表1 宁多花岗岩样品的锆石LA-ICP-MS U-Pb定年结果

Table 1 Zircon LA-ICP-MS U-Pb dating results of the Ningduo granites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 测试点 | 元素含量 (ppm) | | Th/U | 同位素比值 | | | | | |  | 同位素年龄 (Ma) | | | | | |
| 232Th | 238U | 207Pb/206Pb | ±1σ | 207Pb/235U | ±1σ | 206Pb/238U | ±1σ |  | 207Pb/206Pb | ±1σ | 207Pb/235U | ±1σ | 206Pb/238U | ±1σ |
| ND01-2-01 | 214 | 938 | 0.23 | 0.05120 | 0.00197 | 0.27848 | 0.01039 | 0.03936 | 0.00045 |  | 250 | 65 | 249 | 8 | 249 | 3 |
| ND01-2-02 | 212 | 1496 | 0.14 | 0.05316 | 0.00199 | 0.29376 | 0.01060 | 0.04008 | 0.00039 |  | 335 | 87 | 262 | 8 | 253 | 2 |
| ND01-2-03 | 302 | 1021 | 0.30 | 0.05120 | 0.00185 | 0.28186 | 0.01006 | 0.03979 | 0.00041 |  | 250 | 63 | 252 | 8 | 252 | 3 |
| ND01-2-04 | 340 | 695 | 0.49 | 0.05185 | 0.00224 | 0.27762 | 0.01182 | 0.03895 | 0.00048 |  | 279 | 75 | 249 | 9 | 246 | 3 |
| ND01-2-05 | 371 | 1055 | 0.35 | 0.05628 | 0.00198 | 0.30239 | 0.01050 | 0.03895 | 0.00040 |  | 463 | 59 | 268 | 8 | 246 | 2 |
| ND01-2-06 | 433 | 1011 | 0.43 | 0.05054 | 0.00282 | 0.27688 | 0.01469 | 0.03973 | 0.00069 |  | 220 | 129 | 248 | 12 | 251 | 4 |
| ND01-2-07 | 307 | 886 | 0.35 | 0.05141 | 0.00191 | 0.27364 | 0.00991 | 0.03870 | 0.00039 |  | 259 | 64 | 246 | 8 | 245 | 2 |
| ND01-2-08 | 379 | 837 | 0.45 | 0.05175 | 0.00199 | 0.27475 | 0.01061 | 0.03843 | 0.00043 |  | 275 | 68 | 246 | 8 | 243 | 3 |
| ND01-2-09 | 418 | 940 | 0.44 | 0.05238 | 0.00190 | 0.28103 | 0.01090 | 0.03869 | 0.00045 |  | 302 | 67 | 251 | 9 | 245 | 3 |
| ND01-2-10 | 409 | 1138 | 0.36 | 0.05014 | 0.00169 | 0.26849 | 0.00910 | 0.03887 | 0.00041 |  | 201 | 59 | 241 | 7 | 246 | 3 |
| ND01-2-11 | 411 | 1537 | 0.27 | 0.05215 | 0.00236 | 0.28586 | 0.01256 | 0.03975 | 0.00043 |  | 292 | 106 | 255 | 10 | 251 | 3 |
| ND01-2-12 | 206 | 1497 | 0.14 | 0.05232 | 0.00158 | 0.28237 | 0.00873 | 0.03905 | 0.00037 |  | 299 | 53 | 253 | 7 | 247 | 2 |
| ND01-2-13 | 311 | 805 | 0.39 | 0.05275 | 0.00217 | 0.28344 | 0.01148 | 0.03918 | 0.00044 |  | 318 | 72 | 253 | 9 | 248 | 3 |
| ND01-2-14 | 484 | 1222 | 0.40 | 0.04908 | 0.00175 | 0.26212 | 0.00909 | 0.03880 | 0.00035 |  | 152 | 64 | 236 | 7 | 245 | 2 |
| ND01-2-15 | 477 | 1375 | 0.35 | 0.04999 | 0.00169 | 0.27222 | 0.00906 | 0.03955 | 0.00040 |  | 195 | 59 | 244 | 7 | 250 | 2 |
| ND01-2-16 | 486 | 857 | 0.57 | 0.04953 | 0.00211 | 0.27012 | 0.01145 | 0.03975 | 0.00048 |  | 173 | 76 | 243 | 9 | 251 | 3 |
| ND01-2-17 | 371 | 897 | 0.41 | 0.05047 | 0.00194 | 0.27328 | 0.01035 | 0.03952 | 0.00044 |  | 217 | 67 | 245 | 8 | 250 | 3 |
| ND01-2-18 | 433 | 1155 | 0.38 | 0.04941 | 0.00173 | 0.26756 | 0.00915 | 0.03930 | 0.00039 |  | 167 | 61 | 241 | 7 | 249 | 2 |
| ND01-2-19 | 304 | 1080 | 0.28 | 0.05291 | 0.00186 | 0.29324 | 0.01054 | 0.04008 | 0.00043 |  | 325 | 62 | 261 | 8 | 253 | 3 |
| ND01-2-20 | 211 | 1033 | 0.20 | 0.05399 | 0.00228 | 0.29527 | 0.01206 | 0.03967 | 0.00043 |  | 370 | 98 | 263 | 9 | 251 | 3 |
| ND01-2-21 | 427 | 1045 | 0.41 | 0.05237 | 0.00175 | 0.28917 | 0.00957 | 0.04004 | 0.00044 |  | 302 | 55 | 258 | 8 | 253 | 3 |
| ND01-2-22 | 365 | 2371 | 0.15 | 0.05372 | 0.00142 | 0.29174 | 0.00770 | 0.03923 | 0.00034 |  | 359 | 44 | 260 | 6 | 248 | 2 |
| ND01-2-23 | 379 | 838 | 0.45 | 0.05365 | 0.00205 | 0.29032 | 0.01060 | 0.03941 | 0.00046 |  | 356 | 61 | 259 | 8 | 249 | 3 |
| ND01-2-24 | 345 | 1315 | 0.26 | 0.05185 | 0.00164 | 0.28058 | 0.00865 | 0.03923 | 0.00043 |  | 279 | 50 | 251 | 7 | 248 | 3 |
| ND01-2-25 | 499 | 1095 | 0.46 | 0.04957 | 0.00185 | 0.26978 | 0.01005 | 0.03929 | 0.00047 |  | 175 | 65 | 243 | 8 | 248 | 3 |
| ND01-2-26 | 257 | 601 | 0.43 | 0.05407 | 0.00232 | 0.29303 | 0.01253 | 0.03924 | 0.00051 |  | 374 | 73 | 261 | 10 | 248 | 3 |
| ND01-2-27 | 328 | 1168 | 0.28 | 0.05169 | 0.00191 | 0.28300 | 0.01063 | 0.03939 | 0.00042 |  | 272 | 66 | 253 | 8 | 249 | 3 |
| ND01-2-28 | 260 | 774 | 0.34 | 0.05283 | 0.00193 | 0.28388 | 0.00994 | 0.03905 | 0.00046 |  | 321 | 58 | 254 | 8 | 247 | 3 |
| ND01-2-29 | 446 | 1844 | 0.24 | 0.04842 | 0.00131 | 0.26513 | 0.00713 | 0.03964 | 0.00042 |  | 120 | 43 | 239 | 6 | 251 | 3 |
| ND01-2-30 | 184 | 1079 | 0.17 | 0.05183 | 0.00172 | 0.33677 | 0.01734 | 0.04610 | 0.00147 |  | 278 | 62 | 295 | 13 | 291 | 9 |
| ND01-2-31 | 211 | 952 | 0.22 | 0.05490 | 0.00294 | 0.35160 | 0.01983 | 0.04712 | 0.00153 |  | 408 | 70 | 306 | 15 | 297 | 9 |

表2 宁多花岗岩样品的主量元素、微量元素和Sr-Nd同位素组成

Table 2 Major (wt%), trace element (ppm) and Sr-Nd isotopic compositions of the Ningduo granites

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 样品号 | ND06-3 | ND01-1 | ND01-2 | ND05-6 | ND03-4 | ND02-3 | JR2\* | JR3\* | JR4\* | JR5\* | JR6\* |
| SiO2 | 69.59 | 67.10 | 66.94 | 64.59 | 65.94 | 68.22 | 68.73 | 70.87 | 66.74 | 65.66 | 62.80 |
| TiO2 | 0.64 | 0.82 | 0.80 | 0.82 | 0.78 | 0.59 | 0.65 | 0.57 | 0.75 | 0.74 | 0.58 |
| Al2O3 | 14.45 | 13.81 | 13.66 | 13.30 | 13.65 | 13.48 | 14.78 | 14.20 | 15.09 | 15.27 | 14.57 |
| Fe2O3T | 4.22 | 5.60 | 5.34 | 5.09 | 5.16 | 3.95 | 3.91 | 3.55 | 4.70 | 5.42 | 5.62 |
| MnO | 0.04 | 0.06 | 0.08 | 0.08 | 0.07 | 0.06 | 0.06 | 0.06 | 0.07 | 0.08 | 0.11 |
| MgO | 1.47 | 2.60 | 2.18 | 2.49 | 2.10 | 1.58 | 1.97 | 1.68 | 2.48 | 2.83 | 3.14 |
| CaO | 0.38 | 1.16 | 2.03 | 3.13 | 1.95 | 1.86 | 2.59 | 2.17 | 2.31 | 2.27 | 2.65 |
| Na2O | 1.96 | 2.35 | 1.95 | 2.27 | 1.97 | 2.27 | 3.19 | 2.85 | 3.32 | 3.16 | 3.41 |
| K2O | 4.93 | 3.80 | 4.53 | 3.54 | 4.55 | 5.01 | 2.88 | 3.39 | 2.76 | 2.82 | 2.76 |
| P2O5 | 0.17 | 0.18 | 0.19 | 0.19 | 0.18 | 0.16 | 0.14 | 0.13 | 0.07 | 0.08 | 0.13 |
| LOI | 2.02 | 2.20 | 1.55 | 4.07 | 2.87 | 2.81 | 1.54 | 0.98 | 2.00 | 1.53 | 1.09 |
| Mg# | 41 | 48 | 45 | 49 | 45 | 44 | 47 | 46 | 48 | 48 | 50 |
| Sc | 10.6 | 13.5 | 14.0 | 13.8 | 13.7 | 10.1 | 11.7 | 11.6 | 13.2 | 19.1 | 17.1 |
| V | 52 | 74 | 71 | 73 | 72 | 49 | 71 | 65 | 82 | 94 | 80 |
| Cr | 40.1 | 55.7 | 53.3 | 55.8 | 53.5 | 37.4 | 42.0 | 38.6 | 74.3 | 78.8 | 86.0 |
| Co | 8.9 | 11.0 | 12.5 | 10.2 | 12.3 | 7.6 | 136.0 | 135.0 | 109.0 | 123.0 | 105.0 |
| Ni | 14.2 | 20.1 | 21.5 | 19.6 | 20.3 | 13.0 | 19.0 | 19.6 | 35.8 | 34.9 | 34.2 |
| Cu | 17.8 | 13.9 | 15.8 | 20.1 | 15.4 | 10.2 | 13.9 | 14.8 | 7.6 | 14.0 | 13.1 |
| Zn | 56.0 | 46.4 | 70.7 | 46.7 | 71.5 | 57.2 | 93.1 | 105.0 | 121.0 | 162.0 | 122.0 |
| Ga | 18.9 | 19.6 | 18.6 | 18.1 | 18.7 | 17.8 | 18.4 | 18.4 | 21.6 | 22.3 | 20.5 |
| Rb | 248.5 | 174.9 | 201.5 | 164.3 | 195.2 | 218.3 | 147.0 | 162.0 | 166.0 | 180.0 | 143.0 |
| Sr | 82 | 97 | 176 | 87 | 120 | 81 | 134 | 97 | 90 | 112 | 131 |
| Y | 29.1 | 31.5 | 35.2 | 40.3 | 33.8 | 29.6 | 27.1 | 30.0 | 66.1 | 48.9 | 35.4 |
| Zr | 206 | 248 | 266 | 240 | 257 | 200 | 139 | 105 | 171 | 153 | 99 |
| Nb | 16.6 | 18.5 | 17.9 | 18.3 | 17.4 | 16.6 | 16.5 | 11.8 | 15.6 | 16.1 | 9.9 |
| Cs | 11.0 | 6.2 | 7.0 | 12.2 | 9.2 | 6.7 | 4.5 | 4.6 | 4.3 | 5.3 | 3.7 |
| Ba | 1093 | 1098 | 1611 | 935 | 1437 | 1295 | 458 | 469 | 249 | 333 | 538 |
| La | 41.2 | 41.1 | 53.4 | 53.6 | 50.9 | 40.2 | 45.1 | 47.5 | 62.9 | 54.5 | 68.3 |
| Ce | 80.6 | 84.7 | 106.9 | 106.2 | 101.5 | 80.1 | 86.5 | 94.1 | 124.0 | 110.0 | 145.0 |
| Pr | 9.3 | 9.6 | 11.6 | 11.9 | 11.2 | 8.9 | 9.8 | 11.0 | 14.6 | 13.0 | 16.9 |
| Nd | 35.1 | 38.7 | 45.4 | 46.1 | 43.5 | 34.3 | 35.1 | 40.5 | 52.9 | 47.3 | 62.5 |
| Sm | 7.20 | 8.40 | 9.03 | 9.12 | 8.67 | 7.08 | 7.15 | 8.29 | 11.60 | 9.80 | 12.70 |
| Eu | 1.01 | 2.00 | 1.33 | 1.14 | 1.54 | 1.07 | 1.00 | 0.85 | 1.05 | 1.08 | 1.24 |
| Gd | 6.05 | 7.50 | 7.67 | 8.02 | 7.43 | 6.40 | 6.18 | 7.95 | 11.64 | 10.29 | 12.09 |
| Tb | 0.93 | 1.05 | 1.12 | 1.23 | 1.08 | 0.95 | 1.07 | 1.16 | 1.88 | 1.57 | 1.73 |
| Dy | 5.47 | 5.89 | 6.76 | 7.08 | 6.28 | 5.26 | 5.51 | 5.93 | 10.90 | 8.52 | 7.90 |
| Ho | 1.02 | 1.09 | 1.22 | 1.38 | 1.17 | 0.99 | 1.07 | 1.16 | 2.36 | 1.78 | 1.42 |
| Er | 2.71 | 2.85 | 3.42 | 3.76 | 3.20 | 2.77 | 2.85 | 2.92 | 6.56 | 4.47 | 3.35 |
| Tm | 0.38 | 0.38 | 0.48 | 0.52 | 0.44 | 0.39 | 0.37 | 0.37 | 0.87 | 0.57 | 0.38 |
| Yb | 2.45 | 2.54 | 3.22 | 3.46 | 2.93 | 2.57 | 2.42 | 2.39 | 5.39 | 3.09 | 2.37 |
| Lu | 0.35 | 0.36 | 0.46 | 0.51 | 0.41 | 0.37 | 0.35 | 0.35 | 0.75 | 0.38 | 0.32 |
| Hf | 5.44 | 6.72 | 6.96 | 6.02 | 6.62 | 5.25 | 4.10 | 3.04 | 4.91 | 4.36 | 2.82 |
| Ta | 1.46 | 1.44 | 1.39 | 1.41 | 1.33 | 1.38 | 1.50 | 1.18 | 1.47 | 1.46 | 0.77 |
| Pb | 38.1 | 34.0 | 34.7 | 27.8 | 34.1 | 39.4 | 27.5 | 33.6 | 22.1 | 57.6 | 24.4 |
| Th | 25.17 | 27.14 | 28.37 | 27.85 | 26.49 | 23.65 | 25.50 | 28.30 | 43.00 | 35.30 | 47.40 |
| U | 4.12 | 3.50 | 3.91 | 4.54 | 4.64 | 5.23 | 2.30 | 2.73 | 2.99 | 2.38 | 1.80 |
| Nb/La | 0.40 | 0.45 | 0.34 | 0.34 | 0.34 | 0.41 | 0.37 | 0.25 | 0.25 | 0.30 | 0.14 |
| T(℃) | 845 | 849 | 839 | 811 | 836 | 806 | 777 | 758 | 798 | 790 | 739 |
| 87Rb/86Sr | 8.790599 |  | 3.331025 |  |  |  | 3.183682 | 4.836339 | 5.355183 | 4.665341 | 3.168891 |
| 87Sr/86Sr | 0.751319 |  | 0.734207 |  |  |  | 0.738668 | 0.748054 | 0.743193 | 0.741306 | 0.741628 |
| 147Sm/144Nd | 0.124177 |  | 0.120381 |  |  |  | 0.123166 | 0.123764 | 0.132584 | 0.125272 | 0.122862 |
| 143Nd/144Nd | 0.511892 |  | 0.511880 |  |  |  | 0.511949 | 0.511965 | 0.511917 | 0.511917 | 0.511954 |
| t(Ma) | 249 |  | 249 |  |  |  |  |  |  |  |  |
| Isr | 0.720 |  | 0.722 |  |  |  | 0.727 | 0.731 | 0.724 | 0.725 | 0.730 |
| εNd(t) | -12.3 |  | -12.4 |  |  |  | -11.1 | -10.8 | -12.0 | -11.8 | -11.0 |
| T2DM(Nd) | 2.02 |  | 2.03 |  |  |  | 1.92 | 1.90 | 2.00 | 1.98 | 1.92 |

续上表

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 样品号 | JR7\* | JR8\* | JR1\* | 11ST-60A\*\* | 11ST-60C\*\* | 11ST-60E\*\* | 11ST-60F\*\* | 11ST-61A\*\* | 11ST-61C\*\* |
| SiO2 | 67.61 | 63.45 | 68.22 | 67.50 | 67.49 | 67.35 | 67.04 | 67.04 | 67.26 |
| TiO2 | 0.62 | 0.67 | 0.75 | 0.46 | 0.47 | 0.45 | 0.46 | 0.60 | 0.63 |
| Al2O3 | 15.87 | 15.16 | 13.27 | 15.00 | 15.02 | 15.25 | 15.43 | 13.98 | 14.16 |
| Fe2O3T | 3.20 | 6.30 | 5.48 | 3.65 | 3.64 | 3.55 | 3.56 | 3.94 | 3.76 |
| MnO | 0.03 | 0.10 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.07 | 0.06 |
| MgO | 1.97 | 3.83 | 2.49 | 1.23 | 1.21 | 1.30 | 1.24 | 2.44 | 2.33 |
| CaO | 0.83 | 2.90 | 1.09 | 3.21 | 3.25 | 3.01 | 2.92 | 2.20 | 2.27 |
| Na2O | 4.22 | 2.56 | 1.84 | 2.80 | 2.71 | 2.90 | 2.92 | 2.28 | 2.36 |
| K2O | 2.12 | 1.75 | 2.42 | 3.73 | 3.93 | 3.69 | 4.00 | 3.75 | 3.57 |
| P2O5 | 0.16 | 0.07 | 0.09 | 0.12 | 0.12 | 0.12 | 0.12 | 0.18 | 0.18 |
| LOI | 2.20 | 2.16 | 2.85 | 1.24 | 1.09 | 1.35 | 1.29 | 2.57 | 2.48 |
| Mg# | 52 | 52 | 45 | 38 | 37 | 39 | 38 | 52 | 52 |
| Sc | 13.7 | 18.0 | 14.2 | 7.6 | 6.6 | 11.4 | 4.6 | 10.8 | 12.6 |
| V | 70 | 113 | 108 | 35 | 40 | 51 | 21 | 66 | 80 |
| Cr | 41.7 | 122.0 | 82.5 | 15.0 | 9.0 | 23.0 | 9.0 | 80.0 | 104.0 |
| Co | 86.1 | 103.0 | 103.0 | 5.0 | 6.0 | 8.0 | 3.0 | 9.0 | 11.0 |
| Ni | 19.1 | 52.9 | 40.7 | 3.0 | 4.0 | 5.0 | 2.0 | 24.0 | 32.0 |
| Cu | 14.7 | 14.9 | 33.6 |  |  |  |  |  |  |
| Zn | 55.9 | 141.0 | 79.6 |  |  |  |  |  |  |
| Ga | 18.9 | 23.3 | 15.8 | 15.2 | 18.0 | 21.5 | 9.5 | 17.4 | 21.1 |
| Rb | 116.0 | 96.3 | 87.5 | 136.0 | 96.0 | 132.0 | 76.5 | 159.0 | 175.0 |
| Sr | 152 | 136 | 105 | 234 | 161 | 241 | 120 | 147 | 131 |
| Y | 30.3 | 16.1 | 27.3 | 26.6 | 23.9 | 28.9 | 16.6 | 27.7 | 36.9 |
| Zr | 229 | 153 | 127 | 201 | 135 | 162 | 97 | 170 | 206 |
| Nb | 12.4 | 8.7 | 12.3 | 12.8 | 13.1 | 14.1 | 6.9 | 14.3 | 15.2 |
| Cs | 1.4 | 2.7 | 5.8 | 2.2 | 2.8 | 3.4 | 1.2 | 3.3 | 2.7 |
| Ba | 697 | 540 | 719 | 1091 | 1020 | 1243 | 608 | 1137 | 826 |
| La | 54.1 | 43.2 | 32.3 | 55.9 | 23.3 | 45.1 | 18.1 | 43.8 | 44.6 |
| Ce | 105.0 | 86.2 | 65.2 | 106.0 | 48.1 | 85.1 | 35.0 | 89.9 | 89.2 |
| Pr | 12.1 | 10.1 | 7.5 | 11.8 | 5.4 | 9.6 | 4.2 | 10.8 | 10.4 |
| Nd | 43.7 | 36.9 | 27.4 | 42.8 | 20.9 | 33.9 | 15.6 | 41.1 | 39.1 |
| Sm | 8.12 | 7.22 | 5.90 | 7.21 | 4.36 | 6.38 | 3.10 | 7.56 | 7.37 |
| Eu | 1.11 | 1.27 | 1.22 | 1.28 | 0.99 | 1.27 | 0.67 | 1.34 | 1.21 |
| Gd | 7.12 | 6.64 | 5.40 | 6.59 | 4.59 | 5.93 | 3.17 | 6.93 | 6.88 |
| Tb | 1.13 | 0.87 | 0.89 | 0.99 | 0.72 | 0.93 | 0.52 | 0.99 | 1.11 |
| Dy | 5.60 | 3.49 | 5.08 | 5.67 | 4.45 | 5.58 | 3.12 | 5.70 | 6.71 |
| Ho | 1.12 | 0.61 | 1.10 | 1.14 | 0.94 | 1.12 | 0.66 | 1.13 | 1.43 |
| Er | 3.12 | 1.57 | 2.94 | 3.15 | 2.63 | 3.16 | 1.88 | 3.05 | 4.05 |
| Tm | 0.41 | 0.20 | 0.40 | 0.45 | 0.39 | 0.45 | 0.28 | 0.42 | 0.57 |
| Yb | 2.61 | 1.42 | 2.67 | 2.89 | 2.57 | 2.90 | 1.86 | 2.72 | 3.72 |
| Lu | 0.35 | 0.21 | 0.38 | 0.44 | 0.38 | 0.44 | 0.28 | 0.39 | 0.55 |
| Hf | 6.30 | 4.24 | 3.80 | 5.74 | 3.64 | 4.52 | 2.85 | 4.69 | 5.73 |
| Ta | 1.20 | 0.56 | 1.07 | 1.23 | 1.19 | 1.39 | 0.85 | 1.45 | 1.66 |
| Pb | 4.8 | 18.9 | 14.4 | 30.0 | 26.5 | 31.7 | 16.7 | 37.5 | 28.1 |
| Th | 28.40 | 23.80 | 14.70 | 25.40 | 13.60 | 21.40 | 9.69 | 24.40 | 22.90 |
| U | 2.30 | 1.80 | 2.20 | 3.59 | 2.24 | 3.23 | 1.91 | 2.57 | 3.16 |
| Nb/La | 0.23 | 0.20 | 0.38 | 0.23 | 0.56 | 0.31 | 0.38 | 0.33 | 0.34 |
| T(℃) | 847 | 796 |  | 800 | 764 | 784 | 741 | 800 | 818 |
| 87Rb/86Sr |  | 2.056288 | 2.418803 |  | 1.730000 |  | 1.850000 | 3.140000 | 3.870000 |
| 87Sr/86Sr |  | 0.745266 | 0.740191 |  | 0.723624 |  | 0.724253 | 0.736370 | 0.741243 |
| 147Sm/144Nd |  | 0.118302 | 0.130192 |  | 0.130000 |  | 0.120000 | 0.110000 | 0.110000 |
| 143Nd/144Nd |  | 0.511849 | 0.511865 |  | 0.511967 |  | 0.511951 | 0.511892 | 0.511882 |
| t(Ma) |  |  |  |  |  |  |  |  |  |
| Isr |  | 0.738 | 0.732 |  | 0.717 |  | 0.718 | 0.725 | 0.728 |
| εNd(t) |  | -12.9 | -13.0 |  | -11.0 |  | -11.0 | -11.8 | -12.0 |
| T2DM(Nd) |  | 2.07 | 2.07 |  | 1.91 |  | 1.91 | 1.98 | 2.00 |

\*和\*\*数据分别为东达山和吉塘花岗岩的数据（Peng et al.,2015; Tao et al., 2014)，其中JR1\*为元古代片麻岩。