

Table S1. Main attributes of Au-(base metal) deposits of the Tapajós Mineral Province (TMP). Abbreviations after [1], except Bs = bismuthinite; Hd = hedleyte; Hs = hessite; Lu = luzonite; Wt = wittichenite.

Deposit	Resources/ Reserve	Host Rocks/Ages	Hydrothermal Alteration	Ore style/ Control	Ore Mineralogy	Fluid Inclusion	Stable Isotopes	Ore-Stage Age
Sediment-Hosted Gold Deposit								
Castelo de Sonhos	Indicated re-sources: 40.1Mt @ 1.2 g/t Au (1.5 Moz) [2]	ca. 2.01–2.05 Ga sandstones, conglomerates, ca. 2.01 dacite porphyry, ca. 1.98 Ga Bt granodiorite [2]	Silicification, Hem, sericitic (Ms–fuchsite), epidote, argillic alteration [3]	Stratigraphically-controlled Au mineralization (conglomerate matrix), fracture-controlled veinlets [4]	Au, Mag, Hem, Py, Ccp [4]		$\delta^{18}\text{O}_{\text{H}_2\text{O}} = 10.5$ to 16.3 ‰, at 673°C [4]	
Epithermal Au Deposits								
High-Sulfidation Au-(Ag) Epithermal Deposit								
Botica Velha (V3)	Resources: 0.96 Moz [5]	ca. 1.87–1.89 Ga intermediate to felsic lava flows/ volcanic-clastic rocks [6]	Silicification, advanced argillic (Alu–Qz), advanced argillic (Prl), intermediate argillic (Klm–Dck), sericitic, propylitic alteration [6]	Hydrothermal breccia in a ring rhyolitic volcano (post-caldera stage) [6]	Py, Cv, Bn, Gn, Eng–Lu, Ccp, Sp, native Ag Cu, Au [6]	Vapor-rich fluid with high CO and H_2 contents $\text{CO}_2/\text{CH}_4 = 12.8$; $\text{H}_2\text{S}/\text{SO}_2 = 2.3$ [7]	$\delta^{34}\text{S}_{\text{SO}_4}$ in Alu = $+14.0$ to $+36.9$ ‰; $T = 420$ to 130°C [6]	1869 ± 2 Ma (Ar–Ar in Alu) [6]
Intermediate- to Low-Sulfidation Au-Polymetallic Epithermal Deposit								
Coringa	Proven and probable reserve: 768,600 t @ 6.49g/t Au (0.16 Moz) [8]	ca. 1.97–1.99 Ga felsic volcanic/ volcanoclastic rocks [9,10]	Potassic (Kfs, Bt), propylitic, sericitic (Qz–Ser–Py or Qz–Ser–Adl), argillic (Illt), Cb (Cal–Mn–Cal) alteration [10]	Veins/stockworks controlled by brittle structures within a rhyolite dome along with a N- and NW-trending fault [8,10]	Gn, Py, Ccp, Fe-poor-Sp, Au, Tnt, Dg, electrum, Ar [9,10]	(i) H_2O –NaCl (salinity = up to 1.6 wt% NaCl equiv; 190 to 252°C); (ii) H_2O – CO_2 –NaCl (2.0 to 7.4 wt% NaCl equiv.; 315 to 355°C); (iii) CO_2 -rich fluid [9]	$\delta^{34}\text{S}_{\text{sulfides}} = -10.9$ to 1.8 ‰; $\delta^{18}\text{O}_{\text{H}_2\text{O}} = -1.8$ to 9.8 ‰; $\delta\text{D}_{\text{H}_2\text{O}} = -92$ ‰ (Ser) [9]	
Mato Velho		Volcanic breccia, lapilli-tuffs, rhyolite, andesite porphyry [11]	Potassic (Kfs, Bt), propylitic, sericitic, epidote, argillic, carbonate alteration [11]	Veins/stockworks controlled by brittle structures [11]	Gn + Py + Ccp \pm Fe-poor-Sp \pm Au, electrum [11]			ca. 1.97 Ga (Pb–Pb model age in Py) [12]
Pista and Fofão		ca. 2.0 Ga granite, rhyolite, lapilli-tuffs [13]	Sodic (Ab), potassic (Kfs), silicification, sericitic (Ser–Rt–Py–Qz–Adl), carbonate (Cal, Mn-siderite), propylitic alteration [13]	Disseminated, veinlet networks, hydrothermal breccias [13]	Au, Hs, Hs, Py, Sp, Gn, Ccp, Cst, Wt [13]	(i) H_2O –NaCl (<11.2 wt. % NaCl; 120 to 303°C); (ii) H_2O – CO_2 –NaCl (3.0–8.9 wt% NaCl equiv.; 233 to 370°C); (iii) CO_2 -rich fluid [13]		
Chapéu		ca. 1.99 Ga andesite,	Sodic (Ab), potassic	Disseminated, vein–	Py, Ccp, Sp, Gn,			

de Sol		rhyolites, ca. 1.89–1.87 Ga volcanoclastic unit, ca. 1.88–1.86 Ga rhyodacite porphyry [14]	(Kfs), sericitic (Ser–Py–Qz–Adl), propylitic (Chl–Ep–Ab–Adl, Fl–Rt–barite, platy Cal) [14]	veinlet networks controlled by brittle structures [14]	Mol, native Ag, Au [14]			
São Chico	Proven and probable reserve: 90,000 t @ 8.43g/t of Au (0.02 Moz) [15]	Porphyritic granodiorites, granites [15]	Potassic (Kfs), sericitic, chloritic alteration [15]	Veins and hydrothermal breccias controlled by a W–NW-trending fault zone [15]	Py, Gn, Sp, Ccp, and Au [15]			
Joel and Davi		Qz–diabases, granophyric gabbro, granite [16]	Propylitic (Chl–Ser–Cb–Ep–Py), Qz–Ser, carbonate, Adl–Ep–Fl and Hem–Ab [16]	NE-trending brecciated veins with comb texture [17]	Py, Gn, Ccp, Bn, Au, Sp, native Ag [17]	(i) H ₂ O–NaCl (0.18–5.7 wt. % NaCl; 220 to 340 °C) [16]		
Poprophyry-Like Au–(Cu) Deposits								
Palito	Proven and probable reserve: 717,000 t @ 11.74 g/t of Au (0.27 Moz) [18]	ca. 1.88 Ga porphyritic granites, ca. 1.95 Ga granodiorite, rhyolite porphyry, diabase, gabbro dikes [19]	Potassic (Kfs–Bt), propylitic (Chl–Ep–Ab–bladed Cal, Spn–Fl–Prh), Sericitic (Ser–Py–Qz), argillic alteration (Prl–Ser–Klm) [19]	Veins controlled by sub-vertical, NW–SE and E–W-trending brittle faults, stockworks, disseminated sulfides [19]	Ccp, Py, Au, Po, Dg, Cct, Au–Ag, Gn, Sp, Cv, Brt, Ttr, Sch, Bs, Hd, Wt, matildite [19]	(i) H ₂ O–CO ₂ –NaCl (1.1–1.7 wt.% NaCl; > 462 °C); (ii) H ₂ O–NaCl–FeCl ₂ (45–50% wt.% NaCl; 100 – 400 °C) fluid; (iii) H ₂ O–NaCl (< 2.0 wt.% NaCl) [19]	δ ¹⁸ O _{H2O} = +7.2‰ to –2.6‰, at 450–350 °C; δD _{H2O} = –55 to +0.2‰; δ ³⁴ S _{sulfides} = 1.2–3.6‰ [19]	Pb–Pb model age in Py = 1797 ±17 Ma ⁽¹⁶⁾ (post-ore barren veins) [20]
Tocantinzinho	Indicated resources: 49 Mt @ 1.35g/t Au (2.13 Moz) [21]	ca. 2.0 Ga syenogranite; ca. 1.99 Ga monzogranite; ca. 2.0 andesite dikes [22]	Potassic (Mc–Qz), silicification, chloritic (Chl–Rt–Py–Ccp), sericitic (Ser–Py–Qz), and carbonate alteration [23,24]	Disseminated- and stockwork within a regional NW-trending brittle fault zone [21]	Au, Ccp, Sp, Gn, Mag, Hem, Mol, Bi, petzite, Hd altaite, Bs, native Ag, Ar, Hs [23,24]	H ₂ O–NaCl (0.2 to 15.9 wt.% NaCl; 100 to 433 °C) [23]	δ ¹³ C _{Cal} = –3.45 to –2.29‰; δ ¹⁸ O _{H2O} = +0.39 to +8.52‰, at 300 °C) [25]	⁴⁰ Ar– ³⁹ Ar ages (Ms/ Ser) = 1854 ±6 Ma; 1865 ±5 Ma [26]
Deep-Emplaced Granite-Hosted Gold-(copper) Deposit								
Batalha		ca. 1.88 Ga Hb–Bt granite [27]	Sodic (Ab), potassic (Kfs–Bt), propylitic, sericitic, carbonate, silicification [28]	Stockwork to disseminated [27,28]	Au, Py, Ccp, Gn [28]			
Structurally-Controlled Granite-Hosted Gold Deposits								
Central, Moreira Gomes, (Cuiú–Cuiú camp)	Measured resources: 48.7Mt @ 1.35 g/t Au (Central/Moreira Gomes) (2.11 Moz) [29]	ca. 1.89 Ga monzogranite, ca. 2.0 Ga Hb tonalite, granodiorite, [30,31]	Chloritic, sericitic, sulfide, carbonate alteration, silicification [30,32]	Veins controlled by brittle faults related to a NW-SE-striking lineament [30]	Py, Po, Ccp, Hs, Gn, Sp, Au, Bs [30,32]	i) H ₂ O–NaCl (0.0–25 wt. % NaCl; 120 to 220 °C); (ii) H ₂ O–CO ₂ –NaCl (1.6–11.8 wt% NaCl equiv.; 280 to 350 °C); (iii) CO ₂ -rich fluid	δ ¹⁸ O _{H2O} = +9.8‰ to –0.5‰, δD _{H2O} = –49 to –0.8‰; δ ³⁴ S _{sulfides} = –0.29 to 3.95‰ [32]	Pb–Pb model age in sulfides = ca. 1.86 Ga [31]

Jerimum de Baixo (Cuiú-Cuiú camp)	ca. 2.0 Ga monzogranite, andesite dikes [30]	Chloritic (Chl–Qz–Rt– Ser), sericitic (Ser–Qz– Py), epidote, carbonate (Cal–Fl–Qz) alteration [30]	Veins and dissemi- nated zones con- trolled by WNW– ESE-trending faults within a regional NW–SE-trending fault zone [30]	Py, Po, Ccp, Gn, Sp, native Bi, Ag, Au [30]	[32] (i) H ₂ O–NaCl (4.3–17.1 wt. % NaCl; 118 to 249 °C); (ii) H ₂ O–CO ₂ – NaCl (2.2–9.4 wt% NaCl equiv.; 237 to 405 °C); (iii) CO ₂ –rich fluid [30]	$\delta^{18}\text{O}_{\text{H}_2\text{O}} = +10.1\text{‰}$ to -1.4‰ , at 330 to 205 °C, $\delta^{34}\text{S}_{\text{sulfides}} =$ 0.57 to 2.33‰ [31]	
Jerimum de Cima and Babi (Cuiú- Cuiú camp)	Bt-Hb tonalite, granodiorite monzogranite [31]	Sericitic, chloritic, carbonate, sulfide alteration, silicification [31]		Py, Sp, Ccp, Gn, Au [31,33]	i) H ₂ O–NaCl (0–18 wt. % NaCl; 104 to 410 °C); (ii) H ₂ O–CO ₂ –NaCl (1.7–7.8 wt% NaCl equiv.; 144 to 448 °C); (iii) CO ₂ –rich fluid [33,34]		
Guarim (Cuiú- Cuiú camp)	Qz diorite, granodiorite [34]	Ser–Chl and potassic (Kfs) alteration [34]	Stockwork, breccia and veins controlled by ENE-trending faults [34]	Py, Ccp, Mag, Au [34]	(i) H ₂ O–NaCl (0.2–23 wt. % NaCl; 140 to 240 °C); (ii) H ₂ O–CO ₂ – NaCl (3.9–19 wt% NaCl equiv.; 240 to 310 °C); (iii) CO ₂ –rich fluid [34]	$\delta^{18}\text{O}_{\text{H}_2\text{O}} = 11.2\text{‰}$, $\delta\text{D}_{\text{H}_2\text{O}} = -31\text{‰}$ [35]	
Patinhas (Cuiú- Cuiú camp)	ca. 2.0 Ga granodiorite gneiss [36,37]		Veins controlled by NE–SW-trending. brittle-ductile. strike- slip shear zone [37]	Py, Au Ccp [37]	(i) H ₂ O–NaCl (0.2–16 wt. % NaCl; 273 to 319 °C); (ii) H ₂ O–CO ₂ – NaCl (6.6 wt% NaCl equiv.; 307 to 389 °C); (iii) CO ₂ –rich fluid [37]		
Ouro Roxo	Resources: 1.34 Mt @ 4.5 g/t Au (oxidized ore) (0.19 Moz) [38]	ca.1.89–1.91 Ga my- lonitized diorite, granodiorite [39]	Propylitic alteration (Chl–Ph–Cb), sericitic (Qz–Ser–Py–Cb), car- bonate alteration [39]	Sheared or brecciated veins controlled by a N–S-trending, region- al, brittle-ductile, transcurrent shear zone [39]	Py, Au, Ccp, Bs, native Bi [39]	(i) H ₂ O–NaCl–MgCl ₂ – FeCl ₂ (6–18 wt. % NaCl; 180–280 °C); (ii) H ₂ O–NaCl–CaCl ₂ (~30 wt.% NaCl; 270–400 °C); (iii) H ₂ O–CO ₂ – NaCl (20% wt.% NaCl; 230–430 °C) [40]	
São Jorge	14.42 Mt @ 1.54 g/t Au (Indicated resources); 28.19 Mt @ 1.14 g/t Au (Inferred Re-	ca. 1.89 Ga Hb-Bt monzogranite; ca. 1.98 Ga monzodiorite, monzogranite [42]	Ser–Chl–(Cb–Spn–Ep– Mag), propylitic, se- ricitic (Ser–Cb–Py) alteration [43]	Vein system and disseminated ore controlled by sub- vertical NW-trending brittle-ductile faults	Py, Au Ccp, Sp, Gn, Mol, Bs, na- tive Bi [43]	(i) H ₂ O–NaCl–CaCl ₂ (20–23 wt.% NaCl; 122–236 °C); (ii) H ₂ O– NaCl–KCl (2.7–14.36 wt.% NaCl; 122–236 °C	

References

- Whitney, D.L.; Evans, B.W. Abbreviations for names of rock-forming minerals. *American Mineralogist* **2010**, *95*, doi:10.2138/am.2010.3371.
- Srivastava, M.; Rodriguez, P.C. NI 43-101 Technical report mineral resource update for the Castelo de Sonhos Gold Project, Pará State, Brazil; TriStar Gold Inc., Belo Horizonte, Brazil, 2020. Available online: https://www.tristargold.com/site/assets/files/3927/techreport_final_20210429.pdf?gm95z (accessed on 20 November 2020).
- Appleyard, N.; Brown, A.; Srivastava, M. National Instrument 43-101 Technical report exploration target range for the Castelo de Sonhos Gold Project Pará State – Brazil; TriStar Gold Inc., Belo Horizonte, Brazil, 2016.
- Queiroz, J.D. da S.; Klein, E.L. The Paleoproterozoic metaconglomerate-hosted Castelo de Sonhos gold deposit, Tapajós Gold Province, Amazonian Craton: a modified paleoplacer origin. *Journal of the Geological Survey of Brazil* **2018**, *1*, 81–99, doi:10.29396/jgsb.2019.v1.n2.3.
- Jacobi, P. The Discovery of epithermal Au–Cu–Mo Proterozoic deposits in the Tapajós Province, Brazil. *Revista Brasileira de Geociências* **1999**, *29*, 277–279.
- Juliani, C.; Rye, R.O.; Nunes, C.M.D.; Snee, L.W.; Correa Silva, R.H.; Monteiro, L.V.S.; Bettencourt, J.S.; Neumann, R.; Neto, A.A. Paleoproterozoic high-sulfidation mineralization in the Tapajós Gold Province, Amazonian Craton, Brazil: geology, mineralogy, alunite argon age, and stable-isotope constraints. *Chemical Geology* **2005**, *215*, 95–125.
- Landis, G.P.; Snee, L.W.; Juliani, C. Evaluation of argon ages and integrity of fluid-inclusion compositions: stepwise noble gas heating experiments on 1.87 Ga alunite from Tapajós Province, Brazil. *Chemical Geology* **2005**, *215*, 127–153.
- Prenn, N.; Peralta, E.; Breckenridge, L.; Sim, R.; Davis, B.M.; King, N.; Michel, R.; Fisher, B.; Smith, M. NI 43-101 Technical report of Coringa Gold Project, Brazil. mineral resource estimate, MTB Project Management Professionals, Inc.; Greenwood Village, CO, USA, 2017. Available online: <https://www.serabigold.com/wp-content/uploads/2018/02/Coringa-FS-43-101.pdf> (accessed on 20 November 2020).
- Guimarães, S.B.; Klein, E.L.; Harris, C.; Costa, I.S.L. Metallogenesis of the Orosirian Epithermal Coringa Gold–Silver (Cu–Pb–Zn) Deposit, Southeastern Tapajós Mineral Province, Amazonian Craton, Brazil. *Ore Geology Reviews* **2021**, *128*, 103908, doi:10.1016/j.oregeorev.2020.103908.
- Tokashiki, C.C. Mineralizações low- e intermediate-sulfidation de ouro e de metais de base em domos de riolito paleoproterozoicos na porção sul da Província Mineral do Tapajós. Ph.D. Thesis, Universidade de São Paulo, São Paulo, Brazil, 2015.
- Tokashiki, C.C.; Juliani, C.; Monteiro, L.V.S.; Misas, C.M.E.; Aguiar, M.A.; Arrais, L.B. Eventos vulcânicos de 1,97 Ga com mineralizações de ouro epitermais low- e intermediate-sulfidation na porção sul da Província Mineral do Tapajós (PA). In *Contribuições à Geologia da Amazônia*; Gorayeb, P.S.S., Lima, A.M.M., Eds.; Sociedade Brasileira de Geologia - Núcleo Norte (SBG-NNN): Belém, 2015; Vol. 9, pp. 119–138.
- Feio, J.V.B. Petrografia das rochas hospedeiras e do minério aurífero e estudo de isótopos de chumbo no alvo Mato Velho, SE da Província Aurífera do Tapajós, Pará. Bachelor's Thesis, Universidade Federal do Pará, Belém, Brazil, 2014.
- Corrêa-Lima, R.G.; Klein, E.L. Hydrothermal alteration, mineralization and fluid inclusions in the Pista and Fofão Prospects: implications for the genetic model of the Coringa polymetallic deposit, SE Tapajós Mineral Province, Amazonian Craton, Brazil. *Journal of the Geological Survey of Brazil* **2020**, *3*, 33–59.
- Aguiar-Bocanegra, M.A. Mineralizações epitermal low-sulfidation e do tipo pórfiro superpostas associadas ao magmatismo félsico de 1,88 Ga na parte norte da província Mineral do Tapajós (PA). Master's Thesis, Universidade de São Paulo, São Paulo, Brazil, 2013.
- Tunningley, A.J.; Ackroyd, B. *Mineral resource estimate on the São Chico Gold Project, Brazil*; Montevideo, Uruguay, 2012;
- Dreher, A.M.; Vlach, S.R.F.; Martini, S.L. Adularia associated with epithermal gold veins in the Tapajós Mineral Province, Pará State, Northern Brazil. *Revista Brasileira de Geociências* **1998**, *28*, 397–404.
- Gómez-Gutiérrez, D.F. Petrogênese e metalogenia do magmatismo paleoproterozoico na porção sul da Província Mineral do Tapajós, Cráton Amazônico. Ph.D. Thesis, Universidade de São Paulo, São Paulo, Brazil, 2018.
- Olin, E.J.; Cole, G.; Willow, M.A.; Olson, T.R. Canadian National Instrument 43-101 (NI 43-101) Technical report prepared by Inc. ("SRK") on the Palito Mining Complex; SRK Consulting (US): Denver, CO, USA, 2018. Available online: <https://www.serabigold.com/projects/palito-gold-mine/geological-resources/> (accessed on 20 November 2020).
- Echeverri-Misas, C.M. Evolução magmática, alteração hidrotermal e gênese da mineralização de ouro e cobre do Palito, Província Aurífera do Tapajós (PA). Master's Thesis, Universidade de São Paulo, São Paulo, Brazil, 2010.
- Echeverri-Misas, C.M. Geologia e alteração hidrotermal nas rochas vulcânicas e plutônicas paleoproterozóicas na porção sul da Província Mineral do Tapajós (PA). Ph.D. Thesis, Universidade de São Paulo, São Paulo, Brazil, 2015.

21. Sutherland, D.; Gradim, R.J.; Nilsson, J.; Rosario, P.P.; McKenzie, W.; Franca, P.R.B. d. *Technical Report Tocantinzinho Project Brazil*; Eldorado Gold Corporation, Vancouver, Canada, 2019.
22. Borgo, A.; Biondi, J.C.; Chauvet, A.; Bruguier, O.; Monié, P.; Baker, T.; Ocampo, R.; Friedman, R.; Mortensen, J. Geochronological, geochemical and petrographic constraints on the Paleoproterozoic Tocantinzinho Gold Deposit (Tapajós Gold Province, Amazonian Craton - Brazil): implications for timing, regional evolution and deformation style of its host rocks. *Journal of South American Earth Sciences* **2017**, *75*, 92–115, doi:10.1016/j.jsames.2017.02.003.
23. Lopes, A.A.; Moura, M.A. The Tocantinzinho Paleoproterozoic porphyry-style gold deposit, Tapajós Mineral Province (Brazil): geology, petrology and fluid inclusion evidence for ore-forming processes. *Minerals* **2019**, *9*, 29.
24. Santiago, É.S.B.; Villas, R.N.; Ocampo, R.C. The Tocantinzinho gold deposit, Tapajós Province, State of Pará: host granite, hydrothermal alteration and mineral chemistry. *Brazilian Journal of Geology* **2013**, *43*, 185–208, doi:10.5327/Z2317-48892013000100015.
25. Villas, R.; Santiago, É.S.B.; Castilho, M. Contexto Geológico, estudos isotópicos (C, O-Pb) e associação metálica do depósito Aurífero Tocantinzinho, Domínio Tapajós, Província Tapajós-Parima. *Geologia USP. Série Científica* **2013**, *13*, 119–138, doi:10.5327/Z1519-874X2013000100008.
26. Biondi, J.C.; Borgo, A.; Chauvet, A.; Monié, P.; Bruguier, O.; Ocampo, R. Structural, mineralogical, geochemical and geochronological constraints on ore genesis of the gold-only Tocantinzinho deposit (Para State, Brazil). *Ore Geology Reviews* **2018**, *102*, 154–194, doi:10.1016/j.oregeorev.2018.08.007.
27. Santos, J.O.S.; Hartmann, L.A.; Gaudette, H.E.; Groves, D.I.; McNaughton, N.J.; Fletcher, I.R. A New Understanding of the provinces of the Amazon Craton Based on Integration of field mapping and U-Pb and Sm-Nd geochronology. *Gondwana Research* **2000**, *3*, 453–488.
28. Juliani, C.; Correa-Silva, R.H.; Monteiro, L.V.S.; Bettencourt, J.S.; Nunes, C.M.D. The Batalha Au-granite system – Tapajós Gold Province, Amazonian Craton, Brazil: hydrothermal alteration and regional implications. *Precambrian Research* **2002**, *119*, 225–256.
29. Stubens, T.C.; Hennessey, B.T.; Gowans, R.M. *Cabral Gold Files NI 43-101 Technical report on the Cuiú-Cuiú Project, mineral resource estimate, Pará State, North-Central Brazil*; Toronto, Canada, 2018. Available online: https://cabralgold.com/site/assets/files/4292/cabral_technical_report_amended_181219.pdf (accessed on 20 November 2020).
30. Oliveira, H.T. de; Borges, R.M.K.; Klein, E.L.; Lamarão, C.N.; Marques, G.T.; Lima, R.G.C. Alteração hidrotermal e fluidos mineralizantes no Alvo Jerimum de Baixo, campo mineralizado do Cuiú-Cuiú, Província Aurífera do Tapajós: um estudo baseado em petrografia, inclusões fluidas e química mineral. *Geologia USP. Série Científica* **2019**, doi:10.11606/issn.2316-9095.v19-142134.
31. Silva Junior, C.A.S.; Klein, E.L.; Galarza, M.A.; Borges, R.M.K.; Queiroz, J.D.S.; Assunção, R.F.S.; Araújo, A.C.S.; Moore, D.J. Zircon geochronology and Pb isotope systematics in sulfides: implications for the genesis of gold mineralization in the Cuiú-Cuiú Goldfield, Tapajós Gold Province, Amazonian Craton, Brazil. In *Contribuições à Geologia da Amazônia*; Gorayaeb, P.S.S., Lima, A.M.M., Eds.; SBG-Núcleo Norte: Belém, 2015; pp. 453–465.
32. Assunção, R.F.S.; Klein, E.L. The Moreira Gomes deposit of the Cuiú-Cuiú Goldfield: fluid inclusions and stable isotope constraints and implications for the genesis of granite-hosted gold mineralization in the Tapajós Gold Province, Brazil. *Journal of South American Earth Sciences* **2014**, *49*, 85–105, doi:10.1016/j.jsames.2013.11.004.
33. Silva Júnior, C.A. dos S.; Klein, E.L. Geologia e características do fluido mineralizador dos alvos Auríferos Jerimum de Cima e Babi, Campo Mineralizado do Cuiú-Cuiú, Província Aurífera do Tapajós, Cráton Amazônico, com base em estudos de inclusões fluidas e de isótopos estáveis. *Boletim do Museu Paraense Emílio Goeldi de Ciências Naturais* **2015**, *10*, 199–230.
34. Klein, E.L.; Santos, R.A.; Fuzikawa, K.; Angélica, R.S. Hydrothermal fluid evolution and structural control of the brittle-style Guarim lode-gold mineralisation, Tapajós Province, Amazonian Craton, Brazil. *Mineralium Deposita* **2001**, *36*, 149–164.
35. Coutinho, M.G.N.; Souza, E.C.; Guimarães, M.T.; Liverton, T.; Walsh, J.N. Petrologia e geoquímica das rochas hospedeiras. In *Província Mineral do Tapajós: Geologia, metalogênia e mapa provisional para ouro em SIG*; Coutinho, M.G.N., Ed.; CPRM: Rio de Janeiro, 2008; pp. 137–196.
36. Klein, E.L.; Rosa-Costa, L.T.; Vasquez, M.L. Metalogênese da borda oriental do Cráton Amazônico. In *Metalogênese das Províncias Tectônicas Brasileiras*; Silva, M.G., Rocha Neto, M.G., Jost, H., Kuyumajian, R.M., Eds.; CPRM - Serviço Geológico do Brasil: Belo Horizonte, 2014; Vol. 1, pp. 171–194.
37. Klein, E.L.; Rosa Costa, L.T.; Carvalho, J.M. Estudo de inclusões fluidas em veio de quartzo aurífero do prospecto Patinhas, Província Aurífera do Tapajós, Cráton Amazônico. *Revista Brasileira de Geociências* **2004**, *34*, 59–66.
38. Keller, G.F.; Couture, J.F. *Vila Porto Rico Project mineral resource technical report, Pará State, Brazil. Amerix Precious Metals Corp. SRK Project Number 3UA015.000.*; 2006.
39. Veloso, Â.S.R.; Dias Santos, M. Geologia, petrografia e geocronologia das rochas do depósito aurífero Ouro Roxo, Província Tapajós, Jacareacanga (PA), Brasil. *Brazilian Journal of Geology* **2013**, *43*, 22–36, doi:10.5327/Z2317-48892013000100004.
40. Veloso, Â.S.R.; Santos, M.D.; Rios, F.J. evolução dos fluidos mineralizantes e modelo genético dos veios de quartzo auríferos em zona de cisalhamento do depósito Ouro Roxo, Província Tapajós, Jacareacanga (PA), Brasil. *Brazilian Journal of Geology* **2013**, *43*, 725–744, doi:10.5327/Z2317-488920130004000011.
41. Rodriguez, P.; Soares, L.M. *São Jorge Gold Project, Pará State, Brazil. independent technical report on mineral resources, Brazil Resources Inc.*; Belo Horizonte, Brazil, 2014. Available online: http://g1.brazilresources.com/_resources/SaoJorgeTechnicalReport.pdf (accessed on 20 November 2020).

42. Lamarão, C.N.; Dall'Agnol, R.; Lafon, J.-M.; Lima, E.F. Geology, geochemistry, and Pb-Pb zircon geochronology of the Paleoproterozoic magmatism of Vila Riozinho, Tapajós Gold Province, Amazonian Craton, Brazil. *Precambrian Research* **2002**, *119*, 189–223.
43. Borges, R.M.K.; Dall'Agnol, R.; Lamarão, C.N.; Figueiredo, M.A.B.M.; Leite, A.A. da S.; Barros, C.E. de M.; Costi, H.T. Petrografia, química mineral e processos hidrotermais associados ao depósito de ouro São Jorge, Província Aurífera do Tapajós, Cráton Amazônico. *Revista Brasileira de Geociências* **2009**, *39*, 375–393, doi:10.25249/0375-7536.2009392375393.
44. Borges, A.W.G. Geologia e metalogênese do depósito aurífero São Jorge, Província Aurífera do Tapajós, Novo Progresso, PA. Master's Thesis, Universidade do Pará, Belém, Brazil, 2010.