



## IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) Newsletter 41

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### NEW MINERALS AND NOMENCLATURE MODIFICATIONS APPROVED IN 2017 AND 2018

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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

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 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 DECEMBER 2017

IMA No. 2017-085

Thorasphite

$\text{Th}_2\text{H}(\text{PO}_4, \text{AsO}_4)_3 \cdot 6\text{H}_2\text{O}$

Elsmore Tin Mine, Elsmore, New South Wales,  
Australia (151°17'E, 29°48'S)

Peter Elliott\*

\*E-mail: peter.elliott@adelaide.edu.au

New structure type

Orthorhombic: *Pbcn*; structure determined

$a = 13.673(3)$ ,  $b = 9.925(2)$ ,  $c = 10.222(2)$  Å  
8.007(100), 5.127(57), 4.934(71), 4.320(24), 4.251  
(38), 3.225(22), 3.189(27), 2.926(27),

Type material is deposited in the mineralogical collections of the South Australian Museum, North Terrace, Adelaide, South Australia 5000, Australia, registration number G34702

How to cite: Elliott, P. (2018) Thorasphite, IMA 2017-085. CNMNC Newsletter No. 41, February 2018, page 183; *European Journal of Mineralogy*, **30**, 183–186.

IMA No. **2017-086**

Straßmannite  
 $\text{Al}(\text{UO}_2)(\text{SO}_4)_2\cdot 16\text{H}_2\text{O}$   
 Green Lizard mine, White Canyon mining district, San Juan Co., Utah, USA (37°34'37.10"N, 110°17'52.80"W); Markey mine, White Canyon mining district, San Juan Co., Utah, USA (37°32'57"N, 110°18'08"W)  
 Anthony R. Kampf\*, Jakub Plášil, Barbara P. Nash and Joe Marty  
 \*E-mail: akampf@nhm.org  
 Structurally related to leydetite, magnesioleydetite and wetherillite  
 Monoclinic:  $C2/c$ ; structure determined  
 $a = 11.0187(5)$ ,  $b = 8.3284(3)$ ,  $c = 26.673(2)$  Å,  $\beta = 97.426(7)^\circ$   
 13.24(100), 6.61(53), 6.11(26), 5.74(35), 4.494(22), 3.324(38), 3.265(20), 3.138(23)  
 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 67264 (GL), 67265 (GL), 67266 (M), and 67267 (M)  
 How to cite: Kampf, A.R., Plášil, J., Nash, B.P. and Marty, J. (2018) Straßmannite, IMA 2017-086. CNMNC Newsletter No. 41, February 2018, page 184; *European Journal of Mineralogy*, **30**, 183–186.

IMA No. **2017-088**

Tsygankoite  
 $\text{Mn}_8\text{Tl}_8\text{Hg}_2(\text{Sb}_{21}\text{Pb}_2\text{Tl})\text{S}_{48}$   
 Vorontsovskoe deposit, 0.5 km W of the settlement of Vorontsovka, ca. 13 km S of Krasnotur'insk, Sverdlovskaya Oblast', Northern Urals, Russia (59°39'5"N, 60°12'56"E)  
 Anatoly V. Kasatkin\*, Emil Makovicky, Jakub Plášil, Radek Škoda, Atali A. Agakhanov and Vladimir Y. Karpenko  
 \*E-mail: anatoly.kasatkin@gmail.com  
 New structure type  
 Monoclinic:  $C2/c$ ; structure determined  
 $a = 21.362(4)$ ,  $b = 3.858(1)$ ,  $c = 27.135(4)$  Å,  $\beta = 106.94(1)^\circ$   
 3.587(100), 3.391(68), 3.353(70), 3.204(88), 2.858(64), 2.841(72), 2.805(60), 2.786(99)  
 Type material is deposited in the mineralogical collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 5018/1  
 How to cite: Kasatkin, A.V., Makovicky, E., Plášil, J., Škoda, R., Agakhanov, A.A. and Karpenko, V.Y. (2018) Tsygankoite, IMA 2017-088. CNMNC Newsletter No. 41, February 2018, page 184; *European Journal of Mineralogy*, **30**, 183–186.

IMA No. **2017-089**

Petersite-(La)  
 $\text{Cu}_6\text{La}(\text{PO}_4)_3(\text{OH})_6\cdot 3\text{H}_2\text{O}$   
 Detani River, Ohgurusu, Kiwa, Kumano, Mie Prefecture, Japan (33°52'57"N, 135°55'46"E)  
 Daisuke Nishio-Hamane\*, Masayuki Ohnishi, Norimasa Shimobayashi, Koichi Momma, Ritsuro Miyawaki and Sachio Inaba  
 \*E-mail: hamane@issp.u-tokyo.ac.jp  
 Mixite group  
 Hexagonal:  $P6_3/m$ ; structure determined  
 $a = 13.410(5)$ ,  $c = 5.881(4)$  Å  
 11.621(100), 4.393(36), 3.519(29), 3.344(15), 2.907(21), 2.693(14), 2.534(14), 2.444(73)  
 Type material is deposited in the mineralogical collections of the National Museum of Nature and Science, Tsukuba, Ibaraki 305-0005, Japan, specimen number NSM-M45621  
 How to cite: Nishio-Hamane, D., Ohnishi, M., Shimobayashi, M., Momma, K., Miyawaki, R. and Inaba, S. (2018) Petersite-(La), IMA 2017-089. CNMNC Newsletter No. 41, February 2018, page 184; *European Journal of Mineralogy*, **30**, 183–186.

IMA No. **2017-090**

Ramazzoite  
 $[\text{Mg}_8\text{Cu}_{12}(\text{PO}_4)(\text{CO}_3)_4(\text{OH})_{24}(\text{H}_2\text{O})_{20}]$   
 $[(\text{H}_{0.33}\text{SO}_4)_3(\text{H}_2\text{O})_{36}]$   
 Monte Ramazzo mine, Genova, Liguria, Italy (44°28'5"N, 8°51'33"E)  
 Anthony R. Kampf\*, George R. Rossman, Chi Ma, Donato Belmonte, Cristian Biagioni, Fabrizio Castellaro and Luigi Chiappino  
 \*E-mail: akampf@nhm.org  
 New structure type  
 Cubic:  $P43m$ ; structure determined  
 $a = 13.389(1)$  Å  
 13.37(10), 9.43(24), 4.224(8), 4.043(11), 3.252(9), 2.857(9), 2.730(5), 2.668(5)  
 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 66691 and 66692  
 How to cite: Kampf, A.R., Rossman, G.R., Ma, C., Belmonte, D., Biagioni, C., Castellaro, F. and Chiappino, L. (2018) Ramazzoite, IMA 2017-090. CNMNC Newsletter No. 41, February 2018, page 184; *European Journal of Mineralogy*, **30**, 183–186.

**NEW MINERAL PROPOSALS APPROVED IN JANUARY 2018**

IMA No. **2017-092**

Siudaite  
 $\text{Na}_8\text{Mn}_3^{2+}\text{Ca}_6(\text{Fe}^{3+}, \text{Mn}^{2+})_3\text{Zr}_3\text{NbSi}_{24}(\text{Si}, \square, \text{Ti})\text{O}_{72}(\text{O}, \text{OH})_3\text{Cl}\cdot 4\text{H}_2\text{O}$

Eveslogchorr Mt., Astrophyllitovyi Stream valley, Khibiny alkaline massif, Kola Peninsula, Russia (67°40'02"N, 33°55'28"E)

Nikita V. Chukanov\*, Ramiza K. Rastsvetaeva, Łukasz Kruszewski, Sergey M. Aksenov, Vyacheslav S. Rusakov, Sergey N. Britvin and Svetlana A. Vozchikova  
\*E-mail: nikchukanov@yandex.ru

Eudialyte group

Trigonal:  $R3m$ ; structure determined

$a = 14.188(3)$ ,  $c = 29.831(7)$  Å

6.38(60), 5.68(47), 4.29(55), 3.389(47), 3.191(63), 2.963(100), 2.843(99), 2.577(49)

Type material is deposited in the collections of the Mineralogical and Petrographical Section, Museum of Earth PAS (Muzeum Ziemi Polskiej Akademii Nauk), aleja Na Skarpie 20/26, PL-00-488 Warsaw, Poland, catalogue no. MZI III/1/541

How to cite: Chukanov, N., Rastsvetaeva, R.K., Kruszewski, Ł., Aksenov, S.M., Rusakov, V.S., Britvin, S.N. and Vozchikova, S.A. (2018) Siudaite, IMA 2017-092. CNMNC Newsletter No. 41, February 2018, page 184; *European Journal of Mineralogy*, **30**, 183–186.

#### IMA No. 2017-095

Tantalowodginite

(Mn,□)TaTa<sub>2</sub>O<sub>8</sub>

Emmons pegmatite dike, exposed on Uncle Tom Mountain, Greenwood, Oxford Co., Maine, USA (44°19'24"N, 70°41'41"E)

Sarah L. Hanson, Alexander U. Falster, William B. Simmons, Raymond Sprague, Pietro Vignola\*, Nicola Rotiroti, Sergio Andó and Frédéric Hatert

\*E-mail: pietro.vignola@idpa.cnr.it

Wodginite group

Monoclinic:  $C2/c$ ; structure determined

$a = 9.542(1)$ ,  $b = 11.488(2)$ ,  $c = 5.128(1)$  Å,  $\beta = 91.13(1)^\circ$

7.332(20), 4.741(20), 3.838(30), 3.667(100), 3.000(100), 2.957(100), 2.883(30), 1.778(30)

Type material is deposited in the mineralogical collections of the Maine Mineral and Gem Museum, 99 Main Street, Bethel, Maine, USA, catalogue number MMGM-MP<sup>2</sup>-12-10-2016

How to cite: Hanson, S.L., Falster, A.U., Simmons, W. B., Sprague, R., Vignola, P., Rotiroti, N., Andó, S. and Hatert, F. (2018) Tantalowodginite, IMA 2017-095. CNMNC Newsletter No. 41, February 2018, page 185; *European Journal of Mineralogy*, **30**, 183–186.

#### IMA No. 2017-096

Pampaloite

AuSbTe

Pampalo mine (drill core 315, depth 71.50 m), 65 km E of Joensuu, 46 km N of Ilimantsi, Finland (62°59'11"N, 31°15'53"E)

Anna Vymazalová\*, Kari Kojonen, František Laufek, Bo Johanson, Chris J. Stanley, Jakub Plášil and Patricie Halodová

\*E-mail: anna.vymazalova@geology.cz

New structure type

Monoclinic:  $C2/c$ ; structure determined

$a = 11.947(3)$ ,  $b = 4.481(1)$ ,  $c = 12.335(3)$  Å,  $\beta = 105.83(2)^\circ$   
4.846(24), 3.825(18), 2.978(100), 2.968(50), 2.242(25), 2.144(55), 2.063(33), 1.789(18)

Type material is deposited in the mineralogical collections of the Natural History Museum, Cromwell Road, SW7 5BD London, U.K., catalogue No. BM 2017,16

How to cite: Vymazalová, A., Kojonen, K., Laufek, F., Johanson, B., Stanley, C.J., Plášil, J. and Halodová, P. (2018) Pampaloite, IMA 2017-096. CNMNC Newsletter No. 41, February 2018, page 185; *European Journal of Mineralogy*, **30**, 183–186.

#### IMA No. 2017-097

Sbacchiite

Ca<sub>2</sub>AlF<sub>7</sub>

In a fossil fumarole (1944 eruption,  $T \approx 80^\circ\text{C}$ ), Vesuvius volcano crater, Napoli, Italy

Italo Campostrini, Francesco Demartin\* and Massimo Russo

\*E-mail: francesco.demartin@unimi.it

Chemically related to carlhintzeite

Orthorhombic:  $Pnma$ ; structure determined

$a = 7.665(2)$ ,  $b = 6.993(1)$ ,  $c = 9.566(2)$  Å

3.840(45), 3.563(85), 3.499(100), 2.899(55), 2.750(30), 2.281(20), 2.255(52), 2.173(36)

Type material is deposited in the reference collection of the Department of Chemistry, University of Milan, Via Golgi 19, I-20133 Milano, Italy, sample no. 2017-01

How to cite: Campostrini, I., Demartin, F. and Russo, M. (2018) Sbacchiite, IMA 2017-097. CNMNC Newsletter No. 41, February 2018, page 185; *European Journal of Mineralogy*, **30**, 183–186.

#### IMA No. 2017-098

Paddlewheelite

MgCa<sub>5</sub>Cu<sub>2</sub>(UO<sub>2</sub>)<sub>4</sub>(CO<sub>3</sub>)<sub>12</sub>(H<sub>2</sub>O)<sub>33</sub>

Klement vein, Svornost mine (5th level), Jáchymov district, Bohemia, Czech Republic (50°22'21"N, 12°54'42"E)

Travis A. Olds\*, Jakub Plášil, Anthony R. Kampf, Fabrice Dal Bo and Peter C. Burns

\*E-mail: tolds@nd.edu

New structure type

Monoclinic:  $Pc$ ; structure determined

$a = 22.052(4)$ ,  $b = 17.118(3)$ ,  $c = 19.354(3)$  Å,  $\beta = 90.474(2)^\circ$

11.12(100), 7.33(46), 6.42(30), 5.54(37), 4.823(33), 4.642(38), 4.215(34), 3.717(33)

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 66696

How to cite: Olds, T.A., Plášil, J., Kampf, A.R., Bo, F. and Burns, P.C. (2018) Paddlewheelite, IMA 2017-098. CNMNC Newsletter No. 41, February 2018, page 185; *European Journal of Mineralogy*, **30**, 183–186.

## NOMENCLATURE PROPOSALS APPROVED IN DECEMBER 2017

### IMA 17-E – Bobdownsite discredited (and krásnoite redefined)

Proposal 17-E is accepted, and bobdownsite is discredited because it does not contain fluorine, which was its distinguishing characteristic as a new mineral. F-free bobdownsite is equivalent to the mineral whitlockite, although the phase probably lies along the whitlockite-merrillite join. Krásnoite is a valid mineral species, but it does not contain monofluorophosphate anions ( $\text{PO}_3\text{F}^{2-}$ ). Instead, fluorine substitutes for hydroxyl groups that are bonded to aluminium, as shown by vibrational and  $^{19}\text{F}$  NMR spectroscopic data.

### IMA 17-F – Redefinition of montbrayite

Proposal 17-F is accepted, and montbrayite is redefined. Its crystal-chemical formula becomes  $(\text{Au, Ag, Sb, Bi, Pb})_{23}(\text{Te, Sb, Bi, Pb})_{38}$ , instead of  $(\text{Au, Sb})_2\text{Te}_3$  as previously reported.

### IMA 17-G – Redefinition of gabrielsonite

Proposal 17-G is accepted, and gabrielsonite is redefined as  $\text{PbFe}^{3+}(\text{As}^{3+}\text{O}_3)\text{O}$ , instead of  $\text{PbFe}^{2+}(\text{As}^{5+}\text{O}_4)(\text{OH})$ , previously reported. Indeed, the mineral is anhydrous, and contains iron almost exclusively in the trivalent state. Consequently, gabrielsonite does not belong to the descloizite supergroup.

### Rockbridgeite group

A new classification and nomenclature scheme has been approved for the minerals of the rockbridgeite group. Currently the group includes three mineral species: rockbridgeite, frondelite, and plimerite, plus a number of potentially new mineral species.

## MINERAL APPROVAL WITHDRAWN

### IMA No. 2000-030a Uvite

Approval for this mineral, which occurred in 2010 (see CNMNC Newsletter 2), has been withdrawn. Subsequent analytical work undertaken by the authors shows this material to be a potentially new oxy-tourmaline.