附表1 庞西垌地区花岗质岩石锆石LA-ICP-MS U-Pb测年结果

Appendix table 1 Zircon LA-MC-ICP-MS U-Pb dating results of the granitoid rocks in the Pangxidong area

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 剥蚀点 | Th | U | Th/U | 同位素比值 | | | | | | 年龄(Ma) | | | | | | 谐和度  (%) |
| (ppm) | (ppm) | 207Pb/206Pb | 1σ | 207Pb/235U | 1σ | 206Pb/238U | 1σ | 207Pb/206Pb | 1σ | 207Pb/235U | 1σ | 206Pb/238U | 1σ |
| HHYB1-01 | 880 | 34091 | 0.03 | 0.0543 | 0.0014 | 0.3619 | 0.0100 | 0.0480 | 0.0013 | 383 | 57 | 314 | 7 | 302 | 8 | 96 |
| HHYB1-02 | 764 | 11505 | 0.07 | 0.0549 | 0.0015 | 0.5384 | 0.0144 | 0.0707 | 0.0019 | 409 | 64 | 437 | 10 | 440 | 11 | 99 |
| HHYB1-03 | 3195 | 6477 | 0.49 | 0.0703 | 0.0018 | 1.3849 | 0.0363 | 0.1424 | 0.0037 | 939 | 54 | 883 | 15 | 858 | 21 | 97 |
| HHYB1-04 | 640 | 6023 | 0.11 | 0.0559 | 0.0015 | 0.5482 | 0.0149 | 0.0711 | 0.0019 | 456 | 59 | 444 | 10 | 443 | 11 | 100 |
| HHYB1-05 | 1060 | 17411 | 0.06 | 0.0545 | 0.0014 | 0.5356 | 0.0144 | 0.0709 | 0.0019 | 394 | 59 | 435 | 9 | 441 | 11 | 99 |
| HHYB1-06 | 1332 | 6887 | 0.19 | 0.0545 | 0.0015 | 0.5379 | 0.0145 | 0.0715 | 0.0019 | 394 | 61 | 437 | 10 | 445 | 11 | 98 |
| HHYB1-07 | 654 | 4966 | 0.13 | 0.0639 | 0.0021 | 0.6808 | 0.0226 | 0.0773 | 0.0022 | 739 | 36 | 527 | 14 | 480 | 13 | 90 |
| HHYB1-08 | 959 | 5135 | 0.19 | 0.0980 | 0.0025 | 3.3443 | 0.0869 | 0.2469 | 0.0064 | 1587 | 48 | 1491 | 20 | 1422 | 33 | 95 |
| HHYB1-09 | 1220 | 9637 | 0.13 | 0.0564 | 0.0015 | 0.5524 | 0.0147 | 0.0710 | 0.0018 | 478 | 57 | 447 | 10 | 442 | 11 | 99 |
| HHYB1-10 | 6805 | 13805 | 0.49 | 0.0683 | 0.0018 | 1.1948 | 0.0314 | 0.1268 | 0.0033 | 876 | 54 | 798 | 15 | 770 | 19 | 96 |
| HHYB1-11 | 587 | 7109 | 0.08 | 0.0576 | 0.0016 | 0.5706 | 0.0155 | 0.0722 | 0.0019 | 517 | 61 | 458 | 10 | 449 | 11 | 98 |
| HHYB1-12 | 819 | 9565 | 0.09 | 0.0608 | 0.0017 | 0.6009 | 0.0165 | 0.0725 | 0.0020 | 635 | 61 | 478 | 10 | 451 | 12 | 94 |
| HHYB1-13 | 1133 | 13780 | 0.08 | 0.0584 | 0.0016 | 0.5689 | 0.0159 | 0.0723 | 0.0020 | 546 | 61 | 457 | 10 | 450 | 12 | 98 |
| HHYB1-15 | 944 | 4680 | 0.20 | 0.0639 | 0.0020 | 0.6877 | 0.0212 | 0.0792 | 0.0023 | 739 | 66 | 531 | 13 | 491 | 14 | 92 |
| HHYB1-16 | 1972 | 21122 | 0.09 | 0.0625 | 0.0020 | 0.5887 | 0.0221 | 0.0698 | 0.0027 | 692 | 70 | 470 | 14 | 435 | 16 | 92 |
| HHYB1-17 | 1175 | 11687 | 0.10 | 0.0580 | 0.0016 | 0.5671 | 0.0152 | 0.0718 | 0.0019 | 528 | 55 | 456 | 10 | 447 | 11 | 98 |
| HHYB1-18 | 1263 | 18436 | 0.07 | 0.0624 | 0.0017 | 0.5990 | 0.0173 | 0.0692 | 0.0019 | 687 | 57 | 477 | 11 | 431 | 11 | 89 |
| HHYB1-19 | 873 | 6424 | 0.14 | 0.0569 | 0.0016 | 0.5604 | 0.0155 | 0.0718 | 0.0019 | 487 | 56 | 452 | 10 | 447 | 11 | 99 |
| HHYB1-20 | 2868 | 14777 | 0.19 | 0.0588 | 0.0015 | 0.6229 | 0.0163 | 0.0770 | 0.0020 | 567 | 57 | 492 | 10 | 478 | 12 | 97 |
| AOTB2-01 | 821 | 4588 | 0.18 | 0.0563 | 0.0018 | 0.5612 | 0.0178 | 0.0722 | 0.0022 | 461 | 70 | 452 | 12 | 449 | 13 | 99 |
| AOTB2-02 | 585 | 9276 | 0.06 | 0.0557 | 0.0016 | 0.5677 | 0.0168 | 0.0730 | 0.0021 | 439 | 65 | 457 | 11 | 454 | 13 | 99 |
| AOTB2-03 | 828 | 18812 | 0.04 | 0.0547 | 0.0016 | 0.5505 | 0.0170 | 0.0716 | 0.0021 | 398 | 65 | 445 | 11 | 446 | 13 | 100 |
| AOTB2-04 | 547 | 4741 | 0.12 | 0.0565 | 0.0017 | 0.5671 | 0.0171 | 0.0719 | 0.0020 | 472 | 36 | 456 | 11 | 447 | 12 | 98 |
| AOTB2-05 | 5817 | 19661 | 0.30 | 0.0493 | 0.0016 | 0.1091 | 0.0038 | 0.0158 | 0.0005 | 161 | 78 | 105 | 4 | 101 | 3 | 96 |
| AOTB2-06 | 1226 | 16978 | 0.07 | 0.0557 | 0.0016 | 0.5521 | 0.0165 | 0.0714 | 0.0021 | 439 | 63 | 446 | 11 | 445 | 13 | 100 |
| AOTB2-07 | 847 | 6968 | 0.12 | 0.0588 | 0.0018 | 0.5693 | 0.0184 | 0.0722 | 0.0024 | 567 | 73 | 458 | 12 | 449 | 14 | 98 |
| AOTB2-08 | 468 | 7472 | 0.06 | 0.0702 | 0.0020 | 1.1235 | 0.0340 | 0.1148 | 0.0034 | 933 | 58 | 765 | 16 | 700 | 20 | 91 |
| AOTB2-12 | 605 | 4841 | 0.12 | 0.0572 | 0.0018 | 0.5557 | 0.0183 | 0.0701 | 0.0021 | 498 | 66 | 449 | 12 | 437 | 12 | 97 |
| AOTB2-13 | 1469 | 4484 | 0.33 | 0.1542 | 0.0043 | 8.4621 | 0.2442 | 0.3960 | 0.0117 | 2394 | 48 | 2282 | 26 | 2151 | 54 | 94 |
| AOTB2-14 | 959 | 18241 | 0.05 | 0.0548 | 0.0016 | 0.5386 | 0.0167 | 0.0705 | 0.0021 | 406 | 67 | 437 | 11 | 439 | 12 | 100 |
| AOTB2-15 | 498 | 5176 | 0.10 | 0.0558 | 0.0016 | 0.5496 | 0.0161 | 0.0709 | 0.0020 | 443 | 65 | 445 | 11 | 441 | 12 | 99 |
| AOTB2-16 | 820 | 88390 | 0.01 | 0.0547 | 0.0015 | 0.2633 | 0.0074 | 0.0346 | 0.0010 | 398 | 56 | 237 | 6 | 219 | 6 | 92 |
| AOTB2-17 | 711 | 4847 | 0.15 | 0.0554 | 0.0016 | 0.5446 | 0.0157 | 0.0709 | 0.0020 | 432 | 65 | 441 | 10 | 442 | 12 | 100 |
| AOTB2-18 | 1156 | 3565 | 0.32 | 0.0560 | 0.0017 | 0.5488 | 0.0165 | 0.0714 | 0.0020 | 454 | 65 | 444 | 11 | 445 | 12 | 100 |
| AOTB2-19 | 1259 | 3057 | 0.41 | 0.0562 | 0.0017 | 0.5447 | 0.0169 | 0.0705 | 0.0020 | 461 | 69 | 442 | 11 | 439 | 12 | 99 |
| AOTB2-20 | 973 | 37671 | 0.03 | 0.0539 | 0.0015 | 0.2663 | 0.0079 | 0.0360 | 0.0011 | 365 | 65 | 240 | 6 | 228 | 7 | 95 |
| AOTB2-21 | 5861 | 7510 | 0.78 | 0.0479 | 0.0016 | 0.1019 | 0.0034 | 0.0155 | 0.0004 | 95 | 80 | 98 | 3 | 99 | 3 | 99 |
| AOTB2-22 | 3805 | 9082 | 0.42 | 0.0592 | 0.0020 | 0.5804 | 0.0203 | 0.0720 | 0.0025 | 572 | 72 | 465 | 13 | 448 | 15 | 96 |
| AOTB2-23 | 628 | 8619 | 0.07 | 0.0552 | 0.0016 | 0.4758 | 0.0141 | 0.0627 | 0.0018 | 417 | 67 | 395 | 10 | 392 | 11 | 99 |
| D009B1-01 | 2611 | 8523 | 0.31 | 0.0501 | 0.0021 | 0.1145 | 0.0046 | 0.0169 | 0.0005 | 211 | 96 | 110 | 4 | 108 | 3 | 98 |
| D009B1-03 | 691 | 20333 | 0.03 | 0.0559 | 0.0017 | 0.5410 | 0.0183 | 0.0709 | 0.0024 | 450 | 64 | 439 | 12 | 442 | 15 | 99 |
| D009B1-04 | 5073 | 14169 | 0.36 | 0.0561 | 0.0019 | 0.1257 | 0.0046 | 0.0169 | 0.0006 | 457 | 72 | 120 | 4 | 108 | 4 | 89 |
| D009B1-05 | 2960 | 7866 | 0.38 | 0.0503 | 0.0034 | 0.1158 | 0.0082 | 0.0170 | 0.0008 | 209 | 156 | 111 | 7 | 108 | 5 | 97 |
| D009B1-06 | 765 | 907 | 0.84 | 0.0958 | 0.0061 | 0.1890 | 0.0107 | 0.0164 | 0.0006 | 1544 | 120 | 176 | 9 | 105 | 4 | 32 |
| D009B1-07 | 499 | 8664 | 0.06 | 0.0574 | 0.0018 | 0.5512 | 0.0174 | 0.0717 | 0.0023 | 509 | 67 | 446 | 11 | 446 | 14 | 100 |
| D009B1-09 | 1072 | 41412 | 0.03 | 0.0568 | 0.0018 | 0.3777 | 0.0134 | 0.0515 | 0.0020 | 483 | 69 | 325 | 10 | 323 | 12 | 99 |
| D009B1-10 | 945 | 1308 | 0.72 | 0.0695 | 0.0041 | 0.1579 | 0.0085 | 0.0182 | 0.0007 | 922 | 122 | 149 | 7 | 116 | 4 | 72 |
| D009B1-12 | 2382 | 2645 | 0.90 | 0.0496 | 0.0024 | 0.1162 | 0.0057 | 0.0173 | 0.0005 | 176 | 113 | 112 | 5 | 111 | 3 | 99 |
| D009B1-14 | 792 | 11488 | 0.07 | 0.0559 | 0.0020 | 0.5431 | 0.0193 | 0.0706 | 0.0022 | 456 | 80 | 440 | 13 | 440 | 13 | 100 |
| D009B1-16 | 815 | 1078 | 0.76 | 0.0681 | 0.0048 | 0.1411 | 0.0093 | 0.0162 | 0.0006 | 870 | 146 | 134 | 8 | 104 | 4 | 71 |
| D009B1-17 | 2990 | 4291 | 0.70 | 0.0502 | 0.0021 | 0.1114 | 0.0045 | 0.0167 | 0.0005 | 206 | 94 | 107 | 4 | 106 | 3 | 99 |
| D009B1-18 | 688 | 3780 | 0.18 | 0.0750 | 0.0035 | 0.1896 | 0.0086 | 0.0187 | 0.0006 | 1133 | 94 | 176 | 7 | 120 | 4 | 53 |
| D009B1-19 | 116 | 7948 | 0.01 | 0.0512 | 0.0017 | 0.2404 | 0.0078 | 0.0341 | 0.0010 | 250 | 74 | 219 | 6 | 216 | 6 | 99 |
| D009B1-20 | 5718 | 19572 | 0.29 | 0.0470 | 0.0015 | 0.1018 | 0.0033 | 0.0157 | 0.0004 | 56 | 65 | 98 | 3 | 100 | 3 | 98 |
| D009B1-21 | 382 | 6086 | 0.06 | 0.0486 | 0.0022 | 0.0916 | 0.0043 | 0.0139 | 0.0004 | 128 | 106 | 89 | 4 | 89 | 2 | 100 |
| D009B1-22 | 469 | 844 | 0.56 | 0.0901 | 0.0120 | 0.1506 | 0.0117 | 0.0159 | 0.0007 | 1428 | 257 | 142 | 10 | 102 | 4 | 61 |
| D009B1-23 | 283 | 9892 | 0.03 | 0.0486 | 0.0015 | 0.1048 | 0.0031 | 0.0157 | 0.0004 | 128 | 72 | 101 | 3 | 101 | 3 | 100 |
| D009B1-24 | 908 | 799 | 1.14 | 0.0737 | 0.0069 | 0.1526 | 0.0127 | 0.0169 | 0.0007 | 1033 | 191 | 144 | 11 | 108 | 4 | 67 |
| D009B1-25 | 726 | 1087 | 0.67 | 0.0760 | 0.0036 | 0.1445 | 0.0062 | 0.0159 | 0.0005 | 1095 | 95 | 137 | 6 | 102 | 3 | 66 |
| AOTB3-01 | 3581 | 16372 | 0.22 | 0.0489 | 0.0016 | 0.1055 | 0.0034 | 0.0157 | 0.0004 | 143 | 78 | 102 | 3 | 100 | 3 | 98 |
| AOTB3-02 | 2315 | 11527 | 0.20 | 0.0486 | 0.0015 | 0.1046 | 0.0032 | 0.0157 | 0.0004 | 128 | 72 | 101 | 3 | 100 | 3 | 99 |
| AOTB3-03 | 3204 | 14198 | 0.23 | 0.0499 | 0.0017 | 0.1060 | 0.0037 | 0.0156 | 0.0004 | 191 | 112 | 102 | 3 | 99 | 3 | 97 |
| AOTB3-04 | 3462 | 13033 | 0.27 | 0.0494 | 0.0016 | 0.1131 | 0.0037 | 0.0167 | 0.0005 | 169 | 78 | 109 | 3 | 107 | 3 | 98 |
| AOTB3-05 | 3091 | 6148 | 0.50 | 0.0503 | 0.0018 | 0.1077 | 0.0038 | 0.0160 | 0.0005 | 206 | 90 | 104 | 4 | 102 | 3 | 98 |
| AOTB3-06 | 2662 | 11277 | 0.24 | 0.0497 | 0.0016 | 0.1129 | 0.0036 | 0.0167 | 0.0005 | 189 | 74 | 109 | 3 | 107 | 3 | 98 |
| AOTB3-07 | 4349 | 13908 | 0.31 | 0.0500 | 0.0017 | 0.1102 | 0.0037 | 0.0166 | 0.0005 | 195 | 106 | 106 | 3 | 106 | 3 | 100 |
| AOTB3-08 | 2733 | 6067 | 0.45 | 0.0497 | 0.0018 | 0.1123 | 0.0041 | 0.0166 | 0.0005 | 189 | 83 | 108 | 4 | 106 | 3 | 98 |
| AOTB3-09 | 1879 | 5657 | 0.33 | 0.0726 | 0.0020 | 1.6902 | 0.0455 | 0.1687 | 0.0045 | 1011 | 56 | 1005 | 17 | 1005 | 25 | 100 |
| AOTB3-10 | 2246 | 6587 | 0.34 | 0.0523 | 0.0018 | 0.1191 | 0.0040 | 0.0169 | 0.0005 | 298 | 80 | 114 | 4 | 108 | 3 | 94 |
| AOTB3-11 | 3358 | 12395 | 0.27 | 0.0493 | 0.0015 | 0.1117 | 0.0034 | 0.0166 | 0.0005 | 167 | 72 | 108 | 3 | 106 | 3 | 98 |
| AOTB3-12 | 1712 | 6784 | 0.25 | 0.0541 | 0.0015 | 0.5100 | 0.0144 | 0.0684 | 0.0018 | 376 | 58 | 418 | 10 | 426 | 11 | 98 |
| AOTB3-13 | 427 | 84514 | 0.01 | 0.0518 | 0.0014 | 0.1580 | 0.0043 | 0.0221 | 0.0006 | 276 | 66 | 149 | 4 | 141 | 4 | 94 |
| AOTB3-14 | 4020 | 8197 | 0.49 | 0.0638 | 0.0020 | 0.1500 | 0.0046 | 0.0171 | 0.0005 | 744 | 32 | 142 | 4 | 109 | 3 | 70 |
| AOTB3-15 | 1081 | 5718 | 0.19 | 0.0560 | 0.0016 | 0.5582 | 0.0156 | 0.0717 | 0.0019 | 454 | 66 | 450 | 10 | 447 | 12 | 99 |
| AOTB3-17 | 2940 | 10600 | 0.28 | 0.0512 | 0.0016 | 0.1198 | 0.0038 | 0.0170 | 0.0005 | 256 | 74 | 115 | 3 | 108 | 3 | 94 |
| AOTB3-18 | 1831 | 5595 | 0.33 | 0.0648 | 0.0018 | 1.1660 | 0.0345 | 0.1317 | 0.0040 | 765 | 64 | 785 | 16 | 797 | 23 | 98 |
| AOTB3-19 | 3742 | 10710 | 0.35 | 0.0592 | 0.0019 | 0.5721 | 0.0186 | 0.0715 | 0.0024 | 576 | 69 | 459 | 12 | 445 | 14 | 97 |
| AOTB3-20 | 915 | 6502 | 0.14 | 0.0601 | 0.0021 | 0.5990 | 0.0234 | 0.0731 | 0.0029 | 609 | 76 | 477 | 15 | 455 | 18 | 95 |

谐和度=100\*(1-abs((206Pb/238Uage-207Pb/235Uage)/206Pb/238Uage))(据Liu et al., 2010).

附表2 庞西垌地区花岗质岩石主微量元素结果

Appendix table 2 Major and trace element contents of the granitoid rocks in the Pangxidong area

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 岩性 | 花岗片麻岩 | | | |  | 片麻状花岗岩 | | |  | 黑云母花岗岩 | | | |
| 样品编号 | SBT-B1 | DZ-B1 | LZ-B1 | HHY-B1 |  | AOT-B2 | WD-19 | AT-B14 |  | D009-B1 | AOT-B1 | B4003-2 | JS-B6 |
| SiO2 | 76.61 | 75.84 | 74.08 | 69.87 |  | 72.53 | 72.10 | 69.24 |  | 71.59 | 70.78 | 68.87 | 67.34 |
| Al2O3 | 12.42 | 12.75 | 12.97 | 14.41 |  | 13.48 | 13.76 | 16.01 |  | 15.99 | 15.88 | 13.97 | 14.89 |
| Na2O | 2.62 | 2.91 | 2.70 | 2.19 |  | 2.72 | 3.25 | 3.20 |  | 3.40 | 3.34 | 3.69 | 2.83 |
| MgO | 0.21 | 0.18 | 0.28 | 0.63 |  | 1.12 | 0.52 | 0.87 |  | 0.53 | 0.65 | 0.75 | 1.16 |
| K2O | 5.21 | 5.19 | 6.05 | 5.24 |  | 3.72 | 4.19 | 4.65 |  | 4.27 | 4.25 | 4.70 | 4.69 |
| CaO | 0.55 | 0.78 | 0.96 | 2.85 |  | 1.99 | 2.09 | 2.27 |  | 1.70 | 2.36 | 2.01 | 2.65 |
| MnO | 0.10 | 0.11 | 0.10 | 0.06 |  | 0.04 | 0.12 | 0.03 |  | 0.03 | 0.03 | 0.11 | 0.06 |
| Fe2O3t | 1.23 | 1.25 | 1.74 | 2.54 |  | 2.91 | 2.34 | 2.25 |  | 1.64 | 1.64 | 2.19 | 2.78 |
| TiO2 | 0.09 | 0.08 | 0.13 | 0.29 |  | 0.41 | 0.28 | 0.33 |  | 0.32 | 0.42 | 0.43 | 0.50 |
| P2O5 | 0.13 | 0.09 | 0.08 | 0.10 |  | 0.33 | 0.19 | 0.21 |  | 0.10 | 0.13 | 0.13 | 0.15 |
| LOI | 0.83 | 0.83 | 0.92 | 1.84 |  | 0.77 | 1.16 | 0.92 |  | 0.42 | 0.52 | 3.14 | 2.94 |
| Tatol | 100.0 | 100.0 | 100.0 | 100.0 |  | 100.0 | 100.0 | 100.0 |  | 100.0 | 100.0 | 100.0 | 100.0 |
| La | 11.21 | 8.63 | 14.83 | 22.89 |  | 19.50 | 26.36 | 54.96 |  | 69.71 | 59.55 | 31.76 | 54.96 |
| Ce | 26.37 | 19.64 | 33.23 | 49.24 |  | 38.80 | 56.28 | 98.42 |  | 154.5 | 139.2 | 60.74 | 115.8 |
| Pr | 3.25 | 2.40 | 4.06 | 5.58 |  | 4.56 | 6.58 | 9.96 |  | 13.20 | 12.89 | 6.66 | 11.74 |
| Nd | 12.05 | 9.00 | 15.26 | 21.17 |  | 17.55 | 24.80 | 31.24 |  | 43.23 | 46.79 | 23.83 | 41.69 |
| Sm | 3.65 | 2.69 | 4.28 | 4.98 |  | 4.08 | 5.77 | 4.85 |  | 5.72 | 7.58 | 3.91 | 6.77 |
| Eu | 0.23 | 0.27 | 0.47 | 0.85 |  | 0.93 | 0.90 | 0.97 |  | 1.20 | 1.66 | 0.88 | 1.52 |
| Gd | 3.75 | 2.82 | 4.64 | 5.49 |  | 4.18 | 5.54 | 4.40 |  | 4.37 | 5.73 | 3.08 | 5.25 |
| Tb | 0.85 | 0.66 | 1.06 | 1.00 |  | 0.81 | 0.98 | 0.56 |  | 0.42 | 0.59 | 0.36 | 0.57 |
| Dy | 5.91 | 4.73 | 7.53 | 6.52 |  | 5.03 | 6.38 | 3.16 |  | 1.79 | 2.54 | 1.71 | 2.59 |
| Ho | 1.20 | 0.96 | 1.54 | 1.37 |  | 0.91 | 1.32 | 0.56 |  | 0.29 | 0.41 | 0.31 | 0.43 |
| Er | 3.68 | 3.04 | 4.58 | 4.00 |  | 2.43 | 3.95 | 1.52 |  | 0.80 | 1.09 | 0.87 | 1.16 |
| Tm | 0.60 | 0.52 | 0.70 | 0.55 |  | 0.34 | 0.60 | 0.18 |  | 0.10 | 0.14 | 0.12 | 0.15 |
| Yb | 3.93 | 3.61 | 4.40 | 3.25 |  | 2.10 | 3.84 | 1.21 |  | 0.65 | 0.89 | 0.80 | 0.95 |
| Lu | 0.54 | 0.51 | 0.58 | 0.45 |  | 0.28 | 0.52 | 0.13 |  | 0.09 | 0.12 | 0.11 | 0.13 |
| Zr | 45.92 | 62.86 | 70.91 | 94.47 |  | 121.90 | 53.87 | 116.00 |  | 142.4 | 150.8 | 89.54 | 175.3 |
| A/CNK | 0.01 | 0.01 | 0.01 | 0.01 |  | 0.00 | 0.01 | 0.00 |  | 0.00 | 0.00 | 0.00 | 0.00 |
| A/NK | 0.13 | 0.13 | 0.14 | 0.15 |  | 0.14 | 0.14 | 0.13 |  | 0.14 | 0.14 | 0.13 | 0.14 |
| TZr(°C) | 699 | 718 | 720 | 736 |  | 770 | 696 | 760 |  | 788 | 783 | 725 | 786 |

注：主量元素单位为wt. %，微量元素单位为ppm. TZr为锆石饱和温度（计算据Watson and Harrison, 1983）.数据来自曾长育等（2015）.