

Geological Magazine

Single zircon U-Pb ages and geochemistry of granitoid gneisses from SW Poland: evidence for an Avalonian affinity of the Brunian microcontinent

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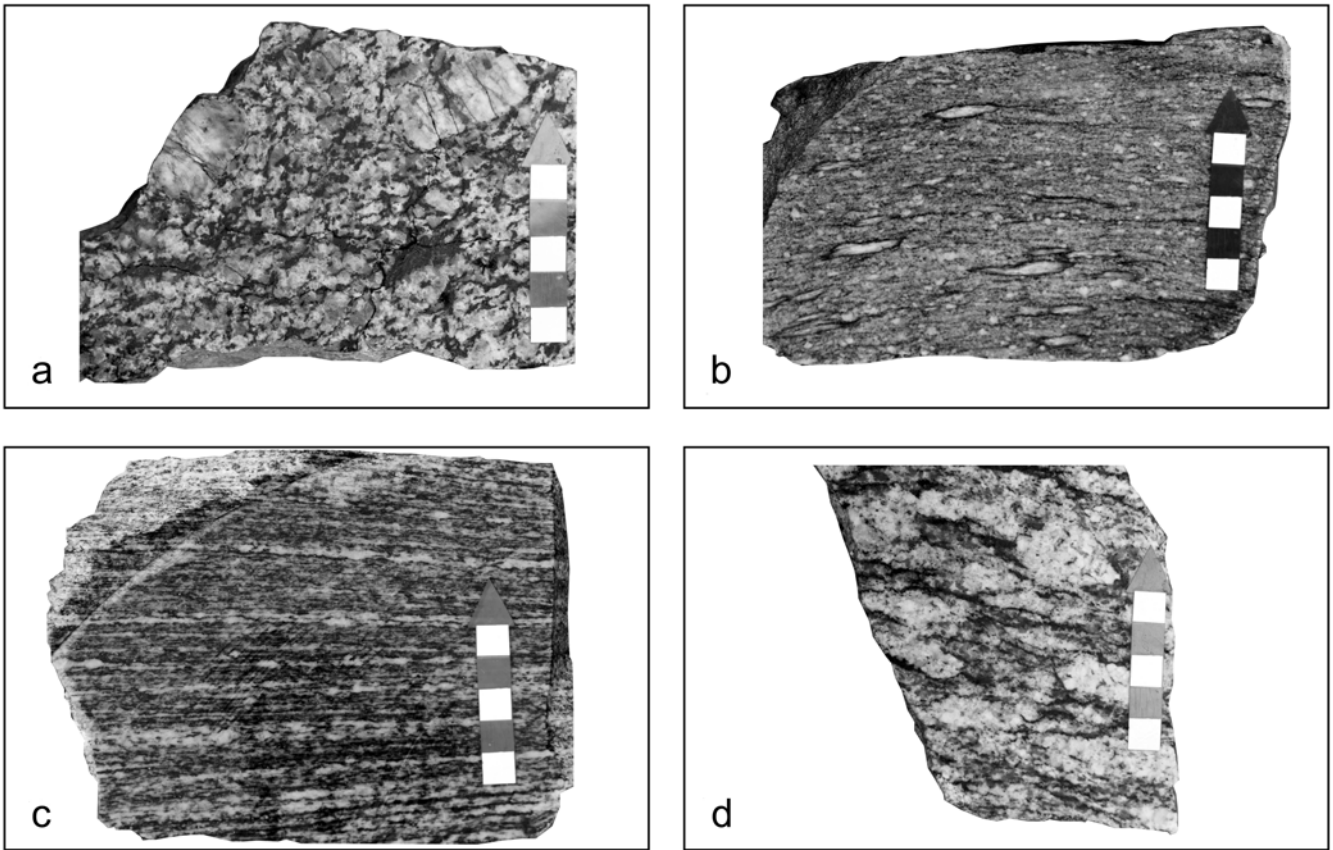


Figure A1. (a) XZ section of coarse-grained, weakly foliated Gościęcice gneiss (sample S4) with large K-feldspar megacrysts; (b) XZ section of fine-grained Nowolesie gneiss (sample S6) with characteristic sillimanite nodules; (c) XZ section of fine-grained Doboszowice gneiss showing thinly laminated flaser texture (sample S3); (d) XZ section of coarse-grained Maciejowice gneiss (sample S8; light variety) showing augen texture; length of arrow is 6 cm.

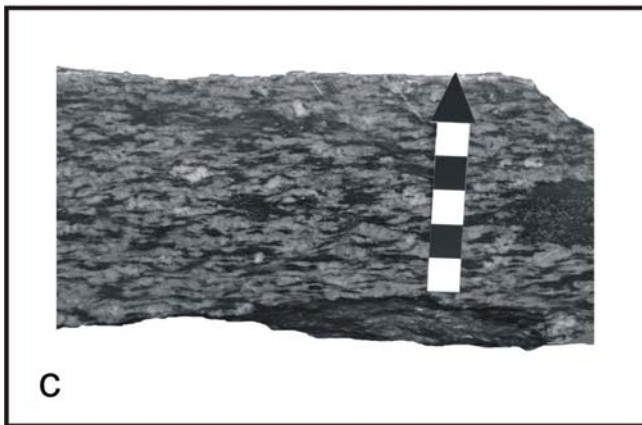
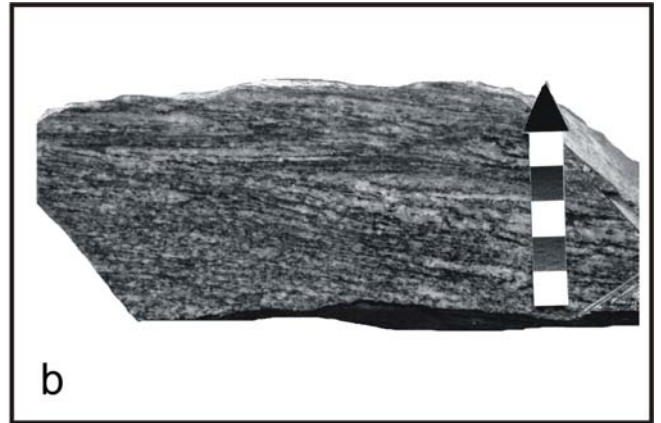


Figure A2. (a) XZ section of coarse-grained Śnieżnik gneiss with large K-feldspar megacrysts (sample PL26); (b) XZ section of fine-grained, strongly foliated Gierałtów gneiss (sample PL27a); (c) XZ section of coarse-grained similar to Śnieżnik-type gneiss (sample PL27) showing thinly laminated flaser texture; length of arrow is 6 cm.

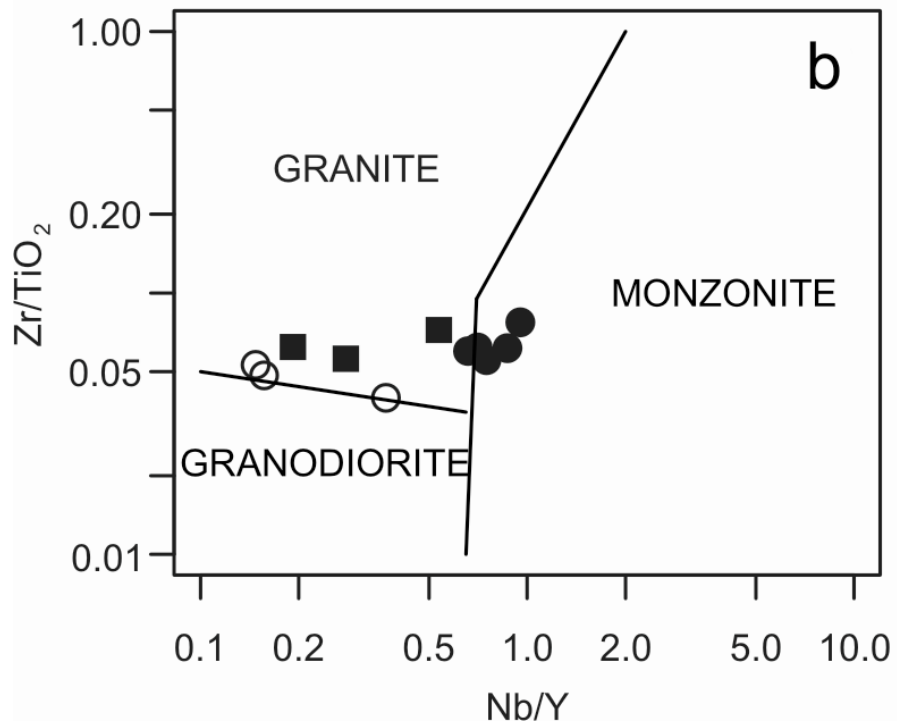
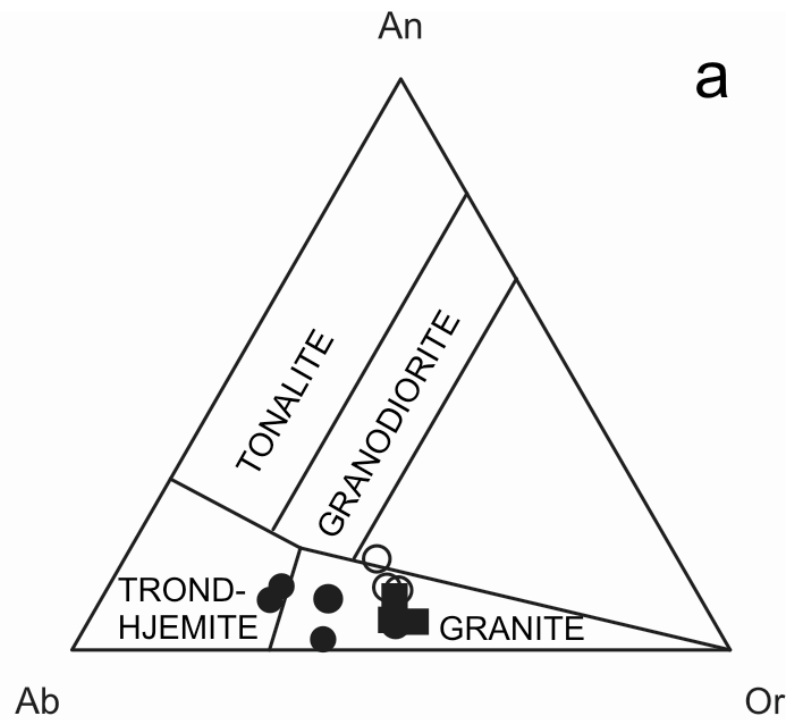
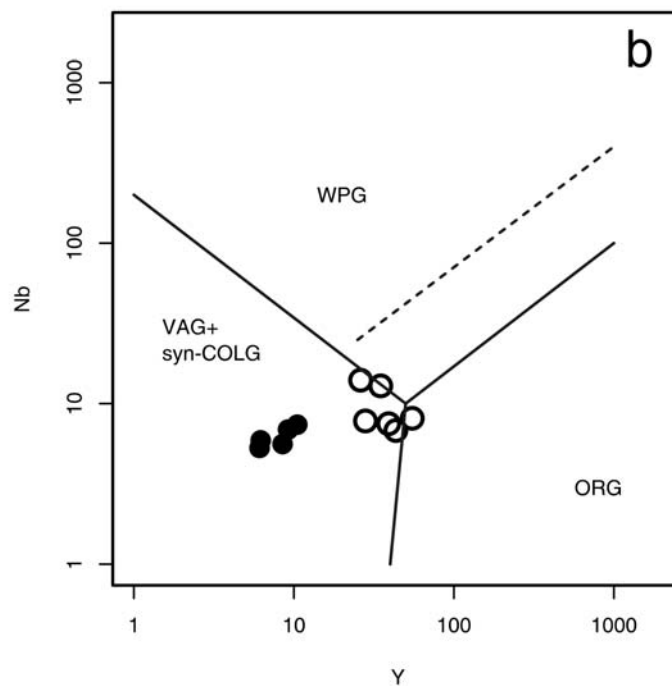
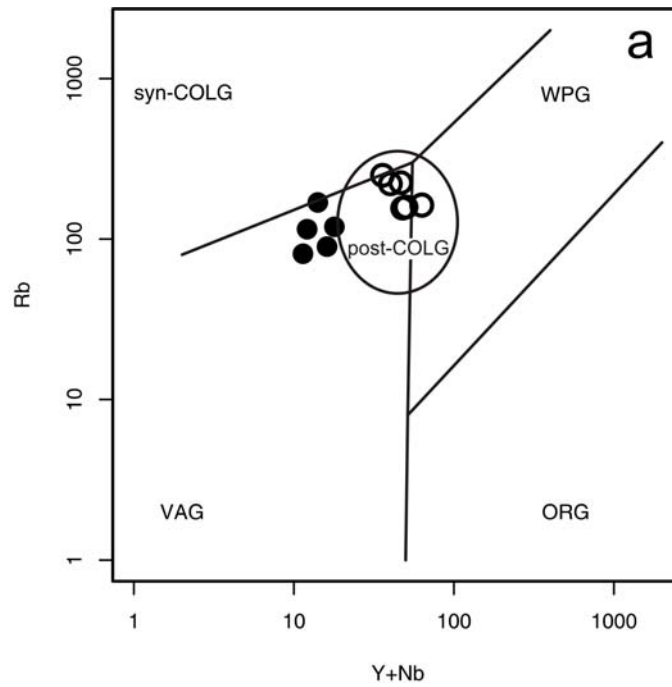
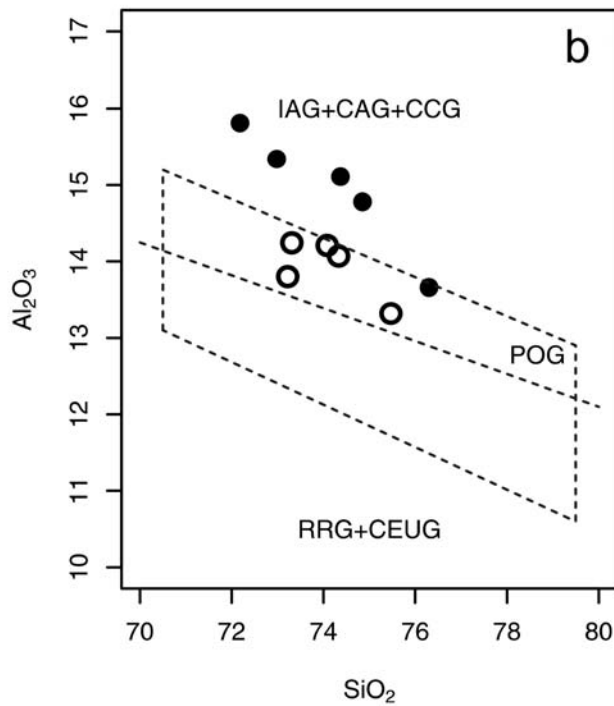
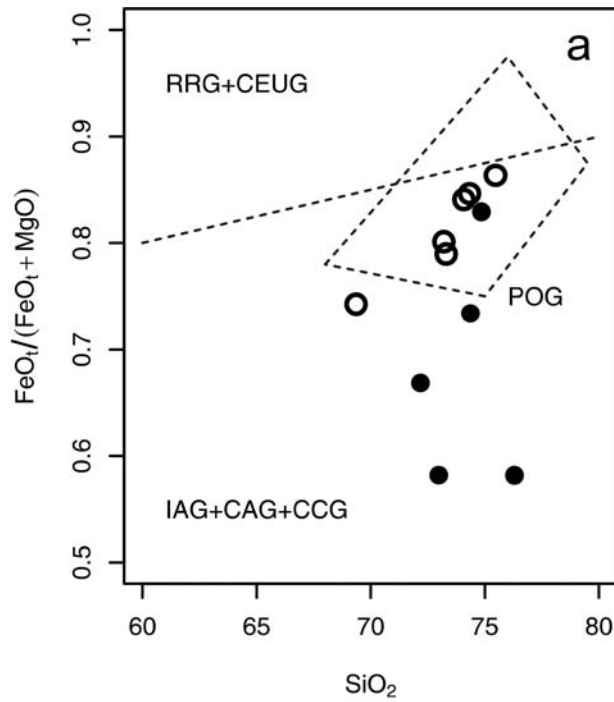


Figure A3. (a) Normative Ab–An–Or ternary diagram (after Barker, 1979) showing fields for various granitoid rocks and position of analysed orthogneisses from the eastern Fore-Sudetic block; (b) Zr/TiO_2 v. Nb/Y binary diagram (adapted from Winchester & Floyd, 1977).



- G1 - Strzelin and Nowolesie gneisses: S1, S2, S5, S6A, S6B
- G2B - Gościęcice and Maciejowice gneisses: S4, S8A, S8B

Figure A4. (a) Y + Nb v. Rb tectonic discrimination diagram after Pearce, Harris & Tindle (1984). Post-collisional field after Pearce (1996). (b) Y v. Nb tectonic discrimination diagram after Pearce, Harris & Tindle (1984). ORG – ocean ridge granites; syn-COLG – syncollisional granites; VAG – volcanic arc granites; WPG – within-plate granites.



- G1 - Strzelin and Nowolesie gneisses: S1, S2, S5, S6A, S6B
- G2 - Gościńce and Maciejowice gneisses: S4, S8A, S8B

Figure A5. Tectonic setting of analysed orthogneisses from the eastern Fore-Sudetic Block in the Maniar & Piccoli (1989) diagrams. (A) SiO_2 v. $\text{FeO}/(\text{FeO} + \text{MgO})$. (B) SiO_2 v. Al_2O_3 . RRG – rift-related granitoids; CEUG – continental epeiorogenic uplift granitoids; POG – post-orogenic granitoids; IAG – island arc granitoids; CAG – continental arc granitoids; CCG – continental collision granitoids.

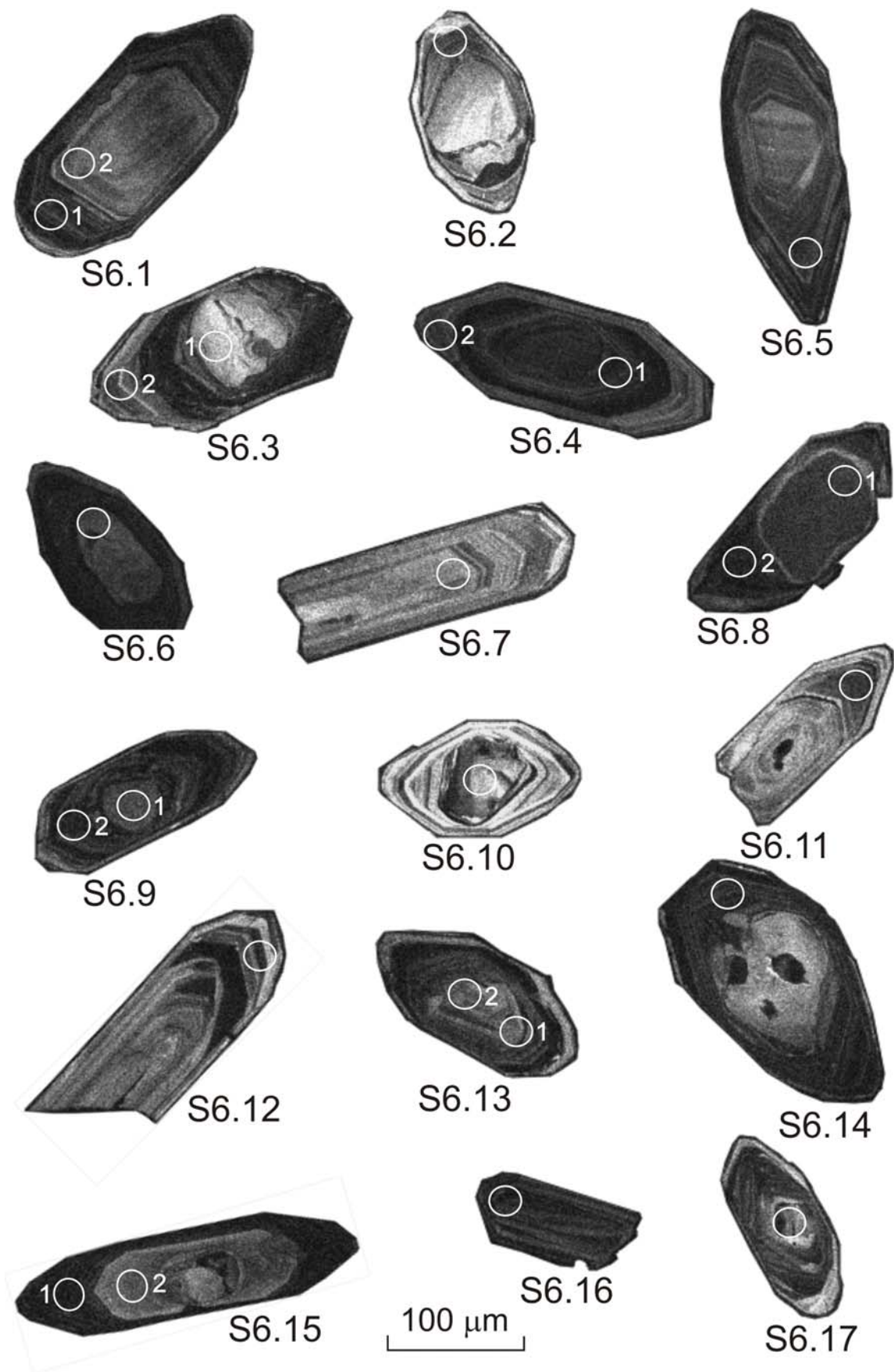


Figure A6. (a) Cathodoluminescence images of zircons with SHRIMP analytical spots from gneiss sample S6.

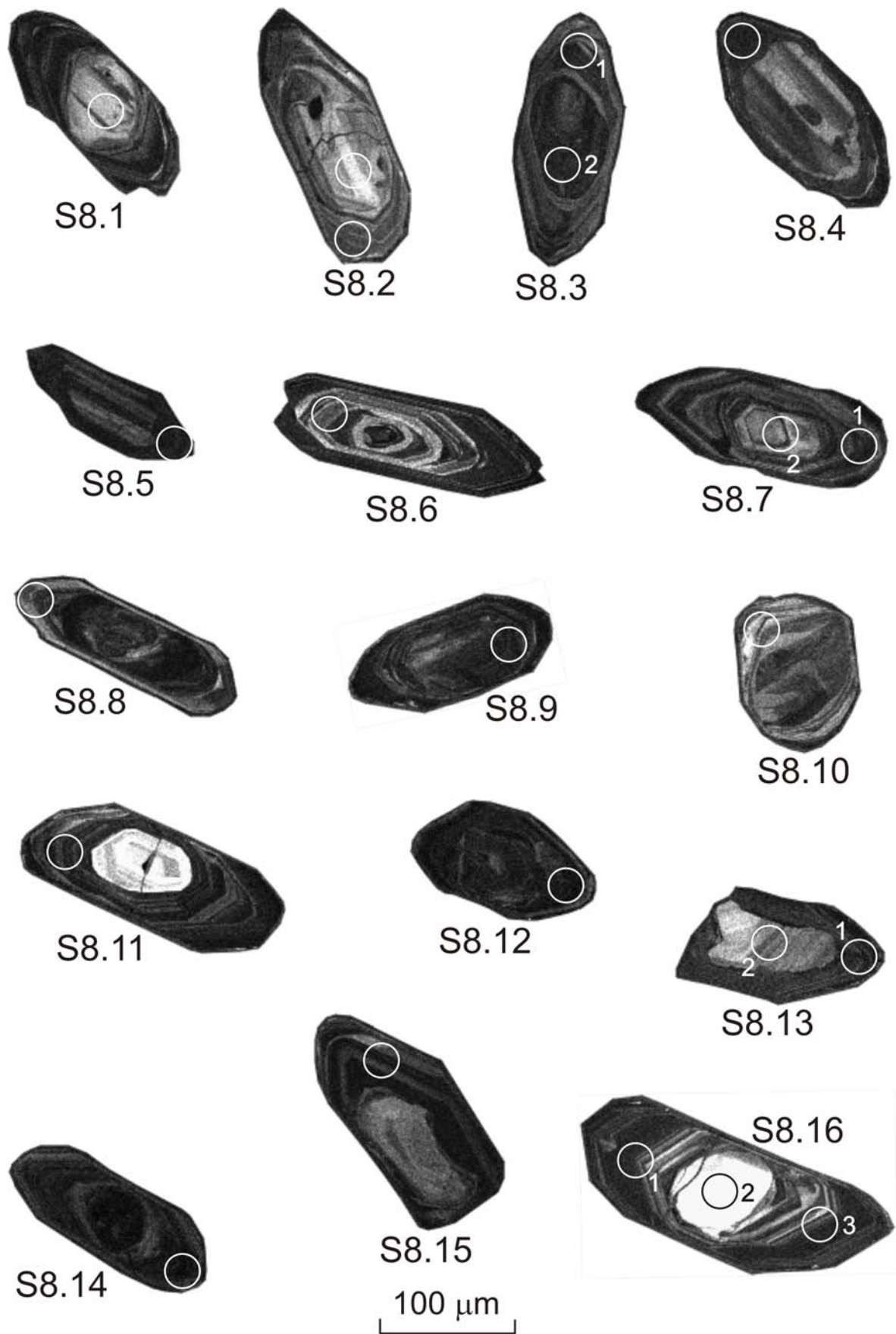


Figure A6. (b) Cathodoluminescence images of zircons with SHRIMP analytical spots from gneiss sample S8.



Figure A6. (c) Cathodoluminescence images of zircons with SHRIMP analytical spots from gneiss sample S4.

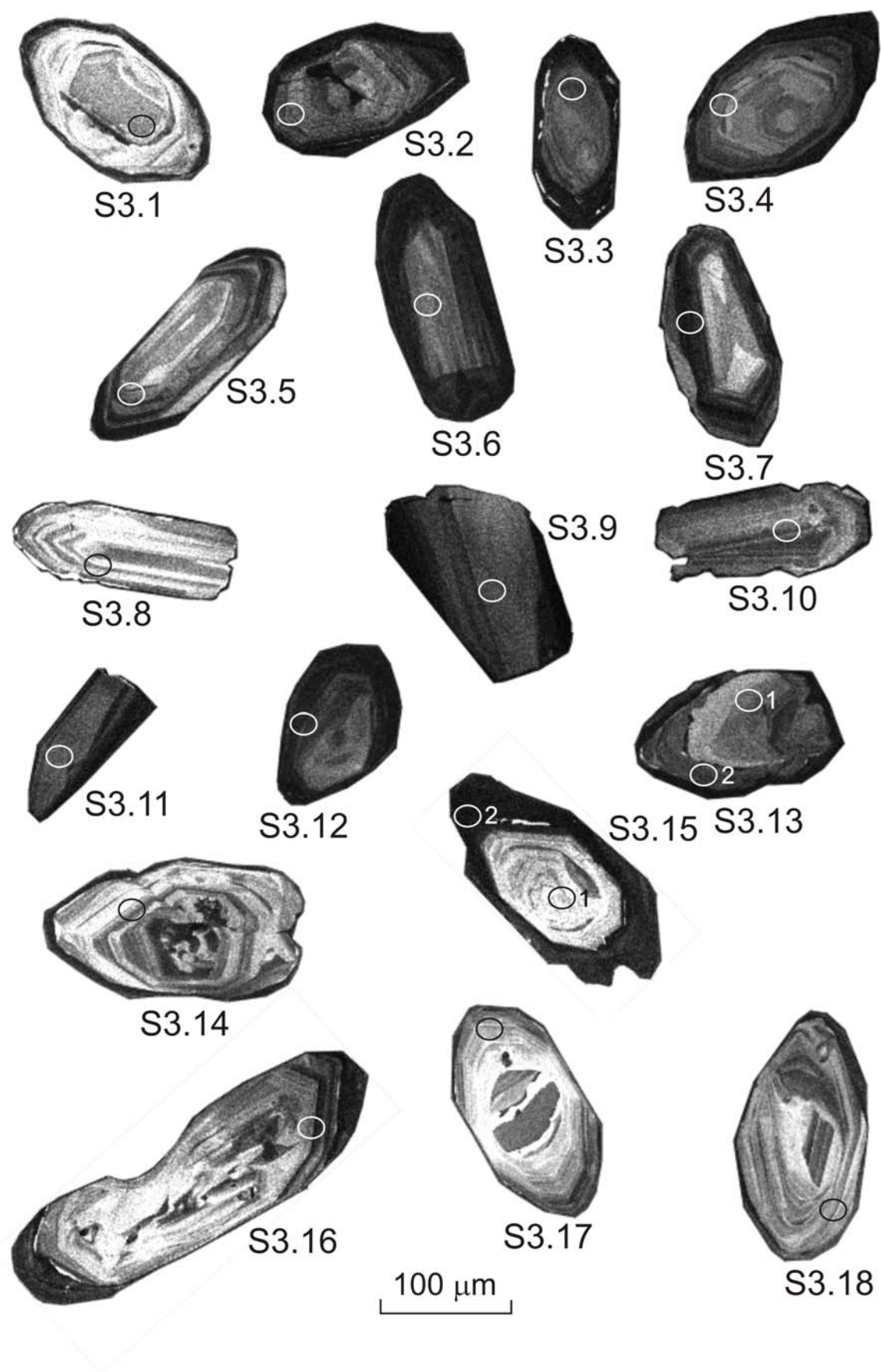


Figure A6. (d) Cathodoluminescence images of zircons with SHRIMP analytical spots from gneiss sample S3.