Supplemental Table A. LA–ICP–MS zircon U–Pb dating results of granites from the Yinyan tin deposit.

| Spots | Th  (ppm) | U  (ppm) | 207Pb/206Pb | | 207Pb/235U | | 206Pb/238U | | 207Pb/206Pb | | 207Pb/235U | | 206Pb/238U | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ratio | 1σ | Ratio | 1σ | Ratio | 1σ | Age (Ma) | 1σ | Age (Ma) | 1σ | Age (Ma) | 1σ |
| Quartz porphyry (sample Y730) | | | | | | | | | | | | | | |
| Y730-1 | 3684 | 19509 | 0.167639 | 0.005435 | 0.319741 | 0.008764 | 0.013971 | 0.000176 | 2600.0 | 53.9 | 281.7 | 6.7 | 89.4 | 1.1 |
| Y730-2 | 2994 | 13370 | 0.628468 | 0.010150 | 3.632471 | 0.063063 | 0.041767 | 0.000406 | 4575.3 | 23.4 | 1556.7 | 13.9 | 263.8 | 2.5 |
| Y730-3 | 3022 | 17820 | 0.048202 | 0.000883 | 0.080821 | 0.001634 | 0.012109 | 0.000110 | 109.4 | 42.6 | 78.9 | 1.5 | 77.6 | 0.7 |
| Y730-4 | 2230 | 15606 | 0.047253 | 0.000707 | 0.080534 | 0.001254 | 0.012329 | 0.000107 | 61.2 | 32.4 | 78.6 | 1.2 | 79.0 | 0.7 |
| Y730-5 | 2033 | 14185 | 0.046681 | 0.000681 | 0.079175 | 0.001325 | 0.012252 | 0.000111 | 31.6 | 46.3 | 77.4 | 1.2 | 78.5 | 0.7 |
| Y730-6 | 2009 | 15284 | 0.047060 | 0.000696 | 0.079207 | 0.001248 | 0.012178 | 0.000112 | 53.8 | 35.2 | 77.4 | 1.2 | 78.0 | 0.7 |
| Y730-7 | 3642 | 19671 | 0.183524 | 0.002670 | 0.363774 | 0.006720 | 0.014317 | 0.000156 | 2684.9 | 24.1 | 315.0 | 5.0 | 91.6 | 1.0 |
| Y730-8 | 2201 | 14012 | 0.047526 | 0.000771 | 0.081674 | 0.001403 | 0.012426 | 0.000097 | 76.0 | 43.5 | 79.7 | 1.3 | 79.6 | 0.6 |
| Y730-9 | 3055 | 12625 | 0.047599 | 0.000807 | 0.081248 | 0.001466 | 0.012347 | 0.000105 | 79.7 | 40.7 | 79.3 | 1.4 | 79.1 | 0.7 |
| Y730-10 | 1759 | 13069 | 0.047957 | 0.000943 | 0.081710 | 0.002198 | 0.012310 | 0.000221 | 98.2 | 46.3 | 79.8 | 2.1 | 78.9 | 1.4 |
| Y730-11 | 3213 | 17037 | 0.047411 | 0.000721 | 0.081564 | 0.001338 | 0.012439 | 0.000099 | 77.9 | 37.0 | 79.6 | 1.3 | 79.7 | 0.6 |
| Y730-12 | 3620 | 19025 | 0.047887 | 0.000723 | 0.080966 | 0.001255 | 0.012228 | 0.000081 | 100.1 | 35.2 | 79.1 | 1.2 | 78.3 | 0.5 |
| Y730-13 | 3704 | 18638 | 0.048117 | 0.000735 | 0.081391 | 0.001363 | 0.012230 | 0.000103 | 105.6 | 30.6 | 79.5 | 1.3 | 78.4 | 0.7 |
| Y730-14 | 2450 | 15869 | 0.048400 | 0.000785 | 0.082563 | 0.001436 | 0.012332 | 0.000095 | 120.5 | 43.5 | 80.6 | 1.3 | 79.0 | 0.6 |
| Y730-15 | 2592 | 16231 | 0.047740 | 0.000674 | 0.079634 | 0.001209 | 0.012066 | 0.000095 | 87.1 | 33.3 | 77.8 | 1.1 | 77.3 | 0.6 |
| Y730-16 | 4537 | 21573 | 0.048012 | 0.000824 | 0.080018 | 0.001480 | 0.012058 | 0.000118 | 98.2 | 40.7 | 78.2 | 1.4 | 77.3 | 0.8 |
| Y730-17 | 2179 | 14497 | 0.048168 | 0.000777 | 0.081734 | 0.001433 | 0.012266 | 0.000097 | 109.4 | 34.3 | 79.8 | 1.3 | 78.6 | 0.6 |
| Y730-18 | 2391 | 16063 | 0.047795 | 0.000798 | 0.082878 | 0.001441 | 0.012555 | 0.000113 | 100.1 | 36.1 | 80.8 | 1.4 | 80.4 | 0.7 |
| Y730-19 | 2579 | 16098 | 0.047302 | 0.000727 | 0.078868 | 0.001287 | 0.012056 | 0.000087 | 64.9 | 34.3 | 77.1 | 1.2 | 77.3 | 0.6 |
| Y730-20 | 2190 | 13414 | 0.048043 | 0.000798 | 0.081556 | 0.001415 | 0.012284 | 0.000098 | 101.9 | 38.9 | 79.6 | 1.3 | 78.7 | 0.6 |
| Y730-21 | 4032 | 22455 | 0.048465 | 0.000989 | 0.081837 | 0.001664 | 0.012229 | 0.000106 | 120.5 | 48.1 | 79.9 | 1.6 | 78.4 | 0.7 |
| Y730-22 | 5778 | 34533 | 0.047949 | 0.000498 | 0.081066 | 0.001014 | 0.012236 | 0.000094 | 98.2 | 24.1 | 79.1 | 1.0 | 78.4 | 0.6 |
| Y730-23 | 4288 | 25596 | 0.047447 | 0.000505 | 0.079366 | 0.000957 | 0.012113 | 0.000092 | 77.9 | 21.3 | 77.5 | 0.9 | 77.6 | 0.6 |
| Granite porphyry (sample Y802) | | | | | | | | | | | | | | |
| Y802-1 | 405 | 723 | 0.050206 | 0.001402 | 0.084919 | 0.002368 | 0.012298 | 0.000143 | 211 | 97 | 82.8 | 2.2 | 78.8 | 0.9 |
| Y802-2 | 576 | 751 | 0.048157 | 0.001672 | 0.082961 | 0.002945 | 0.012517 | 0.000167 | 106 | 77 | 80.9 | 2.8 | 80.2 | 1.1 |
| Y802-3 | 248 | 329 | 0.048400 | 0.001350 | 0.081700 | 0.002500 | 0.012440 | 0.000240 | 70 | 55 | 79.5 | 2.4 | 79.7 | 1.6 |
| Y802-4 | 389 | 421 | 0.047600 | 0.001250 | 0.080400 | 0.002250 | 0.012170 | 0.000215 | 80 | 50 | 78.4 | 2.1 | 78.0 | 1.4 |
| Y802-5 | 173 | 247 | 0.048500 | 0.001600 | 0.079400 | 0.002900 | 0.012030 | 0.000220 | 60 | 65 | 77.2 | 2.8 | 77.1 | 1.4 |
| Y802-6 | 649 | 674 | 0.048700 | 0.001250 | 0.080800 | 0.002100 | 0.012280 | 0.000220 | 120 | 55 | 78.8 | 2.0 | 78.7 | 1.4 |
| Y802-7 | 179 | 374 | 0.054800 | 0.001450 | 0.461000 | 0.014500 | 0.061800 | 0.001550 | 380 | 55 | 383.0 | 10.0 | 386.0 | 9.5 |
| Y802-8 | 1019 | 1067 | 0.060200 | 0.000850 | 0.191000 | 0.003650 | 0.022850 | 0.000325 | 591 | 31 | 177.1 | 3.1 | 145.6 | 2.1 |
| Y802-9 | 306 | 342 | 0.047600 | 0.001250 | 0.084300 | 0.002550 | 0.012670 | 0.000195 | 60 | 55 | 81.9 | 2.4 | 81.1 | 1.3 |
| Y802-10 | 551 | 843 | 0.061500 | 0.001000 | 0.173900 | 0.003550 | 0.020270 | 0.000295 | 630 | 36 | 162.5 | 3.1 | 129.3 | 1.9 |