi Ma and Christopher Emproto

\*E-mail: [akampf@nhm.org](mailto:akampf@nhm.org)

Hexagonal:  $P6_3$ ; structure determined

Chemically and structurally related to lahnsteinite, namuwite and osakaite

$a = 8.312(2)$ ,  $c = 15.295(2)$  Å

7.64(100), 3.633(16), 3.374(30), 2.716(27), 2.561(38), 2.216(21), 1.858(32), 1.566(37)

Cotype material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76212, 76213 and 76214

How to cite: Kampf, A.R., Smith, J.B., Hughes, J.M., Ma, C. and Emproto, C. (2022) Hanahanite, IMA 2022-012. CNMNC Newsletter 67; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.56>

#### NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN APRIL 2022

##### *Mckelveyite*-(Y): end-member formula

In the current IMA List of Minerals the chemical formula of mckelveyite-(Y) is given as  $NaBa_3(Ca,U)Y(CO_3)_6 \cdot 3H_2O$ . Minor uranium (ca. 0.15 apfu) was detected in the original description of the mineral [*Am. Mineral.* **50** (1965), 593–612]. However the ideal formula, for stoichiometric constraints, can not contain any U. A crystal structure study of mckelveyite-(Y) [*Can. Mineral.* **46** (2008), 195–203] clearly shows that the Ca site is occupied by calcium only. Therefore uranium does not occur, or might occur as a subordinate cation; in either case it should be omitted from the chemical formula of mckelveyite-(Y), which becomes  $NaBa_3CaY(CO_3)_6 \cdot 3H_2O$ . This is an executive decision taken by the officers of the CNMNC.