

Supplementary Materials: Shannon, Rényi, Tsallis Entropies and Onicescu Information Energy for Low-Lying Singly Excited States Helium

Jen-Hao Ou ^{1,2*}, Yew Kam Ho ¹

Table S1. Rényi entropy of order α (R_α) for the ground and low-lying singly excited states of helium with size of basis set $\omega = 15$. Values of R_1 are set to Shannon entropy.

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
0.50	4.015 711 97	7.827 360 64	7.375 384 22	$1.005 154 57 \times 10^1$	9.750 363 90
0.51	3.975 078 80	7.784 260 17	7.332 206 20	$1.000 924 83 \times 10^1$	9.707 778 96
0.52	3.935 408 51	7.741 388 79	7.289 398 93	9.966 688 82	9.664 991 54
0.53	3.896 660 88	7.698 705 71	7.246 921 10	9.923 813 98	9.621 950 10
0.54	3.858 798 29	7.656 171 88	7.204 733 95	9.880 571 01	9.578 603 85
0.55	3.821 785 53	7.613 749 96	7.162 801 06	9.836 907 45	9.534 902 62
0.56	3.785 589 53	7.571 404 19	7.121 088 08	9.792 771 09	9.490 796 80
0.57	3.750 179 18	7.529 100 34	7.079 562 61	9.748 109 94	9.446 237 23
0.58	3.715 525 17	7.486 805 61	7.038 194 00	9.702 872 12	9.401 175 20
0.59	3.681 599 82	7.444 488 61	6.996 953 31	9.657 005 84	9.355 562 36
0.60	3.648 376 95	7.402 119 30	6.955 813 12	9.610 459 36	9.309 350 75
0.61	3.615 831 78	7.359 668 96	6.914 747 51	9.563 181 02	9.262 492 75
0.62	3.583 940 83	7.317 110 14	6.873 731 98	9.515 119 21	9.214 941 11
0.63	3.552 681 78	7.274 416 70	6.832 743 36	9.466 222 42	9.166 649 01
0.64	3.522 033 46	7.231 563 73	6.791 759 80	9.416 439 30	9.117 570 07
0.65	3.491 975 70	7.188 527 60	6.750 760 74	9.365 718 73	9.067 658 45
0.66	3.462 489 31	7.145 285 94	6.709 726 83	9.314 009 91	9.016 868 94
0.67	3.433 556 00	7.101 817 67	6.668 639 97	9.261 262 52	8.965 157 05
0.68	3.405 158 32	7.058 102 98	6.627 483 26	9.207 426 86	8.912 479 21
0.69	3.377 279 64	7.014 123 42	6.586 240 99	9.152 453 99	8.858 792 87
0.70	3.349 904 03	6.969 861 86	6.544 898 64	9.096 296 04	8.804 056 74
0.71	3.323 016 29	6.925 302 57	6.503 442 89	9.038 906 38	8.748 230 96
0.72	3.296 601 87	6.880 431 24	6.461 861 61	8.980 239 91	8.691 277 39
0.73	3.270 646 85	6.835 235 02	6.420 143 86	8.920 253 43	8.633 159 84
0.74	3.245 137 89	6.789 702 56	6.378 279 91	8.858 905 92	8.573 844 40
0.75	3.220 062 20	6.743 824 09	6.336 261 24	8.796 158 99	8.513 299 73
0.76	3.195 407 52	6.697 591 41	6.294 080 55	8.731 977 24	8.451 497 40
0.77	3.171 162 08	6.650 998 01	6.251 731 76	8.666 328 75	8.388 412 31
0.78	3.147 314 58	6.604 039 03	6.209 210 07	8.599 185 55	8.324 023 01
0.79	3.123 854 17	6.556 711 39	6.166 511 87	8.530 524 12	8.258 312 15
0.80	3.100 770 42	6.509 013 79	6.123 634 87	8.460 325 92	8.191 266 87
0.81	3.078 053 30	6.460 946 74	6.080 578 01	8.388 577 93	8.122 879 22
0.82	3.055 693 15	6.412 512 65	6.037 341 51	8.315 273 22	8.053 146 60
0.83	3.033 680 69	6.363 715 78	5.993 926 86	8.240 411 45	7.982 072 17
0.84	3.012 006 96	6.314 562 34	5.950 336 84	8.163 999 47	7.909 665 22
0.85	2.990 663 35	6.265 060 46	5.906 575 47	8.086 051 77	7.835 941 58
0.86	2.969 641 55	6.215 220 23	5.862 648 06	8.006 591 01	7.760 923 94
0.87	2.948 933 55	6.165 053 67	5.818 561 12	7.925 648 37	7.684 642 16

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
0.88	2.928 531 61	6.114 574 71	5.774 322 44	7.843 264 02	7.607 133 49
0.89	2.908 428 29	6.063 799 21	5.729 940 98	7.759 487 28	7.528 442 76
0.90	2.888 616 37	6.012 744 89	5.685 426 89	7.674 376 90	7.448 622 48
0.91	2.869 088 90	5.961 431 30	5.640 791 45	7.588 001 07	7.367 732 84
0.92	2.849 839 16	5.909 879 74	5.596 047 06	7.500 437 42	7.285 841 66
0.93	2.830 860 66	5.858 113 20	5.551 207 15	7.411 772 82	7.203 024 18
0.94	2.812 147 11	5.806 156 28	5.506 286 17	7.322 103 07	7.119 362 79
0.95	2.793 692 43	5.754 035 08	5.461 299 53	7.231 532 44	7.034 946 65
0.96	2.775 490 75	5.701 777 10	5.416 263 50	7.140 173 08	6.949 871 16
0.97	2.757 536 38	5.649 411 09	5.371 195 18	7.048 144 28	6.864 237 42
0.98	2.739 823 80	5.596 966 96	5.326 112 42	6.955 571 56	6.778 151 48
0.99	2.722 347 68	5.544 475 61	5.281 033 70	6.862 585 74	6.691 723 57
1.00	2.705 102 85	5.491 968 78	5.235 978 14	6.769 321 78	6.605 067 28
1.01	2.688 084 29	5.439 478 89	5.190 965 33	6.675 917 65	6.518 298 58
1.02	2.671 287 15	5.387 038 91	5.146 015 27	6.582 513 09	6.431 534 94
1.03	2.654 706 72	5.334 682 13	5.101 148 29	6.489 248 29	6.344 894 27
1.04	2.638 338 42	5.282 442 05	5.056 384 96	6.396 262 68	6.258 493 97
1.05	2.622 177 81	5.230 352 17	5.011 745 99	6.303 693 65	6.172 449 95
1.06	2.606 220 60	5.178 445 85	4.967 252 13	6.211 675 32	6.086 875 67
1.07	2.590 462 61	5.126 756 13	4.922 924 11	6.120 337 42	6.001 881 26
1.08	2.574 899 76	5.075 315 56	4.878 782 50	6.029 804 27	5.917 572 71
1.09	2.559 528 13	5.024 156 06	4.834 847 69	5.940 193 80	5.834 051 06
1.10	2.544 343 88	4.973 308 79	4.791 139 73	5.851 616 79	5.751 411 81
1.11	2.529 343 29	4.922 803 97	4.747 678 33	5.764 176 16	5.669 744 32
1.12	2.514 522 73	4.872 670 79	4.704 482 71	5.677 966 46	5.589 131 36
1.13	2.499 878 69	4.822 937 29	4.661 571 59	5.593 073 51	5.509 648 77
1.14	2.485 407 74	4.773 630 23	4.618 963 06	5.509 574 09	5.431 365 22
1.15	2.471 106 56	4.724 775 04	4.576 674 60	5.427 535 88	5.354 342 04
1.16	2.456 971 90	4.676 395 72	4.534 722 95	5.347 017 46	5.278 633 21
1.17	2.443 000 61	4.628 514 76	4.493 124 09	5.268 068 43	5.204 285 38
1.18	2.429 189 61	4.581 153 15	4.451 893 23	5.190 729 65	5.131 337 99
1.19	2.415 535 92	4.534 330 25	4.411 044 70	5.115 033 52	5.059 823 51
1.20	2.402 036 63	4.488 063 87	4.370 591 99	5.041 004 44	4.989 767 66
1.21	2.388 688 90	4.442 370 18	4.330 547 70	4.968 659 17	4.921 189 71
1.22	2.375 489 96	4.397 263 72	4.290 923 51	4.898 007 37	4.854 102 88
1.23	2.362 437 13	4.352 757 45	4.251 730 19	4.829 052 12	4.788 514 67
1.24	2.349 527 77	4.308 862 74	4.212 977 59	4.761 790 44	4.724 427 31
1.25	2.336 759 32	4.265 589 41	4.174 674 62	4.696 213 84	4.661 838 15
1.26	2.324 129 30	4.222 945 73	4.136 829 28	4.632 308 87	4.600 740 08
1.27	2.311 635 26	4.180 938 52	4.099 448 65	4.570 057 66	4.541 121 97
1.28	2.299 274 84	4.139 573 19	4.062 538 93	4.509 438 44	4.482 969 06
1.29	2.287 045 71	4.098 853 75	4.026 105 41	4.450 426 02	4.426 263 41
1.30	2.274 945 61	4.058 782 92	3.990 152 56	4.392 992 28	4.370 984 24
1.31	2.262 972 34	4.019 362 18	3.954 683 98	4.337 106 63	4.317 108 32
1.32	2.251 123 74	3.980 591 81	3.919 702 50	4.282 736 39	4.264 610 33
1.33	2.239 397 72	3.942 471 01	3.885 210 14	4.229 847 18	4.213 463 18
1.34	2.227 792 21	3.904 997 92	3.851 208 19	4.178 403 31	4.163 638 28

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
1.35	2.216 305 21	3.868 169 71	3.817 697 22	4.128 368 04	4.115 105 90
1.36	2.204 934 76	3.831 982 65	3.784 677 14	4.079 703 92	4.067 835 35
1.37	2.193 678 95	3.796 432 20	3.752 147 21	4.032 373 02	4.021 795 25
1.38	2.182 535 90	3.761 513 02	3.720 106 06	3.986 337 17	3.976 953 74
1.39	2.171 503 79	3.727 219 09	3.688 551 78	3.941 558 17	3.933 278 67
1.40	2.160 580 83	3.693 543 78	3.657 481 92	3.897 997 96	3.890 737 76
1.41	2.149 765 27	3.660 479 84	3.626 893 51	3.855 618 75	3.849 298 75
1.42	2.139 055 41	3.628 019 54	3.596 783 14	3.814 383 23	3.808 929 55
1.43	2.128 449 57	3.596 154 70	3.567 146 96	3.774 254 59	3.769 598 34
1.44	2.117 946 12	3.564 876 72	3.537 980 74	3.735 196 69	3.731 273 67
1.45	2.107 543 47	3.534 176 66	3.509 279 88	3.697 174 09	3.693 924 54
1.46	2.097 240 04	3.504 045 30	3.481 039 44	3.660 152 15	3.657 520 49
1.47	2.087 034 31	3.474 473 14	3.453 254 20	3.624 097 06	3.622 031 65
1.48	2.076 924 77	3.445 450 47	3.425 918 67	3.588 975 89	3.587 428 78
1.49	2.066 909 98	3.416 967 44	3.399 027 12	3.554 756 63	3.553 683 32
1.50	2.056 988 48	3.389 014 03	3.372 573 61	3.521 408 19	3.520 767 43
1.51	2.047 158 89	3.361 580 15	3.346 552 02	3.488 900 43	3.488 654 00
1.52	2.037 419 81	3.334 655 63	3.320 956 05	3.457 204 15	3.457 316 67
1.53	2.027 769 90	3.308 230 26	3.295 779 28	3.426 291 10	3.426 729 83
1.54	2.018 207 85	3.282 293 83	3.271 015 19	3.396 134 01	3.396 868 66
1.55	2.008 732 37	3.256 836 14	3.246 657 14	3.366 706 51	3.367 709 09
1.56	1.999 342 18	3.231 847 03	3.222 698 42	3.337 983 18	3.339 227 84
1.57	1.990 036 05	3.207 316 38	3.199 132 27	3.309 939 48	3.311 402 36
1.58	1.980 812 77	3.183 234 17	3.175 951 90	3.282 551 81	3.284 210 88
1.59	1.971 671 13	3.159 590 46	3.153 150 48	3.255 797 40	3.257 632 35
1.60	1.962 609 99	3.136 375 40	3.130 721 17	3.229 654 36	3.231 646 47
1.61	1.953 628 18	3.113 579 29	3.108 657 15	3.204 101 60	3.206 233 63
1.62	1.944 724 59	3.091 192 54	3.086 951 60	3.179 118 87	3.181 374 93
1.63	1.935 898 13	3.069 205 70	3.065 597 75	3.154 686 66	3.157 052 14
1.64	1.927 147 70	3.047 609 46	3.044 588 83	3.130 786 25	3.133 247 71
1.65	1.918 472 26	3.026 394 68	3.023 918 15	3.107 399 63	3.109 944 72
1.66	1.909 870 77	3.005 552 39	3.003 579 07	3.084 509 50	3.087 126 87
1.67	1.901 342 21	2.985 073 75	2.983 565 00	3.062 099 24	3.064 778 47
1.68	1.892 885 59	2.964 950 12	2.963 869 43	3.040 152 89	3.042 884 42
1.69	1.884 499 92	2.945 173 04	2.944 485 92	3.018 655 11	3.021 430 18
1.70	1.876 184 24	2.925 734 19	2.925 408 13	2.997 591 18	3.000 401 75
1.71	1.867 937 61	2.906 625 47	2.906 629 77	2.976 946 95	2.979 785 67
1.72	1.859 759 11	2.887 838 92	2.888 144 68	2.956 708 85	2.959 568 98
1.73	1.851 647 83	2.869 366 78	2.869 946 77	2.936 863 82	2.939 739 22
1.74	1.843 602 88	2.851 201 48	2.852 030 04	2.917 399 33	2.920 284 39
1.75	1.835 623 38	2.833 335 61	2.834 388 62	2.898 303 35	2.901 192 94
1.76	1.827 708 47	2.815 761 93	2.817 016 71	2.879 564 32	2.882 453 77
1.77	1.819 857 31	2.798 473 40	2.799 908 63	2.861 171 14	2.864 056 20
1.78	1.812 069 08	2.781 463 15	2.783 058 80	2.843 113 13	2.845 989 94
1.79	1.804 342 95	2.764 724 46	2.766 461 75	2.825 380 05	2.828 245 10
1.80	1.796 678 14	2.748 250 80	2.750 112 11	2.807 962 04	2.810 812 15
1.81	1.789 073 85	2.732 035 82	2.734 004 62	2.790 849 64	2.793 681 93

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
1.82	1.781 529 32	2.716 073 31	2.718 134 12	2.774 033 74	2.776 845 60
1.83	1.774 043 78	2.700 357 22	2.702 495 57	2.757 505 59	2.760 294 69
1.84	1.766 616 50	2.684 881 69	2.687 084 02	2.741 256 77	2.744 021 00
1.85	1.759 246 74	2.669 641 00	2.671 894 64	2.725 279 20	2.728 016 67
1.86	1.751 933 79	2.654 629 57	2.656 922 69	2.709 565 08	2.712 274 09
1.87	1.744 676 93	2.639 841 98	2.642 163 55	2.694 106 92	2.696 785 97
1.88	1.737 475 48	2.625 272 97	2.627 612 70	2.678 897 52	2.681 545 27
1.89	1.730 328 76	2.610 917 41	2.613 265 71	2.663 929 93	2.666 545 19
1.90	1.723 236 09	2.596 770 31	2.599 118 25	2.649 197 47	2.651 779 20
1.91	1.716 196 81	2.582 826 83	2.585 166 11	2.634 693 70	2.637 240 99
1.92	1.709 210 27	2.569 082 24	2.571 405 17	2.620 412 43	2.622 924 49
1.93	1.702 275 85	2.555 531 96	2.557 831 38	2.606 347 68	2.608 823 82
1.94	1.695 392 90	2.542 171 53	2.544 440 82	2.592 493 69	2.594 933 34
1.95	1.688 560 83	2.528 996 61	2.531 229 64	2.578 844 93	2.581 247 60
1.96	1.681 779 01	2.516 002 99	2.518 194 10	2.565 396 03	2.567 761 31
1.97	1.675 046 86	2.503 186 58	2.505 330 54	2.552 141 83	2.554 469 41
1.98	1.668 363 79	2.490 543 38	2.492 635 38	2.539 077 37	2.541 366 98
1.99	1.661 729 21	2.478 069 53	2.480 105 14	2.526 197 84	2.528 449 28
2.00	1.655 142 58	2.465 761 26	2.467 736 41	2.513 498 59	2.515 711 75
2.10	1.591 794 06	2.351 028 03	2.352 240 89	2.395 508 85	2.397 341 62
2.20	1.532 677 42	2.249 401 41	2.249 714 39	2.291 458 62	2.292 934 29
2.30	1.477 353 32	2.158 476 75	2.157 880 81	2.198 625 79	2.199 779 38
2.40	1.425 443 12	2.076 412 32	2.074 959 24	2.114 994 85	2.115 863 15
2.50	1.376 618 60	2.001 780 45	1.999 546 70	2.039 038 44	2.039 655 94
2.60	1.330 593 62	1.933 459 69	1.930 527 89	1.969 574 48	1.969 972 08
2.70	1.287 117 51	1.870 557 20	1.867 007 14	1.905 670 92	1.905 875 63
2.80	1.245 969 63	1.812 352 71	1.808 257 48	1.846 580 46	1.846 615 71
2.90	1.206 954 89	1.758 257 87	1.753 682 60	1.791 695 16	1.791 581 13
3.00	1.169 900 13	1.707 786 50	1.702 788 37	1.740 513 92	1.740 268 03
3.10	1.134 651 05	1.660 532 50	1.655 161 32	1.692 618 94	1.692 256 22
3.20	1.101 069 66	1.616 153 35	1.610 452 38	1.647 658 28	1.647 191 70
3.30	1.069 032 14	1.574 357 56	1.568 364 34	1.605 332 71	1.604 773 53
3.40	1.038 427 05	1.534 895 03	1.528 642 18	1.565 385 71	1.564 743 72
3.50	1.009 153 76	1.497 549 63	1.491 065 53	1.527 595 73	1.526 879 48
3.60	$9.811 211 89 \times 10^{-1}$	1.462 133 30	1.455 442 69	1.491 770 12	1.490 987 08
3.70	$9.542 466 29 \times 10^{-1}$	1.428 481 40	1.421 605 94	1.457 740 34	1.456 897 06
3.80	$9.284 548 29 \times 10^{-1}$	1.396 448 99	1.389 407 66	1.425 358 07	1.424 460 33
3.90	$9.036 771 33 \times 10^{-1}$	1.365 907 82	1.358 717 32	1.394 492 15	1.393 545 05
4.00	$8.798 507 66 \times 10^{-1}$	1.336 743 86	1.329 418 93	1.365 026 03	1.364 034 09
4.10	$8.569 182 05 \times 10^{-1}$	1.308 855 29	1.301 408 95	1.336 855 67	1.335 822 90
4.20	$8.348 266 32 \times 10^{-1}$	1.282 150 82	1.274 594 62	1.309 887 85	1.308 817 83
4.30	$8.135 274 50 \times 10^{-1}$	1.256 548 28	1.248 892 50	1.284 038 71	1.282 934 64
4.40	$7.929 758 62 \times 10^{-1}$	1.231 973 50	1.224 227 30	1.259 232 56	1.258 097 29
4.50	$7.731 305 04 \times 10^{-1}$	1.208 359 24	1.200 530 80	1.235 400 84	1.234 236 95
4.60	$7.539 531 09 \times 10^{-1}$	1.185 644 42	1.177 741 07	1.212 481 29	1.211 291 08
4.70	$7.354 082 22 \times 10^{-1}$	1.163 773 38	1.155 801 70	1.190 417 17	1.189 202 73
4.80	$7.174 629 39 \times 10^{-1}$	1.142 695 24	1.134 661 14	1.169 156 68	1.167 919 90

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
4.90	$7.000\,866\,77 \times 10^{-1}$	1.122 363 39	1.114 272 22	1.148 652 37	1.147 394 94
5.00	$6.832\,509\,70 \times 10^{-1}$	1.102 735 06	1.094 591 62	1.128 860 68	1.127 584 16
5.10	$6.669\,292\,84 \times 10^{-1}$	1.083 770 87	1.075 579 52	1.109 741 56	1.108 447 34
5.20	$6.510\,968\,53 \times 10^{-1}$	1.065 434 49	1.057 199 18	1.091 258 05	1.089 947 43
5.30	$6.357\,305\,32 \times 10^{-1}$	1.047 692 37	1.039 416 69	1.073 376 06	1.072 050 20
5.40	$6.208\,086\,62 \times 10^{-1}$	1.030 513 44	1.022 200 65	1.056 063 99	1.054 723 96
5.50	$6.063\,109\,53 \times 10^{-1}$	1.013 868 89	1.005 521 97	1.039 292 57	1.037 939 35
5.60	$5.922\,183\,71 \times 10^{-1}$	$9.977\,319\,56 \times 10^{-1}$	$9.893\,535\,99 \times 10^{-1}$	1.023 034 60	1.021 669 10
5.70	$5.785\,130\,46 \times 10^{-1}$	$9.820\,777\,12 \times 10^{-1}$	$9.736\,703\,98 \times 10^{-1}$	1.007 264 79	1.005 887 82
5.80	$5.651\,781\,77 \times 10^{-1}$	$9.668\,829\,45 \times 10^{-1}$	$9.584\,489\,39 \times 10^{-1}$	$9.919\,595\,72 \times 10^{-1}$	$9.905\,718\,85 \times 10^{-1}$
5.90	$5.521\,979\,56 \times 10^{-1}$	$9.521\,259\,84 \times 10^{-1}$	$9.436\,673\,59 \times 10^{-1}$	$9.770\,969\,33 \times 10^{-1}$	$9.756\,992\,33 \times 10^{-1}$
6.00	$5.395\,574\,91 \times 10^{-1}$	$9.377\,865\,71 \times 10^{-1}$	$9.293\,052\,29 \times 10^{-1}$	$9.626\,563\,26 \times 10^{-1}$	$9.612\,492\,57 \times 10^{-1}$
6.10	$5.272\,427\,42 \times 10^{-1}$	$9.238\,457\,46 \times 10^{-1}$	$9.153\,434\,32 \times 10^{-1}$	$9.486\,185\,17 \times 10^{-1}$	$9.472\,026\,72 \times 10^{-1}$
6.20	$5.152\,404\,57 \times 10^{-1}$	$9.102\,857\,39 \times 10^{-1}$	$9.017\,640\,59 \times 10^{-1}$	$9.349\,654\,82 \times 10^{-1}$	$9.335\,414\,11 \times 10^{-1}$
6.30	$5.035\,381\,18 \times 10^{-1}$	$8.970\,898\,74 \times 10^{-1}$	$8.885\,503\,05 \times 10^{-1}$	$9.216\,803\,13 \times 10^{-1}$	$9.202\,485\,26 \times 10^{-1}$
6.40	$4.921\,238\,91 \times 10^{-1}$	$8.842\,424\,86 \times 10^{-1}$	$8.756\,863\,88 \times 10^{-1}$	$9.087\,471\,30 \times 10^{-1}$	$9.073\,080\,97 \times 10^{-1}$
6.50	$4.809\,865\,74 \times 10^{-1}$	$8.717\,288\,39 \times 10^{-1}$	$8.631\,574\,68 \times 10^{-1}$	$8.961\,509\,97 \times 10^{-1}$	$8.947\,051\,56 \times 10^{-1}$
6.60	$4.701\,155\,62 \times 10^{-1}$	$8.595\,350\,58 \times 10^{-1}$	$8.509\,495\,72 \times 10^{-1}$	$8.838\,778\,55 \times 10^{-1}$	$8.824\,256\,12 \times 10^{-1}$
6.70	$4.595\,008\,00 \times 10^{-1}$	$8.476\,480\,64 \times 10^{-1}$	$8.390\,495\,35 \times 10^{-1}$	$8.719\,144\,54 \times 10^{-1}$	$8.704\,561\,86 \times 10^{-1}$
6.80	$4.491\,327\,51 \times 10^{-1}$	$8.360\,555\,17 \times 10^{-1}$	$8.274\,449\,35 \times 10^{-1}$	$8.602\,482\,93 \times 10^{-1}$	$8.587\,843\,53 \times 10^{-1}$
6.90	$4.390\,023\,62 \times 10^{-1}$	$8.247\,457\,61 \times 10^{-1}$	$8.161\,240\,42 \times 10^{-1}$	$8.488\,675\,69 \times 10^{-1}$	$8.473\,982\,84 \times 10^{-1}$
7.00	$4.291\,010\,31 \times 10^{-1}$	$8.137\,077\,75 \times 10^{-1}$	$8.050\,757\,68 \times 10^{-1}$	$8.377\,611\,23 \times 10^{-1}$	$8.362\,867\,99 \times 10^{-1}$
7.10	$4.194\,205\,81 \times 10^{-1}$	$8.029\,311\,32 \times 10^{-1}$	$7.942\,896\,26 \times 10^{-1}$	$8.269\,183\,99 \times 10^{-1}$	$8.254\,393\,21 \times 10^{-1}$
7.20	$4.099\,532\,33 \times 10^{-1}$	$7.924\,059\,55 \times 10^{-1}$	$7.837\,556\,80 \times 10^{-1}$	$8.163\,294\,01 \times 10^{-1}$	$8.148\,458\,36 \times 10^{-1}$
7.30	$4.006\,915\,80 \times 10^{-1}$	$7.821\,228\,83 \times 10^{-1}$	$7.734\,645\,18 \times 10^{-1}$	$8.059\,846\,55 \times 10^{-1}$	$8.044\,968\,51 \times 10^{-1}$
7.40	$3.916\,285\,67 \times 10^{-1}$	$7.720\,730\,33 \times 10^{-1}$	$7.634\,072\,09 \times 10^{-1}$	$7.958\,751\,72 \times 10^{-1}$	$7.943\,833\,63 \times 10^{-1}$
7.50	$3.827\,574\,67 \times 10^{-1}$	$7.622\,479\,72 \times 10^{-1}$	$7.535\,752\,76 \times 10^{-1}$	$7.859\,924\,22 \times 10^{-1}$	$7.844\,968\,27 \times 10^{-1}$
7.60	$3.740\,718\,66 \times 10^{-1}$	$7.526\,396\,88 \times 10^{-1}$	$7.439\,606\,64 \times 10^{-1}$	$7.763\,283\,00 \times 10^{-1}$	$7.748\,291\,22 \times 10^{-1}$
7.70	$3.655\,656\,41 \times 10^{-1}$	$7.432\,405\,59 \times 10^{-1}$	$7.345\,557\,17 \times 10^{-1}$	$7.668\,750\,97 \times 10^{-1}$	$7.653\,725\,30 \times 10^{-1}$
7.80	$3.572\,329\,43 \times 10^{-1}$	$7.340\,433\,34 \times 10^{-1}$	$7.253\,531\,47 \times 10^{-1}$	$7.576\,254\,82 \times 10^{-1}$	$7.561\,197\,06 \times 10^{-1}$
7.90	$3.490\,681\,85 \times 10^{-1}$	$7.250\,411\,07 \times 10^{-1}$	$7.163\,460\,17 \times 10^{-1}$	$7.485\,724\,73 \times 10^{-1}$	$7.470\,636\,58 \times 10^{-1}$
8.00	$3.410\,660\,24 \times 10^{-1}$	$7.162\,272\,99 \times 10^{-1}$	$7.075\,277\,17 \times 10^{-1}$	$7.397\,094\,16 \times 10^{-1}$	$7.381\,977\,21 \times 10^{-1}$
8.10	$3.332\,213\,50 \times 10^{-1}$	$7.075\,956\,33 \times 10^{-1}$	$6.988\,919\,44 \times 10^{-1}$	$7.310\,299\,70 \times 10^{-1}$	$7.295\,155\,45 \times 10^{-1}$
8.20	$3.255\,292\,70 \times 10^{-1}$	$6.991\,401\,22 \times 10^{-1}$	$6.904\,326\,85 \times 10^{-1}$	$7.225\,280\,82 \times 10^{-1}$	$7.210\,110\,68 \times 10^{-1}$
8.30	$3.179\,850\,99 \times 10^{-1}$	$6.908\,550\,49 \times 10^{-1}$	$6.821\,441\,98 \times 10^{-1}$	$7.141\,979\,75 \times 10^{-1}$	$7.126\,785\,05 \times 10^{-1}$
8.40	$3.105\,843\,50 \times 10^{-1}$	$6.827\,349\,52 \times 10^{-1}$	$6.740\,210\,01 \times 10^{-1}$	$7.060\,341\,29 \times 10^{-1}$	$7.045\,123\,30 \times 10^{-1}$
8.50	$3.033\,227\,19 \times 10^{-1}$	$6.747\,746\,09 \times 10^{-1}$	$6.660\,578\,50 \times 10^{-1}$	$6.980\,312\,71 \times 10^{-1}$	$6.965\,072\,59 \times 10^{-1}$
8.60	$2.961\,960\,79 \times 10^{-1}$	$6.669\,690\,25 \times 10^{-1}$	$6.582\,497\,33 \times 10^{-1}$	$6.901\,843\,53 \times 10^{-1}$	$6.886\,582\,42 \times 10^{-1}$
8.70	$2.892\,004\,71 \times 10^{-1}$	$6.593\,134\,21 \times 10^{-1}$	$6.505\,918\,51 \times 10^{-1}$	$6.824\,885\,49 \times 10^{-1}$	$6.809\,604\,43 \times 10^{-1}$
8.80	$2.823\,320\,93 \times 10^{-1}$	$6.518\,032\,19 \times 10^{-1}$	$6.430\,796\,13 \times 10^{-1}$	$6.749\,392\,36 \times 10^{-1}$	$6.734\,092\,35 \times 10^{-1}$
8.90	$2.755\,872\,94 \times 10^{-1}$	$6.444\,340\,35 \times 10^{-1}$	$6.357\,086\,16 \times 10^{-1}$	$6.675\,319\,85 \times 10^{-1}$	$6.660\,001\,83 \times 10^{-1}$
9.00	$2.689\,625\,65 \times 10^{-1}$	$6.372\,016\,65 \times 10^{-1}$	$6.284\,746\,43 \times 10^{-1}$	$6.602\,625\,52 \times 10^{-1}$	$6.587\,290\,39 \times 10^{-1}$

Table S2. Tsallis entropy of order α (T_α) for the ground and low-lying singly excited states of helium with size of basis set $\omega = 15$. Values of T_1 are set to Shannon entropy.

α	1s2s			1s3s	
	1s ² 1S ^e	1S ^e	3S ^e	1S ^e	3S ^e
0.50	$1.289\,466\,60 \times 10^1$	$9.816\,586\,92 \times 10^1$	$7.790\,506\,90 \times 10^1$	$3.025\,758\,22 \times 10^2$	$2.599\,959\,72 \times 10^2$
0.51	$1.227\,175\,83 \times 10^1$	$9.049\,884\,94 \times 10^1$	$7.211\,221\,34 \times 10^1$	$2.732\,647\,32 \times 10^2$	$2.354\,577\,48 \times 10^2$
0.52	$1.169\,318\,07 \times 10^1$	$8.352\,955\,16 \times 10^1$	$6.683\,213\,54 \times 10^1$	$2.470\,479\,02 \times 10^2$	$2.134\,606\,77 \times 10^2$
0.53	$1.115\,491\,77 \times 10^1$	$7.718\,630\,95 \times 10^1$	$6.201\,280\,91 \times 10^1$	$2.235\,742\,53 \times 10^2$	$1.937\,203\,96 \times 10^2$
0.54	$1.065\,339\,06 \times 10^1$	$7.140\,569\,00 \times 10^1$	$5.760\,819\,44 \times 10^1$	$2.025\,354\,96 \times 10^2$	$1.759\,868\,95 \times 10^2$
0.55	$1.018\,540\,25 \times 10^1$	$6.613\,144\,26 \times 10^1$	$5.357\,746\,01 \times 10^1$	$1.836\,605\,18 \times 10^2$	$1.600\,400\,31 \times 10^2$
0.56	9.748 090 31	$6.131\,359\,57 \times 10^1$	$4.988\,432\,02 \times 10^1$	$1.667\,105\,62 \times 10^2$	$1.456\,856\,71 \times 10^2$
0.57	9.338 884 53	$5.690\,767\,92 \times 10^1$	$4.649\,646\,55 \times 10^1$	$1.514\,750\,78 \times 10^2$	$1.327\,523\,77 \times 10^2$
0.58	8.955 474 30	$5.287\,405\,27 \times 10^1$	$4.338\,507\,47 \times 10^1$	$1.377\,681\,48 \times 10^2$	$1.210\,885\,46 \times 10^2$
0.59	8.595 777 05	$4.917\,732\,40 \times 10^1$	$4.052\,439\,22 \times 10^1$	$1.254\,253\,99 \times 10^2$	$1.105\,599\,44 \times 10^2$
0.60	8.257 912 31	$4.578\,584\,50 \times 10^1$	$3.789\,136\,32 \times 10^1$	$1.143\,013\,32 \times 10^2$	$1.010\,475\,61 \times 10^2$
0.61	7.940 178 94	$4.267\,127\,34 \times 10^1$	$3.546\,531\,74 \times 10^1$	$1.042\,670\,03 \times 10^2$	$9.244\,576\,10 \times 10^1$
0.62	7.641 035 29	$3.980\,819\,05 \times 10^1$	$3.322\,769\,34 \times 10^1$	$9.520\,801\,36 \times 10^1$	$8.466\,066\,80 \times 10^1$
0.63	7.359 081 80	$3.717\,376\,84 \times 10^1$	$3.116\,179\,89 \times 10^1$	$8.702\,275\,78 \times 10^1$	$7.760\,876\,40 \times 10^1$
0.64	7.093 045 81	$3.474\,747\,79 \times 10^1$	$2.925\,260\,06 \times 10^1$	$7.962\,090\,05 \times 10^1$	$7.121\,566\,48 \times 10^1$
0.65	6.841 768 22	$3.251\,083\,34 \times 10^1$	$2.748\,654\,09 \times 10^1$	$7.292\,204\,43 \times 10^1$	$6.541\,505\,22 \times 10^1$
0.66	6.604 191 68	$3.044\,716\,84 \times 10^1$	$2.585\,137\,67 \times 10^1$	$6.685\,456\,74 \times 10^1$	$6.014\,773\,98 \times 10^1$
0.67	6.379 350 23	$2.854\,143\,82 \times 10^1$	$2.433\,603\,76 \times 10^1$	$6.135\,460\,50 \times 10^1$	$5.536\,085\,37 \times 10^1$
0.68	6.166 360 11	$2.678\,004\,63 \times 10^1$	$2.293\,050\,12 \times 10^1$	$5.636\,515\,74 \times 10^1$	$5.100\,711\,49 \times 10^1$
0.69	5.964 411 66	$2.515\,069\,08 \times 10^1$	$2.162\,568\,30 \times 10^1$	$5.183\,530\,69 \times 10^1$	$4.704\,420\,84 \times 10^1$
0.70	5.772 762 06	$2.364\,222\,91 \times 10^1$	$2.041\,333\,87 \times 10^1$	$4.771\,952\,93 \times 10^1$	$4.343\,422\,79 \times 10^1$
0.71	5.590 728 94	$2.224\,455\,77 \times 10^1$	$1.928\,597\,86 \times 10^1$	$4.397\,708\,88 \times 10^1$	$4.014\,318\,74 \times 10^1$
0.72	5.417 684 63	$2.094\,850\,55 \times 10^1$	$1.823\,679\,06 \times 10^1$	$4.057\,150\,46 \times 10^1$	$3.714\,059\,00 \times 10^1$
0.73	5.253 051 07	$1.974\,574\,00 \times 10^1$	$1.725\,957\,26 \times 10^1$	$3.747\,008\,04 \times 10^1$	$3.439\,904\,70 \times 10^1$
0.74	5.096 295 26	$1.862\,868\,28 \times 10^1$	$1.634\,867\,20 \times 10^1$	$3.464\,348\,90 \times 10^1$	$3.189\,394\,20 \times 10^1$
0.75	4.946 925 13	$1.759\,043\,48 \times 10^1$	$1.549\,893\,15 \times 10^1$	$3.206\,540\,55 \times 10^1$	$2.960\,313\,25 \times 10^1$
0.76	4.804 485 92	$1.662\,470\,95 \times 10^1$	$1.470\,564\,18 \times 10^1$	$2.971\,218\,22 \times 10^1$	$2.750\,668\,65 \times 10^1$
0.77	4.668 556 85	$1.572\,577\,37 \times 10^1$	$1.396\,449\,79 \times 10^1$	$2.756\,256\,14 \times 10^1$	$2.558\,664\,82 \times 10^1$
0.78	4.538 748 18	$1.488\,839\,40 \times 10^1$	$1.327\,156\,13 \times 10^1$	$2.559\,741\,98 \times 10^1$	$2.382\,683\,06 \times 10^1$
0.79	4.414 698 54	$1.410\,778\,92 \times 10^1$	$1.262\,322\,52 \times 10^1$	$2.379\,954\,26 \times 10^1$	$2.221\,263\,10 \times 10^1$
0.80	4.296 072 49	$1.337\,958\,74 \times 10^1$	$1.201\,618\,39 \times 10^1$	$2.215\,342\,24 \times 10^1$	$2.073\,086\,60 \times 10^1$
0.81	4.182 558 38	$1.269\,978\,82 \times 10^1$	$1.144\,740\,50 \times 10^1$	$2.064\,508\,07 \times 10^1$	$1.936\,962\,66 \times 10^1$
0.82	4.073 866 37	$1.206\,472\,78 \times 10^1$	$1.091\,410\,44 \times 10^1$	$1.926\,190\,86 \times 10^1$	$1.811\,814\,65 \times 10^1$
0.83	3.969 726 65	$1.147\,104\,83 \times 10^1$	$1.041\,372\,41 \times 10^1$	$1.799\,252\,53 \times 10^1$	$1.696\,668\,72 \times 10^1$
0.84	3.869 887 81	$1.091\,566\,96 \times 10^1$	9.943 911 83	$1.682\,665\,22 \times 10^1$	$1.590\,643\,33 \times 10^1$
0.85	3.774 115 37	$1.039\,576\,47 \times 10^1$	9.502 502 75	$1.575\,499\,99 \times 10^1$	$1.492\,940\,04 \times 10^1$
0.86	3.682 190 48	9.908 736 87	9.087 503 22	$1.476\,916\,84 \times 10^1$	$1.402\,835\,21 \times 10^1$
0.87	3.593 908 66	9.452 198 88	8.697 075 76	$1.386\,155\,65 \times 10^1$	$1.319\,672\,58 \times 10^1$
0.88	3.509 078 72	9.023 955 11	8.329 525 65	$1.302\,528\,26 \times 10^1$	$1.242\,856\,62 \times 10^1$
0.89	3.427 521 74	8.621 984 51	7.983 288 68	$1.225\,411\,21 \times 10^1$	$1.171\,846\,61 \times 10^1$
0.90	3.349 070 14	8.244 425 52	7.656 920 14	$1.154\,239\,34 \times 10^1$	$1.106\,151\,28 \times 10^1$
0.91	3.273 566 85	7.889 562 39	7.349 084 76	$1.088\,500\,07 \times 10^1$	$1.045\,324\,05 \times 10^1$
0.92	3.200 864 54	7.555 812 73	7.058 547 61	$1.027\,728\,20 \times 10^1$	9.889 586 84
0.93	3.130 824 91	7.241 716 26	6.784 165 82	9.715 013 03	9.366 854 60

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
0.94	3.063 318 01	6.945 924 50	6.524 880 99	9.194 355 54	8.881 676 93
0.95	2.998 221 69	6.667 191 52	6.279 712 41	8.711 820 31	8.430 985 98
0.96	2.935 421 04	6.404 365 40	6.047 750 72	8.264 233 42	8.011 984 81
0.97	2.874 807 87	6.156 380 55	5.828 152 24	7.848 706 12	7.622 121 97
0.98	2.816 280 26	5.922 250 64	5.620 133 76	7.462 607 77	7.259 068 69
0.99	2.759 742 13	5.701 062 20	5.422 967 78	7.103 541 42	6.920 698 23
1.00	2.705 102 85	5.491 968 78	5.235 978 14	6.769 321 78	6.605 067 28
1.01	2.652 276 87	5.294 185 54	5.058 536 05	6.457 955 46	6.310 399 10
1.02	2.601 183 39	5.106 984 44	4.890 056 45	6.167 623 07	6.035 068 42
1.03	2.551 746 05	4.929 689 72	4.729 994 64	5.896 663 09	5.777 587 63
1.04	2.503 892 64	4.761 673 81	4.577 843 25	5.643 557 35	5.536 594 41
1.05	2.457 554 82	4.602 353 63	4.433 129 44	5.406 917 85	5.310 840 45
1.06	2.412 667 93	4.451 187 09	4.295 412 26	5.185 474 90	5.099 181 30
1.07	2.369 170 67	4.307 670 00	4.164 280 33	4.978 066 38	4.900 567 14
1.08	2.327 004 97	4.171 333 16	4.039 349 65	4.783 628 02	4.714 034 42
1.09	2.286 115 75	4.041 739 72	3.920 261 60	4.601 184 60	4.538 698 29
1.10	2.246 450 76	3.918 482 74	3.806 681 06	4.429 842 03	4.373 745 69
1.11	2.207 960 38	3.801 182 94	3.698 294 78	4.268 780 07	4.218 429 13
1.12	2.170 597 49	3.689 486 69	3.594 809 73	4.117 245 85	4.072 061 05
1.13	2.134 317 32	3.583 064 06	3.495 951 72	3.974 547 93	3.934 008 59
1.14	2.099 077 29	3.481 607 12	3.401 464 05	3.840 050 90	3.803 688 97
1.15	2.064 836 89	3.384 828 35	3.311 106 25	3.713 170 52	3.680 565 20
1.16	2.031 557 60	3.292 459 09	3.224 653 01	3.593 369 29	3.564 142 21
1.17	1.999 202 71	3.204 248 27	3.141 893 06	3.480 152 40	3.453 963 32
1.18	1.967 737 27	3.119 961 08	3.062 628 24	3.373 064 10	3.349 607 02
1.19	1.937 127 96	3.039 377 87	2.986 672 60	3.271 684 35	3.250 684 04
1.20	1.907 343 02	2.962 293 03	2.913 851 56	3.175 625 80	3.156 834 67
1.21	1.878 352 15	2.888 514 03	2.844 001 13	3.084 531 01	3.067 726 35
1.22	1.850 126 44	2.817 860 50	2.776 967 22	2.998 070 00	2.983 051 42
1.23	1.822 638 30	2.750 163 37	2.712 604 98	2.915 937 90	2.902 525 10
1.24	1.795 861 35	2.685 264 13	2.650 778 17	2.837 852 88	2.825 883 62
1.25	1.769 770 42	2.623 014 06	2.591 358 58	2.763 554 28	2.752 882 58
1.26	1.744 341 42	2.563 273 58	2.534 225 55	2.692 800 85	2.683 295 31
1.27	1.719 551 34	2.505 911 63	2.479 265 43	2.625 369 17	2.616 911 54
1.28	1.695 378 16	2.450 805 12	2.426 371 16	2.561 052 19	2.553 536 04
1.29	1.671 800 79	2.397 838 33	2.375 441 81	2.499 657 95	2.492 987 50
1.30	1.648 799 07	2.346 902 50	2.326 382 25	2.441 008 35	2.435 097 36
1.31	1.626 353 67	2.297 895 30	2.279 102 69	2.384 938 02	2.379 708 88
1.32	1.604 446 08	2.250 720 44	2.233 518 43	2.331 293 36	2.326 676 22
1.33	1.583 058 57	2.205 287 28	2.189 549 49	2.279 931 59	2.275 863 55
1.34	1.562 174 11	2.161 510 45	2.147 120 33	2.230 719 90	2.227 144 36
1.35	1.541 776 40	2.119 309 49	2.106 159 58	2.183 534 68	2.180 400 70
1.36	1.521 849 78	2.078 608 57	2.066 599 77	2.138 260 83	2.135 522 53
1.37	1.502 379 25	2.039 336 19	2.028 377 10	2.094 791 06	2.092 407 17
1.38	1.483 350 37	2.001 424 86	1.991 431 20	2.053 025 35	2.050 958 72
1.39	1.464 749 30	1.964 810 91	1.955 704 96	2.012 870 36	2.011 087 55
1.40	1.446 562 74	1.929 434 20	1.921 144 28	1.974 238 95	1.972 709 88

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
1.41	1.428 777 89	1.895 237 91	1.887 697 96	1.937 049 69	1.935 747 29
1.42	1.411 382 47	1.862 168 36	1.855 317 44	1.901 226 48	1.900 126 39
1.43	1.394 364 67	1.830 174 80	1.823 956 73	1.866 698 12	1.865 778 43
1.44	1.377 713 11	1.799 209 20	1.793 572 19	1.833 397 95	1.832 638 96
1.45	1.361 416 86	1.769 226 14	1.764 122 43	1.801 263 56	1.800 647 54
1.46	1.345 465 39	1.740 182 60	1.735 568 19	1.770 236 43	1.769 747 46
1.47	1.329 848 56	1.712 037 86	1.707 872 17	1.740 261 70	1.739 885 46
1.48	1.314 556 62	1.684 753 33	1.680 998 97	1.711 287 88	1.711 011 49
1.49	1.299 580 16	1.658 292 43	1.654 914 93	1.683 266 61	1.683 078 51
1.50	1.284 910 13	1.632 620 47	1.629 588 09	1.656 152 46	1.656 042 28
1.51	1.270 537 80	1.607 704 56	1.604 988 04	1.629 902 71	1.629 861 12
1.52	1.256 454 73	1.583 513 47	1.581 085 86	1.604 477 18	1.604 495 82
1.53	1.242 652 83	1.560 017 56	1.557 854 04	1.579 838 03	1.579 909 40
1.54	1.229 124 25	1.537 188 68	1.535 266 39	1.555 949 63	1.556 066 99
1.55	1.215 861 45	1.515 000 08	1.513 297 97	1.532 778 39	1.532 935 72
1.56	1.202 857 12	1.493 426 33	1.491 925 04	1.510 292 63	1.510 484 54
1.57	1.190 104 23	1.472 443 26	1.471 124 94	1.488 462 46	1.488 684 10
1.58	1.177 595 99	1.452 027 86	1.450 876 12	1.467 259 63	1.467 506 70
1.59	1.165 325 82	1.432 158 25	1.431 157 98	1.446 657 49	1.446 926 12
1.60	1.153 287 38	1.412 813 59	1.411 950 92	1.426 630 81	1.426 917 55
1.61	1.141 474 55	1.393 974 02	1.393 236 19	1.407 155 74	1.407 457 51
1.62	1.129 881 40	1.375 620 65	1.374 995 93	1.388 209 69	1.388 523 76
1.63	1.118 502 20	1.357 735 45	1.357 213 05	1.369 771 28	1.370 095 22
1.64	1.107 331 42	1.340 301 23	1.339 871 26	1.351 820 25	1.352 151 88
1.65	1.096 363 69	1.323 301 60	1.322 954 96	1.334 337 37	1.334 674 78
1.66	1.085 593 84	1.306 720 91	1.306 449 27	1.317 304 42	1.317 645 90
1.67	1.075 016 84	1.290 544 23	1.290 339 94	1.300 704 09	1.301 048 14
1.68	1.064 627 86	1.274 757 30	1.274 613 34	1.284 519 93	1.284 865 22
1.69	1.054 422 17	1.259 346 50	1.259 256 43	1.268 736 34	1.269 081 70
1.70	1.044 395 24	1.244 298 80	1.244 256 74	1.253 338 45	1.253 682 86
1.71	1.034 542 66	1.229 601 77	1.229 602 31	1.238 312 13	1.238 654 69
1.72	1.024 860 16	1.215 243 48	1.215 281 70	1.223 643 93	1.223 983 86
1.73	1.015 343 60	1.201 212 55	1.201 283 94	1.209 321 03	1.209 657 67
1.74	1.005 988 97	1.187 498 09	1.187 598 52	1.195 331 24	1.195 663 98
1.75	$9.967 923 90 \times 10^{-1}$	1.174 089 64	1.174 215 36	1.181 662 91	1.181 991 26
1.76	$9.877 500 86 \times 10^{-1}$	1.160 977 22	1.161 124 79	1.168 304 95	1.168 628 46
1.77	$9.788 584 08 \times 10^{-1}$	1.148 151 25	1.148 317 54	1.155 246 74	1.155 565 07
1.78	$9.701 138 11 \times 10^{-1}$	1.135 602 55	1.135 784 71	1.142 478 19	1.142 791 03
1.79	$9.615 128 59 \times 10^{-1}$	1.123 322 31	1.123 517 75	1.129 989 62	1.130 296 72
1.80	$9.530 522 15 \times 10^{-1}$	1.111 302 10	1.111 508 47	1.117 771 80	1.118 072 95
1.81	$9.447 286 43 \times 10^{-1}$	1.099 533 80	1.099 748 97	1.105 815 89	1.106 110 93
1.82	$9.365 390 00 \times 10^{-1}$	1.088 009 66	1.088 231 69	1.094 113 45	1.094 402 26
1.83	$9.284 802 38 \times 10^{-1}$	1.076 722 20	1.076 949 35	1.082 656 39	1.082 938 87
1.84	$9.205 493 93 \times 10^{-1}$	1.065 664 26	1.065 894 94	1.071 436 97	1.071 713 05
1.85	$9.127 435 89 \times 10^{-1}$	1.054 828 94	1.055 061 73	1.060 447 76	1.060 717 42
1.86	$9.050 600 32 \times 10^{-1}$	1.044 209 64	1.044 443 26	1.049 681 67	1.049 944 87
1.87	$8.974 960 08 \times 10^{-1}$	1.033 799 98	1.034 033 28	1.039 131 86	1.039 388 63

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
1.88	$8.90048878 \times 10^{-1}$	1.02359385	1.02382580	1.02879180	1.02904215
1.89	$8.82716080 \times 10^{-1}$	1.01358535	1.01381503	1.01865522	1.01889919
1.90	$8.75495122 \times 10^{-1}$	1.00376884	1.00399543	1.00871609	1.00895373
1.91	$8.68383580 \times 10^{-1}$	$9.94138844 \times 10^{-1}$	$9.94361619 \times 10^{-1}$	$9.98968626 \times 10^{-1}$	$9.99200004 \times 10^{-1}$
1.92	$8.61379100 \times 10^{-1}$	$9.84690116 \times 10^{-1}$	$9.84908435 \times 10^{-1}$	$9.89407264 \times 10^{-1}$	$9.89632449 \times 10^{-1}$
1.93	$8.54479389 \times 10^{-1}$	$9.75417600 \times 10^{-1}$	$9.75630900 \times 10^{-1}$	$9.80026664 \times 10^{-1}$	$9.80245736 \times 10^{-1}$
1.94	$8.47682221 \times 10^{-1}$	$9.66316422 \times 10^{-1}$	$9.66524209 \times 10^{-1}$	$9.70821685 \times 10^{-1}$	$9.71034733 \times 10^{-1}$
1.95	$8.40985427 \times 10^{-1}$	$9.57381886 \times 10^{-1}$	$9.57583732 \times 10^{-1}$	$9.61787384 \times 10^{-1}$	$9.61994503 \times 10^{-1}$
1.96	$8.34386898 \times 10^{-1}$	$9.48609463 \times 10^{-1}$	$9.48805000 \times 10^{-1}$	$9.52919004 \times 10^{-1}$	$9.53120293 \times 10^{-1}$
1.97	$8.27884581 \times 10^{-1}$	$9.39994787 \times 10^{-1}$	$9.40183698 \times 10^{-1}$	$9.44211965 \times 10^{-1}$	$9.44407527 \times 10^{-1}$
1.98	$8.21476478 \times 10^{-1}$	$9.31533645 \times 10^{-1}$	$9.31715665 \times 10^{-1}$	$9.35661857 \times 10^{-1}$	$9.35851799 \times 10^{-1}$
1.99	$8.15160645 \times 10^{-1}$	$9.23221972 \times 10^{-1}$	$9.23396879 \times 10^{-1}$	$9.27264430 \times 10^{-1}$	$9.27448861 \times 10^{-1}$
2.00	$8.08935188 \times 10^{-1}$	$9.15055847 \times 10^{-1}$	$9.15223459 \times 10^{-1}$	$9.19015588 \times 10^{-1}$	$9.19194622 \times 10^{-1}$
2.10	$7.51268307 \times 10^{-1}$	$8.40626484 \times 10^{-1}$	$8.40717765 \times 10^{-1}$	$8.43895741 \times 10^{-1}$	$8.44027044 \times 10^{-1}$
2.20	$7.00881268 \times 10^{-1}$	$7.77288496 \times 10^{-1}$	$7.77309541 \times 10^{-1}$	$7.80046814 \times 10^{-1}$	$7.80141090 \times 10^{-1}$
2.30	$6.56519242 \times 10^{-1}$	$7.22734539 \times 10^{-1}$	$7.22698503 \times 10^{-1}$	$7.25099107 \times 10^{-1}$	$7.25165240 \times 10^{-1}$
2.40	$6.17193357 \times 10^{-1}$	$6.75256681 \times 10^{-1}$	$6.75177204 \times 10^{-1}$	$6.77308930 \times 10^{-1}$	$6.77353853 \times 10^{-1}$
2.50	$5.82115044 \times 10^{-1}$	$6.33563813 \times 10^{-1}$	$6.33452711 \times 10^{-1}$	$6.35363085 \times 10^{-1}$	$6.35392067 \times 10^{-1}$
2.60	$5.50648648 \times 10^{-1}$	$5.96661646 \times 10^{-1}$	$5.96528402 \times 10^{-1}$	$5.98252728 \times 10^{-1}$	$5.98269738 \times 10^{-1}$
2.70	$5.22276695 \times 10^{-1}$	$5.63771853 \times 10^{-1}$	$5.63623767 \times 10^{-1}$	$5.65189426 \times 10^{-1}$	$5.65197445 \times 10^{-1}$
2.80	$4.96574088 \times 10^{-1}$	$5.34276277 \times 10^{-1}$	$5.34118839 \times 10^{-1}$	$5.35547723 \times 10^{-1}$	$5.35548993 \times 10^{-1}$
2.90	$4.73188692 \times 10^{-1}$	$5.07677623 \times 10^{-1}$	$5.07514895 \times 10^{-1}$	$5.08824892 \times 10^{-1}$	$5.08821102 \times 10^{-1}$
3.00	$4.51826560 \times 10^{-1}$	$4.83571213 \times 10^{-1}$	$4.83406163 \times 10^{-1}$	$4.84612118 \times 10^{-1}$	$4.84604549 \times 10^{-1}$
3.10	$4.32240560 \times 10^{-1}$	$4.61624335 \times 10^{-1}$	$4.61459107 \times 10^{-1}$	$4.62573488 \times 10^{-1}$	$4.62563111 \times 10^{-1}$
3.20	$4.14221542 \times 10^{-1}$	$4.41560900 \times 10^{-1}$	$4.41397020 \times 10^{-1}$	$4.42430389 \times 10^{-1}$	$4.42417947 \times 10^{-1}$
3.30	$3.97591407 \times 10^{-1}$	$4.23149866 \times 10^{-1}$	$4.22988405 \times 10^{-1}$	$4.23949783 \times 10^{-1}$	$4.23935842 \times 10^{-1}$
3.40	$3.82197623 \times 10^{-1}$	$4.06196410 \times 10^{-1}$	$4.06038100 \times 10^{-1}$	$4.06935236 \times 10^{-1}$	$4.06920231 \times 10^{-1}$
3.50	$3.67908855 \times 10^{-1}$	$3.90535097 \times 10^{-1}$	$3.90380418 \times 10^{-1}$	$3.91220010 \times 10^{-1}$	$3.91204274 \times 10^{-1}$
3.60	$3.54611443 \times 10^{-1}$	$3.76024538 \times 10^{-1}$	$3.75873788 \times 10^{-1}$	$3.76661650 \times 10^{-1}$	$3.76645441 \times 10^{-1}$
3.70	$3.42206566 \times 10^{-1}$	$3.62543179 \times 10^{-1}$	$3.62396520 \times 10^{-1}$	$3.63137727 \times 10^{-1}$	$3.63121240 \times 10^{-1}$
3.80	$3.30607917 \times 10^{-1}$	$3.49985944 \times 10^{-1}$	$3.49843440 \times 10^{-1}$	$3.50542437 \times 10^{-1}$	$3.50525825 \times 10^{-1}$
3.90	$3.19739806 \times 10^{-1}$	$3.38261540 \times 10^{-1}$	$3.38123184 \times 10^{-1}$	$3.38783880 \times 10^{-1}$	$3.38767258 \times 10^{-1}$
4.00	$3.09535591 \times 10^{-1}$	$3.27290267 \times 10^{-1}$	$3.27156002 \times 10^{-1}$	$3.27781851 \times 10^{-1}$	$3.27765306 \times 10^{-1}$
4.10	$2.99936377 \times 10^{-1}$	$3.17002246 \times 10^{-1}$	$3.16871978 \times 10^{-1}$	$3.17466038 \times 10^{-1}$	$3.17449637 \times 10^{-1}$
4.20	$2.90889933 \times 10^{-1}$	$3.07335946 \times 10^{-1}$	$3.07209558 \times 10^{-1}$	$3.07774547 \times 10^{-1}$	$3.07758339 \times 10^{-1}$
4.30	$2.82349782 \times 10^{-1}$	$2.98236982 \times 10^{-1}$	$2.98114340 \times 10^{-1}$	$2.98652683 \times 10^{-1}$	$2.98636705 \times 10^{-1}$
4.40	$2.74274436 \times 10^{-1}$	$2.89657106 \times 10^{-1}$	$2.89538068 \times 10^{-1}$	$2.90051934 \times 10^{-1}$	$2.90036210 \times 10^{-1}$
4.50	$2.66626749 \times 10^{-1}$	$2.81553370 \times 10^{-1}$	$2.81437787 \times 10^{-1}$	$2.81929121 \times 10^{-1}$	$2.81913670 \times 10^{-1}$
4.60	$2.59373369 \times 10^{-1}$	$2.73887418 \times 10^{-1}$	$2.73775140 \times 10^{-1}$	$2.74245691 \times 10^{-1}$	$2.74230524 \times 10^{-1}$
4.70	$2.52484263 \times 10^{-1}$	$2.66624889 \times 10^{-1}$	$2.66515766 \times 10^{-1}$	$2.66967112 \times 10^{-1}$	$2.66952236 \times 10^{-1}$
4.80	$2.45932322 \times 10^{-1}$	$2.59734912 \times 10^{-1}$	$2.59628798 \times 10^{-1}$	$2.60062365 \times 10^{-1}$	$2.60047783 \times 10^{-1}$
4.90	$2.39693013 \times 10^{-1}$	$2.53189676 \times 10^{-1}$	$2.53086428 \times 10^{-1}$	$2.53503509 \times 10^{-1}$	$2.53489220 \times 10^{-1}$
5.00	$2.33744081 \times 10^{-1}$	$2.46964061 \times 10^{-1}$	$2.46863541 \times 10^{-1}$	$2.47265309 \times 10^{-1}$	$2.47251310 \times 10^{-1}$
5.10	$2.28065292 \times 10^{-1}$	$2.41035319 \times 10^{-1}$	$2.40937393 \times 10^{-1}$	$2.41324918 \times 10^{-1}$	$2.41311205 \times 10^{-1}$
5.20	$2.22638207 \times 10^{-1}$	$2.35382805 \times 10^{-1}$	$2.35287345 \times 10^{-1}$	$2.35661600 \times 10^{-1}$	$2.35648167 \times 10^{-1}$
5.30	$2.17445990 \times 10^{-1}$	$2.29987735 \times 10^{-1}$	$2.29894619 \times 10^{-1}$	$2.30256496 \times 10^{-1}$	$2.30243337 \times 10^{-1}$
5.40	$2.12473238 \times 10^{-1}$	$2.24832987 \times 10^{-1}$	$2.24742098 \times 10^{-1}$	$2.25092412 \times 10^{-1}$	$2.25079519 \times 10^{-1}$

α	1s2s			1s3s	
	$1s^2 1S^e$	$1S^e$	$3S^e$	$1S^e$	$3S^e$
5.50	$2.077\,058\,28 \times 10^{-1}$	$2.199\,029\,16 \times 10^{-1}$	$2.198\,141\,43 \times 10^{-1}$	$2.201\,536\,44 \times 10^{-1}$	$2.201\,410\,09 \times 10^{-1}$
5.60	$2.031\,307\,90 \times 10^{-1}$	$2.151\,832\,05 \times 10^{-1}$	$2.150\,964\,43 \times 10^{-1}$	$2.154\,258\,17 \times 10^{-1}$	$2.154\,134\,33 \times 10^{-1}$
5.70	$1.987\,361\,88 \times 10^{-1}$	$2.106\,607\,21 \times 10^{-1}$	$2.105\,758\,69 \times 10^{-1}$	$2.108\,957\,52 \times 10^{-1}$	$2.108\,836\,09 \times 10^{-1}$
5.80	$1.945\,110\,21 \times 10^{-1}$	$2.063\,234\,00 \times 10^{-1}$	$2.062\,403\,62 \times 10^{-1}$	$2.065\,513\,38 \times 10^{-1}$	$2.065\,394\,29 \times 10^{-1}$
5.90	$1.904\,451\,31 \times 10^{-1}$	$2.021\,601\,39 \times 10^{-1}$	$2.020\,788\,25 \times 10^{-1}$	$2.023\,814\,33 \times 10^{-1}$	$2.023\,697\,49 \times 10^{-1}$
6.00	$1.865\,291\,25 \times 10^{-1}$	$1.981\,607\,01 \times 10^{-1}$	$1.980\,810\,24 \times 10^{-1}$	$1.983\,757\,66 \times 10^{-1}$	$1.983\,642\,99 \times 10^{-1}$
6.10	$1.827\,543\,00 \times 10^{-1}$	$1.943\,156\,34 \times 10^{-1}$	$1.942\,375\,15 \times 10^{-1}$	$1.945\,248\,53 \times 10^{-1}$	$1.945\,135\,95 \times 10^{-1}$
6.20	$1.791\,125\,82 \times 10^{-1}$	$1.906\,162\,00 \times 10^{-1}$	$1.905\,395\,60 \times 10^{-1}$	$1.908\,199\,25 \times 10^{-1}$	$1.908\,088\,67 \times 10^{-1}$
6.30	$1.755\,964\,70 \times 10^{-1}$	$1.870\,543\,03 \times 10^{-1}$	$1.869\,790\,69 \times 10^{-1}$	$1.872\,528\,60 \times 10^{-1}$	$1.872\,419\,95 \times 10^{-1}$
6.40	$1.721\,989\,84 \times 10^{-1}$	$1.836\,224\,35 \times 10^{-1}$	$1.835\,485\,37 \times 10^{-1}$	$1.838\,161\,28 \times 10^{-1}$	$1.838\,054\,48 \times 10^{-1}$
6.50	$1.689\,136\,18 \times 10^{-1}$	$1.803\,136\,24 \times 10^{-1}$	$1.802\,409\,97 \times 10^{-1}$	$1.805\,027\,34 \times 10^{-1}$	$1.804\,922\,32 \times 10^{-1}$
6.60	$1.657\,343\,01 \times 10^{-1}$	$1.771\,213\,86 \times 10^{-1}$	$1.770\,499\,67 \times 10^{-1}$	$1.773\,061\,74 \times 10^{-1}$	$1.772\,958\,43 \times 10^{-1}$
6.70	$1.626\,553\,61 \times 10^{-1}$	$1.740\,396\,84 \times 10^{-1}$	$1.739\,694\,13 \times 10^{-1}$	$1.742\,203\,93 \times 10^{-1}$	$1.742\,102\,25 \times 10^{-1}$
6.80	$1.596\,714\,90 \times 10^{-1}$	$1.710\,628\,87 \times 10^{-1}$	$1.709\,937\,08 \times 10^{-1}$	$1.712\,397\,45 \times 10^{-1}$	$1.712\,297\,34 \times 10^{-1}$
6.90	$1.567\,777\,13 \times 10^{-1}$	$1.681\,857\,42 \times 10^{-1}$	$1.681\,176\,01 \times 10^{-1}$	$1.683\,589\,61 \times 10^{-1}$	$1.683\,491\,00 \times 10^{-1}$
7.00	$1.539\,693\,63 \times 10^{-1}$	$1.654\,033\,39 \times 10^{-1}$	$1.653\,361\,84 \times 10^{-1}$	$1.655\,731\,16 \times 10^{-1}$	$1.655\,634\,00 \times 10^{-1}$
7.10	$1.512\,420\,57 \times 10^{-1}$	$1.627\,110\,84 \times 10^{-1}$	$1.626\,448\,67 \times 10^{-1}$	$1.628\,776\,06 \times 10^{-1}$	$1.628\,680\,28 \times 10^{-1}$
7.20	$1.485\,916\,69 \times 10^{-1}$	$1.601\,046\,75 \times 10^{-1}$	$1.600\,393\,50 \times 10^{-1}$	$1.602\,681\,15 \times 10^{-1}$	$1.602\,586\,70 \times 10^{-1}$
7.30	$1.460\,143\,15 \times 10^{-1}$	$1.575\,800\,78 \times 10^{-1}$	$1.575\,156\,02 \times 10^{-1}$	$1.577\,406\,01 \times 10^{-1}$	$1.577\,312\,82 \times 10^{-1}$
7.40	$1.435\,063\,32 \times 10^{-1}$	$1.551\,335\,09 \times 10^{-1}$	$1.550\,698\,38 \times 10^{-1}$	$1.552\,912\,68 \times 10^{-1}$	$1.552\,820\,70 \times 10^{-1}$
7.50	$1.410\,642\,60 \times 10^{-1}$	$1.527\,614\,12 \times 10^{-1}$	$1.526\,985\,06 \times 10^{-1}$	$1.529\,165\,50 \times 10^{-1}$	$1.529\,074\,69 \times 10^{-1}$
7.60	$1.386\,848\,29 \times 10^{-1}$	$1.504\,604\,43 \times 10^{-1}$	$1.503\,982\,64 \times 10^{-1}$	$1.506\,130\,97 \times 10^{-1}$	$1.506\,041\,28 \times 10^{-1}$
7.70	$1.363\,649\,41 \times 10^{-1}$	$1.482\,274\,56 \times 10^{-1}$	$1.481\,659\,67 \times 10^{-1}$	$1.483\,777\,54 \times 10^{-1}$	$1.483\,688\,91 \times 10^{-1}$
7.80	$1.341\,016\,61 \times 10^{-1}$	$1.460\,594\,85 \times 10^{-1}$	$1.459\,986\,51 \times 10^{-1}$	$1.462\,075\,49 \times 10^{-1}$	$1.461\,987\,87 \times 10^{-1}$
7.90	$1.318\,922\,05 \times 10^{-1}$	$1.439\,537\,36 \times 10^{-1}$	$1.438\,935\,24 \times 10^{-1}$	$1.440\,996\,80 \times 10^{-1}$	$1.440\,910\,16 \times 10^{-1}$
8.00	$1.297\,339\,25 \times 10^{-1}$	$1.419\,075\,72 \times 10^{-1}$	$1.418\,479\,49 \times 10^{-1}$	$1.420\,515\,04 \times 10^{-1}$	$1.420\,429\,34 \times 10^{-1}$
8.10	$1.276\,243\,02 \times 10^{-1}$	$1.399\,185\,03 \times 10^{-1}$	$1.398\,594\,38 \times 10^{-1}$	$1.400\,605\,26 \times 10^{-1}$	$1.400\,520\,44 \times 10^{-1}$
8.20	$1.255\,609\,36 \times 10^{-1}$	$1.379\,841\,73 \times 10^{-1}$	$1.379\,256\,37 \times 10^{-1}$	$1.381\,243\,84 \times 10^{-1}$	$1.381\,159\,88 \times 10^{-1}$
8.30	$1.235\,415\,37 \times 10^{-1}$	$1.361\,023\,56 \times 10^{-1}$	$1.360\,443\,21 \times 10^{-1}$	$1.362\,408\,49 \times 10^{-1}$	$1.362\,325\,34 \times 10^{-1}$
8.40	$1.215\,639\,19 \times 10^{-1}$	$1.342\,709\,45 \times 10^{-1}$	$1.342\,133\,84 \times 10^{-1}$	$1.344\,078\,06 \times 10^{-1}$	$1.343\,995\,69 \times 10^{-1}$
8.50	$1.196\,259\,87 \times 10^{-1}$	$1.324\,879\,43 \times 10^{-1}$	$1.324\,308\,28 \times 10^{-1}$	$1.326\,232\,56 \times 10^{-1}$	$1.326\,150\,93 \times 10^{-1}$
8.60	$1.177\,257\,39 \times 10^{-1}$	$1.307\,514\,56 \times 10^{-1}$	$1.306\,947\,64 \times 10^{-1}$	$1.308\,853\,01 \times 10^{-1}$	$1.308\,772\,09 \times 10^{-1}$
8.70	$1.158\,612\,51 \times 10^{-1}$	$1.290\,596\,90 \times 10^{-1}$	$1.290\,033\,95 \times 10^{-1}$	$1.291\,921\,42 \times 10^{-1}$	$1.291\,841\,18 \times 10^{-1}$
8.80	$1.140\,306\,75 \times 10^{-1}$	$1.274\,109\,39 \times 10^{-1}$	$1.273\,550\,18 \times 10^{-1}$	$1.275\,420\,71 \times 10^{-1}$	$1.275\,341\,10 \times 10^{-1}$
8.90	$1.122\,322\,36 \times 10^{-1}$	$1.258\,035\,83 \times 10^{-1}$	$1.257\,480\,14 \times 10^{-1}$	$1.259\,334\,65 \times 10^{-1}$	$1.259\,255\,65 \times 10^{-1}$
9.00	$1.104\,642\,19 \times 10^{-1}$	$1.242\,360\,85 \times 10^{-1}$	$1.241\,808\,46 \times 10^{-1}$	$1.243\,647\,81 \times 10^{-1}$	$1.243\,569\,40 \times 10^{-1}$

Table S3. Onicescu Information Energy of order α (E_α^O) for the ground and low-lying singly excited states of helium with size of basis set $\omega = 15$. E_1^O is undefined.

α	1s2s			1s3s	
	$1s^2 1S^e$	$1S^e$	$3S^e$	$1S^e$	$3S^e$
0.50	$-1.489\,466\,60 \times 10^1$	$-1.001\,658\,69 \times 10^2$	$-7.990\,506\,90 \times 10^1$	$-3.045\,758\,22 \times 10^2$	$-2.619\,959\,72 \times 10^2$
0.51	$-1.431\,257\,47 \times 10^1$	$-9.253\,966\,57 \times 10^1$	$-7.415\,302\,98 \times 10^1$	$-2.753\,055\,48 \times 10^2$	$-2.374\,985\,64 \times 10^2$
0.52	$-1.377\,651\,40 \times 10^1$	$-8.561\,288\,49 \times 10^1$	$-6.891\,546\,87 \times 10^1$	$-2.491\,312\,35 \times 10^2$	$-2.155\,440\,10 \times 10^2$
0.53	$-1.328\,257\,72 \times 10^1$	$-7.931\,396\,91 \times 10^1$	$-6.414\,046\,87 \times 10^1$	$-2.257\,019\,12 \times 10^2$	$-1.958\,480\,55 \times 10^2$
0.54	$-1.282\,730\,37 \times 10^1$	$-7.357\,960\,31 \times 10^1$	$-5.978\,210\,75 \times 10^1$	$-2.047\,094\,09 \times 10^2$	$-1.781\,608\,08 \times 10^2$
0.55	$-1.240\,762\,47 \times 10^1$	$-6.835\,366\,48 \times 10^1$	$-5.579\,968\,23 \times 10^1$	$-1.858\,827\,40 \times 10^2$	$-1.622\,622\,54 \times 10^2$
0.56	$-1.202\,081\,75 \times 10^1$	$-6.358\,632\,29 \times 10^1$	$-5.215\,704\,74 \times 10^1$	$-1.689\,832\,90 \times 10^2$	$-1.479\,583\,98 \times 10^2$
0.57	$-1.166\,446\,59 \times 10^1$	$-5.923\,326\,06 \times 10^1$	$-4.882\,204\,69 \times 10^1$	$-1.538\,006\,59 \times 10^2$	$-1.350\,779\,58 \times 10^2$
0.58	$-1.133\,642\,66 \times 10^1$	$-5.525\,500\,51 \times 10^1$	$-4.576\,602\,71 \times 10^1$	$-1.401\,491\,00 \times 10^2$	$-1.234\,694\,98 \times 10^2$
0.59	$-1.103\,480\,14 \times 10^1$	$-5.161\,634\,84 \times 10^1$	$-4.296\,341\,66 \times 10^1$	$-1.278\,644\,23 \times 10^2$	$-1.129\,989\,68 \times 10^2$
0.60	$-1.075\,791\,23 \times 10^1$	$-4.828\,584\,50 \times 10^1$	$-4.039\,136\,32 \times 10^1$	$-1.168\,013\,32 \times 10^2$	$-1.035\,475\,61 \times 10^2$
0.61	$-1.050\,428\,15 \times 10^1$	$-4.523\,537\,60 \times 10^1$	$-3.802\,942\,00 \times 10^1$	$-1.068\,311\,06 \times 10^2$	$-9.500\,986\,35 \times 10^1$
0.62	$-1.027\,261\,42 \times 10^1$	$-4.243\,976\,95 \times 10^1$	$-3.585\,927\,24 \times 10^1$	$-9.783\,959\,26 \times 10^1$	$-8.729\,224\,70 \times 10^1$
0.63	$-1.006\,178\,45 \times 10^1$	$-3.987\,647\,11 \times 10^1$	$-3.386\,450\,16 \times 10^1$	$-8.972\,546\,05 \times 10^1$	$-8.031\,146\,67 \times 10^1$
0.64	$-9.870\,823\,59$	$-3.752\,525\,57 \times 10^1$	$-3.203\,037\,84 \times 10^1$	$-8.239\,867\,83 \times 10^1$	$-7.399\,344\,25 \times 10^1$
0.65	$-9.698\,911\,08$	$-3.536\,797\,63 \times 10^1$	$-3.034\,368\,38 \times 10^1$	$-7.577\,918\,72 \times 10^1$	$-6.827\,219\,51 \times 10^1$
0.66	$-9.545\,368\,15$	$-3.338\,834\,48 \times 10^1$	$-2.879\,255\,32 \times 10^1$	$-6.979\,574\,39 \times 10^1$	$-6.308\,891\,63 \times 10^1$
0.67	$-9.409\,653\,26$	$-3.157\,174\,12 \times 10^1$	$-2.736\,634\,07 \times 10^1$	$-6.438\,490\,80 \times 10^1$	$-5.839\,115\,67 \times 10^1$
0.68	$-9.291\,360\,11$	$-2.990\,504\,63 \times 10^1$	$-2.605\,550\,12 \times 10^1$	$-5.949\,015\,74 \times 10^1$	$-5.413\,211\,49 \times 10^1$
0.69	$-9.190\,218\,11$	$-2.837\,649\,73 \times 10^1$	$-2.485\,148\,94 \times 10^1$	$-5.506\,111\,33 \times 10^1$	$-5.027\,001\,48 \times 10^1$
0.70	$-9.106\,095\,40$	$-2.697\,556\,25 \times 10^1$	$-2.374\,667\,20 \times 10^1$	$-5.105\,286\,26 \times 10^1$	$-4.676\,756\,12 \times 10^1$
0.71	$-9.039\,004\,80$	$-2.569\,283\,35 \times 10^1$	$-2.273\,425\,44 \times 10^1$	$-4.742\,536\,47 \times 10^1$	$-4.359\,146\,32 \times 10^1$
0.72	$-8.989\,113\,20$	$-2.451\,993\,41 \times 10^1$	$-2.180\,821\,92 \times 10^1$	$-4.414\,293\,32 \times 10^1$	$-4.071\,201\,85 \times 10^1$
0.73	$-8.956\,754\,78$	$-2.344\,944\,37 \times 10^1$	$-2.096\,327\,63 \times 10^1$	$-4.117\,378\,41 \times 10^1$	$-3.810\,275\,07 \times 10^1$
0.74	$-8.942\,449\,10$	$-2.247\,483\,67 \times 10^1$	$-2.019\,482\,58 \times 10^1$	$-3.848\,964\,29 \times 10^1$	$-3.574\,009\,59 \times 10^1$
0.75	$-8.946\,925\,13$	$-2.159\,043\,48 \times 10^1$	$-1.949\,893\,15 \times 10^1$	$-3.606\,540\,55 \times 10^1$	$-3.360\,313\,25 \times 10^1$
0.76	$-8.971\,152\,58$	$-2.079\,137\,62 \times 10^1$	$-1.887\,230\,84 \times 10^1$	$-3.387\,884\,89 \times 10^1$	$-3.167\,335\,31 \times 10^1$
0.77	$-9.016\,382\,94$	$-2.007\,359\,98 \times 10^1$	$-1.831\,232\,40 \times 10^1$	$-3.191\,038\,75 \times 10^1$	$-2.993\,447\,43 \times 10^1$
0.78	$-9.084\,202\,73$	$-1.943\,384\,86 \times 10^1$	$-1.781\,701\,58 \times 10^1$	$-3.014\,287\,43 \times 10^1$	$-2.837\,228\,52 \times 10^1$
0.79	$-9.176\,603\,30$	$-1.886\,969\,39 \times 10^1$	$-1.738\,512\,99 \times 10^1$	$-2.856\,144\,73 \times 10^1$	$-2.697\,453\,57 \times 10^1$
0.80	$-9.296\,072\,49$	$-1.837\,958\,74 \times 10^1$	$-1.701\,618\,39 \times 10^1$	$-2.715\,342\,24 \times 10^1$	$-2.573\,086\,60 \times 10^1$
0.81	$-9.445\,716\,27$	$-1.796\,294\,61 \times 10^1$	$-1.671\,056\,29 \times 10^1$	$-2.590\,823\,86 \times 10^1$	$-2.463\,278\,44 \times 10^1$
0.82	$-9.629\,421\,93$	$-1.762\,028\,34 \times 10^1$	$-1.646\,966\,00 \times 10^1$	$-2.481\,746\,42 \times 10^1$	$-2.367\,370\,21 \times 10^1$
0.83	$-9.852\,079\,59$	$-1.735\,340\,12 \times 10^1$	$-1.629\,607\,70 \times 10^1$	$-2.387\,487\,83 \times 10^1$	$-2.284\,904\,01 \times 10^1$
0.84	$-1.011\,988\,78 \times 10^1$	$-1.716\,566\,96 \times 10^1$	$-1.619\,391\,18 \times 10^1$	$-2.307\,665\,22 \times 10^1$	$-2.215\,643\,33 \times 10^1$
0.85	$-1.044\,078\,20 \times 10^1$	$-1.706\,243\,14 \times 10^1$	$-1.616\,916\,94 \times 10^1$	$-2.242\,166\,66 \times 10^1$	$-2.159\,606\,71 \times 10^1$
0.86	$-1.082\,504\,76 \times 10^1$	$-1.705\,159\,40 \times 10^1$	$-1.623\,036\,03 \times 10^1$	$-2.191\,202\,55 \times 10^1$	$-2.117\,120\,93 \times 10^1$
0.87	$-1.128\,621\,63 \times 10^1$	$-1.714\,450\,65 \times 10^1$	$-1.638\,938\,34 \times 10^1$	$-2.155\,386\,42 \times 10^1$	$-2.088\,903\,35 \times 10^1$
0.88	$-1.184\,241\,20 \times 10^1$	$-1.735\,728\,84 \times 10^1$	$-1.666\,285\,89 \times 10^1$	$-2.135\,861\,60 \times 10^1$	$-2.076\,189\,95 \times 10^1$
0.89	$-1.251\,843\,08 \times 10^1$	$-1.771\,289\,36 \times 10^1$	$-1.707\,419\,77 \times 10^1$	$-2.134\,502\,12 \times 10^1$	$-2.080\,937\,52 \times 10^1$
0.90	$-1.334\,907\,01 \times 10^1$	$-1.824\,442\,55 \times 10^1$	$-1.765\,692\,01 \times 10^1$	$-2.154\,239\,34 \times 10^1$	$-2.106\,151\,28 \times 10^1$
0.91	$-1.438\,467\,79 \times 10^1$	$-1.900\,067\,35 \times 10^1$	$-1.846\,019\,58 \times 10^1$	$-2.199\,611\,18 \times 10^1$	$-2.156\,435\,16 \times 10^1$
0.92	$-1.570\,086\,45 \times 10^1$	$-2.005\,581\,27 \times 10^1$	$-1.955\,854\,76 \times 10^1$	$-2.277\,728\,20 \times 10^1$	$-2.238\,958\,68 \times 10^1$
0.93	$-1.741\,653\,91 \times 10^1$	$-2.152\,743\,05 \times 10^1$	$-2.106\,988\,01 \times 10^1$	$-2.400\,072\,73 \times 10^1$	$-2.365\,256\,88 \times 10^1$

α	1s2s			1s3s	
	$1s^2 1S^e$	$1S^e$	$3S^e$	$1S^e$	$3S^e$
0.94	$-1.972\,998\,46 \times 10^1$	$-2.361\,259\,11 \times 10^1$	$-2.319\,154\,76 \times 10^1$	$-2.586\,102\,22 \times 10^1$	$-2.554\,834\,35 \times 10^1$
0.95	$-2.299\,822\,16 \times 10^1$	$-2.666\,719\,15 \times 10^1$	$-2.627\,971\,24 \times 10^1$	$-2.871\,182\,03 \times 10^1$	$-2.843\,098\,59 \times 10^1$
0.96	$-2.793\,542\,10 \times 10^1$	$-3.140\,436\,54 \times 10^1$	$-3.104\,775\,07 \times 10^1$	$-3.326\,423\,34 \times 10^1$	$-3.301\,198\,48 \times 10^1$
0.97	$-3.620\,814\,12 \times 10^1$	$-3.948\,971\,38 \times 10^1$	$-3.916\,148\,55 \times 10^1$	$-4.118\,203\,94 \times 10^1$	$-4.095\,545\,53 \times 10^1$
0.98	$-5.281\,628\,02 \times 10^1$	$-5.592\,225\,06 \times 10^1$	$-5.562\,013\,37 \times 10^1$	$-5.746\,260\,77 \times 10^1$	$-5.725\,906\,86 \times 10^1$
0.99	$-1.027\,597\,42 \times 10^2$	$-1.057\,010\,62 \times 10^2$	$-1.054\,229\,67 \times 10^2$	$-1.071\,035\,41 \times 10^2$	$-1.069\,206\,98 \times 10^2$
1.00	undefined	undefined	undefined	undefined	undefined
1.01	$9.734\,772\,31 \times 10^1$	$9.470\,581\,44 \times 10^1$	$9.494\,146\,39 \times 10^1$	$9.354\,204\,45 \times 10^1$	$9.368\,960\,08 \times 10^1$
1.02	$4.739\,881\,66 \times 10^1$	$4.489\,301\,55 \times 10^1$	$4.510\,994\,35 \times 10^1$	$4.383\,237\,69 \times 10^1$	$4.396\,493\,15 \times 10^1$
1.03	$3.078\,158\,72 \times 10^1$	$2.840\,364\,36 \times 10^1$	$2.860\,333\,86 \times 10^1$	$2.743\,667\,02 \times 10^1$	$2.755\,574\,56 \times 10^1$
1.04	$2.249\,610\,73 \times 10^1$	$2.023\,832\,61 \times 10^1$	$2.042\,215\,67 \times 10^1$	$1.935\,644\,26 \times 10^1$	$1.946\,340\,55 \times 10^1$
1.05	$1.754\,244\,51 \times 10^1$	$1.539\,764\,63 \times 10^1$	$1.556\,687\,05 \times 10^1$	$1.459\,308\,21 \times 10^1$	$1.468\,915\,95 \times 10^1$
1.06	$1.425\,399\,87 \times 10^1$	$1.221\,547\,95 \times 10^1$	$1.237\,125\,44 \times 10^1$	$1.148\,119\,17 \times 10^1$	$1.156\,748\,53 \times 10^1$
1.07	$1.191\,654\,36 \times 10^1$	9.978 044 28	$1.012\,143\,39 \times 10^1$	9.307 647 90	9.385 147 13
1.08	$1.017\,299\,50 \times 10^1$	8.328 666 83	8.460 650 34	7.716 371 97	7.785 965 57
1.09	8.824 995 35	7.069 371 38	7.190 849 50	6.509 926 50	6.572 412 81
1.10	7.753 549 23	6.081 517 25	6.193 318 93	5.570 157 96	5.626 254 30
1.11	6.882 948 70	5.289 726 14	5.392 614 30	4.822 129 01	4.872 479 95
1.12	6.162 735 83	4.643 846 64	4.738 523 59	4.216 087 47	4.261 272 27
1.13	5.557 990 36	4.109 243 63	4.196 355 96	3.717 759 75	3.758 299 09
1.14	5.043 779 85	3.661 250 01	3.741 393 09	3.302 806 24	3.339 168 16
1.15	4.601 829 76	3.281 838 31	3.355 560 41	2.953 496 14	2.986 101 46
1.16	4.218 442 39	2.957 540 90	3.025 346 98	2.656 630 70	2.685 857 78
1.17	3.883 150 22	2.678 104 66	2.740 459 87	2.402 200 53	2.428 389 61
1.18	3.587 818 28	2.435 594 46	2.492 927 30	2.182 491 44	2.205 948 52
1.19	3.326 029 93	2.223 780 01	2.276 485 28	1.991 473 53	2.012 473 85
1.20	3.092 656 97	2.037 706 96	2.086 148 43	1.824 374 19	1.843 165 32
1.21	2.883 552 60	1.873 390 72	1.917 903 63	1.677 373 74	1.694 178 40
1.22	2.695 328 09	1.727 594 04	1.768 487 31	1.547 384 53	1.562 403 12
1.23	2.525 187 78	1.597 662 71	1.635 221 09	1.431 888 18	1.445 300 98
1.24	2.370 805 31	1.481 402 53	1.515 888 49	1.328 813 77	1.340 783 03
1.25	2.230 229 57	1.376 985 93	1.408 641 41	1.236 445 71	1.247 117 41
1.26	2.101 812 41	1.282 880 26	1.311 928 29	1.153 352 98	1.162 858 53
1.27	1.984 152 35	1.197 792 06	1.224 438 26	1.078 334 53	1.086 792 16
1.28	1.876 050 40	1.120 623 44	1.145 057 40	1.010 376 37	1.017 892 52
1.29	1.776 475 06	1.050 437 52	1.072 834 04	$9.486\,179\,05 \times 10^{-1}$	$9.552\,883\,61 \times 10^{-1}$
1.30	1.684 534 25	$9.864\,308\,28 \times 10^{-1}$	1.006 951 08	$8.923\,249\,82 \times 10^{-1}$	$8.982\,359\,72 \times 10^{-1}$
1.31	1.599 452 77	$9.279\,111\,48 \times 10^{-1}$	$9.467\,037\,58 \times 10^{-1}$	$8.408\,684\,29 \times 10^{-1}$	$8.460\,975\,65 \times 10^{-1}$
1.32	1.520 553 91	$8.742\,795\,53 \times 10^{-1}$	$8.914\,815\,66 \times 10^{-1}$	$7.937\,066\,35 \times 10^{-1}$	$7.983\,237\,79 \times 10^{-1}$
1.33	1.447 244 45	$8.250\,157\,42 \times 10^{-1}$	$8.407\,535\,36 \times 10^{-1}$	$7.503\,714\,36 \times 10^{-1}$	$7.544\,394\,72 \times 10^{-1}$
1.34	1.379 002 35	$7.796\,660\,18 \times 10^{-1}$	$7.940\,561\,33 \times 10^{-1}$	$7.104\,565\,66 \times 10^{-1}$	$7.140\,321\,02 \times 10^{-1}$
1.35	1.315 366 45	$7.378\,333\,63 \times 10^{-1}$	$7.509\,832\,69 \times 10^{-1}$	$6.736\,081\,68 \times 10^{-1}$	$6.767\,421\,55 \times 10^{-1}$
1.36	1.255 927 98	$6.991\,691\,97 \times 10^{-1}$	$7.111\,780\,01 \times 10^{-1}$	$6.395\,169\,43 \times 10^{-1}$	$6.422\,552\,42 \times 10^{-1}$
1.37	1.200 323 44	$6.633\,665\,06 \times 10^{-1}$	$6.743\,256\,02 \times 10^{-1}$	$6.079\,116\,35 \times 10^{-1}$	$6.102\,955\,25 \times 10^{-1}$
1.38	1.148 228 57	$6.301\,540\,77 \times 10^{-1}$	$6.401\,477\,44 \times 10^{-1}$	$5.785\,535\,89 \times 10^{-1}$	$5.806\,202\,22 \times 10^{-1}$
1.39	1.099 353 25	$5.992\,916\,47 \times 10^{-1}$	$6.083\,976\,03 \times 10^{-1}$	$5.512\,321\,96 \times 10^{-1}$	$5.530\,150\,05 \times 10^{-1}$
1.40	1.053 437 25	$5.705\,657\,99 \times 10^{-1}$	$5.788\,557\,10 \times 10^{-1}$	$5.257\,610\,47 \times 10^{-1}$	$5.272\,901\,18 \times 10^{-1}$

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
1.41	1.010 246 49	$5.437 864 76 \times 10^{-1}$	$5.513 264 25 \times 10^{-1}$	$5.019 746 93 \times 10^{-1}$	$5.032 770 97 \times 10^{-1}$
1.42	$9.695 699 01 \times 10^{-1}$	$5.187 840 13 \times 10^{-1}$	$5.256 349 31 \times 10^{-1}$	$4.797 258 94 \times 10^{-1}$	$4.808 259 87 \times 10^{-1}$
1.43	$9.312 167 19 \times 10^{-1}$	$4.954 065 94 \times 10^{-1}$	$5.016 246 60 \times 10^{-1}$	$4.588 832 73 \times 10^{-1}$	$4.598 029 64 \times 10^{-1}$
1.44	$8.950 141 56 \times 10^{-1}$	$4.735 180 69 \times 10^{-1}$	$4.791 550 79 \times 10^{-1}$	$4.393 293 17 \times 10^{-1}$	$4.400 883 11 \times 10^{-1}$
1.45	$8.608 053 57 \times 10^{-1}$	$4.529 960 81 \times 10^{-1}$	$4.580 997 83 \times 10^{-1}$	$4.209 586 59 \times 10^{-1}$	$4.215 746 76 \times 10^{-1}$
1.46	$8.284 476 50 \times 10^{-1}$	$4.337 304 36 \times 10^{-1}$	$4.383 448 48 \times 10^{-1}$	$4.036 766 06 \times 10^{-1}$	$4.041 655 77 \times 10^{-1}$
1.47	$7.978 110 08 \times 10^{-1}$	$4.156 217 06 \times 10^{-1}$	$4.197 873 97 \times 10^{-1}$	$3.873 978 66 \times 10^{-1}$	$3.877 741 12 \times 10^{-1}$
1.48	$7.687 767 07 \times 10^{-1}$	$3.985 799 97 \times 10^{-1}$	$4.023 343 62 \times 10^{-1}$	$3.720 454 49 \times 10^{-1}$	$3.723 218 38 \times 10^{-1}$
1.49	$7.412 361 56 \times 10^{-1}$	$3.825 238 93 \times 10^{-1}$	$3.859 013 91 \times 10^{-1}$	$3.575 497 14 \times 10^{-1}$	$3.577 378 07 \times 10^{-1}$
1.50	$7.150 898 61 \times 10^{-1}$	$3.673 795 24 \times 10^{-1}$	$3.704 119 07 \times 10^{-1}$	$3.438 475 39 \times 10^{-1}$	$3.439 577 19 \times 10^{-1}$
1.51	$6.902 465 12 \times 10^{-1}$	$3.530 797 49 \times 10^{-1}$	$3.557 962 73 \times 10^{-1}$	$3.308 816 01 \times 10^{-1}$	$3.309 231 88 \times 10^{-1}$
1.52	$6.666 221 83 \times 10^{-1}$	$3.395 634 48 \times 10^{-1}$	$3.419 910 60 \times 10^{-1}$	$3.185 997 42 \times 10^{-1}$	$3.185 811 01 \times 10^{-1}$
1.53	$6.441 396 17 \times 10^{-1}$	$3.267 748 85 \times 10^{-1}$	$3.289 384 09 \times 10^{-1}$	$3.069 544 18 \times 10^{-1}$	$3.068 830 52 \times 10^{-1}$
1.54	$6.227 275 93 \times 10^{-1}$	$3.146 631 64 \times 10^{-1}$	$3.165 854 57 \times 10^{-1}$	$2.959 022 16 \times 10^{-1}$	$2.957 848 52 \times 10^{-1}$
1.55	$6.023 203 66 \times 10^{-1}$	$3.031 817 31 \times 10^{-1}$	$3.048 838 39 \times 10^{-1}$	$2.854 034 22 \times 10^{-1}$	$2.852 460 88 \times 10^{-1}$
1.56	$5.828 571 60 \times 10^{-1}$	$2.922 879 47 \times 10^{-1}$	$2.937 892 45 \times 10^{-1}$	$2.754 216 49 \times 10^{-1}$	$2.752 297 44 \times 10^{-1}$
1.57	$5.642 817 27 \times 10^{-1}$	$2.819 426 99 \times 10^{-1}$	$2.832 610 18 \times 10^{-1}$	$2.659 235 03 \times 10^{-1}$	$2.657 018 58 \times 10^{-1}$
1.58	$5.465 419 39 \times 10^{-1}$	$2.721 100 64 \times 10^{-1}$	$2.732 618 10 \times 10^{-1}$	$2.568 782 92 \times 10^{-1}$	$2.566 312 27 \times 10^{-1}$
1.59	$5.295 894 31 \times 10^{-1}$	$2.627 569 99 \times 10^{-1}$	$2.637 572 66 \times 10^{-1}$	$2.482 577 57 \times 10^{-1}$	$2.479 891 33 \times 10^{-1}$
1.60	$5.133 792 79 \times 10^{-1}$	$2.538 530 75 \times 10^{-1}$	$2.547 157 44 \times 10^{-1}$	$2.400 358 49 \times 10^{-1}$	$2.397 491 14 \times 10^{-1}$
1.61	$4.978 697 05 \times 10^{-1}$	$2.453 702 33 \times 10^{-1}$	$2.461 080 67 \times 10^{-1}$	$2.321 885 18 \times 10^{-1}$	$2.318 867 45 \times 10^{-1}$
1.62	$4.830 218 20 \times 10^{-1}$	$2.372 825 68 \times 10^{-1}$	$2.379 072 95 \times 10^{-1}$	$2.246 935 28 \times 10^{-1}$	$2.243 794 56 \times 10^{-1}$
1.63	$4.687 993 79 \times 10^{-1}$	$2.295 661 32 \times 10^{-1}$	$2.300 885 31 \times 10^{-1}$	$2.175 302 97 \times 10^{-1}$	$2.172 063 63 \times 10^{-1}$
1.64	$4.551 685 76 \times 10^{-1}$	$2.221 987 66 \times 10^{-1}$	$2.226 287 37 \times 10^{-1}$	$2.106 797 44 \times 10^{-1}$	$2.103 481 13 \times 10^{-1}$
1.65	$4.420 978 42 \times 10^{-1}$	$2.151 599 37 \times 10^{-1}$	$2.155 065 69 \times 10^{-1}$	$2.041 241 59 \times 10^{-1}$	$2.037 867 53 \times 10^{-1}$
1.66	$4.295 576 71 \times 10^{-1}$	$2.084 306 02 \times 10^{-1}$	$2.087 022 37 \times 10^{-1}$	$1.978 470 88 \times 10^{-1}$	$1.975 056 09 \times 10^{-1}$
1.67	$4.175 204 63 \times 10^{-1}$	$2.019 930 78 \times 10^{-1}$	$2.021 973 69 \times 10^{-1}$	$1.918 332 20 \times 10^{-1}$	$1.914 891 72 \times 10^{-1}$
1.68	$4.059 603 74 \times 10^{-1}$	$1.958 309 27 \times 10^{-1}$	$1.959 748 91 \times 10^{-1}$	$1.860 682 96 \times 10^{-1}$	$1.857 230 06 \times 10^{-1}$
1.69	$3.948 531 85 \times 10^{-1}$	$1.899 288 56 \times 10^{-1}$	$1.900 189 24 \times 10^{-1}$	$1.805 390 19 \times 10^{-1}$	$1.801 936 55 \times 10^{-1}$
1.70	$3.841 761 80 \times 10^{-1}$	$1.842 726 18 \times 10^{-1}$	$1.843 146 83 \times 10^{-1}$	$1.752 329 78 \times 10^{-1}$	$1.748 885 64 \times 10^{-1}$
1.71	$3.739 080 37 \times 10^{-1}$	$1.788 489 33 \times 10^{-1}$	$1.788 483 86 \times 10^{-1}$	$1.701 385 74 \times 10^{-1}$	$1.697 960 07 \times 10^{-1}$
1.72	$3.640 287 25 \times 10^{-1}$	$1.736 454 05 \times 10^{-1}$	$1.736 071 82 \times 10^{-1}$	$1.652 449 58 \times 10^{-1}$	$1.649 050 20 \times 10^{-1}$
1.73	$3.545 194 11 \times 10^{-1}$	$1.686 504 56 \times 10^{-1}$	$1.685 790 67 \times 10^{-1}$	$1.605 419 75 \times 10^{-1}$	$1.602 053 43 \times 10^{-1}$
1.74	$3.453 623 78 \times 10^{-1}$	$1.638 532 60 \times 10^{-1}$	$1.637 528 26 \times 10^{-1}$	$1.560 201 03 \times 10^{-1}$	$1.556 873 64 \times 10^{-1}$
1.75	$3.365 409 42 \times 10^{-1}$	$1.592 436 85 \times 10^{-1}$	$1.591 179 71 \times 10^{-1}$	$1.516 704 13 \times 10^{-1}$	$1.513 420 70 \times 10^{-1}$
1.76	$3.280 393 86 \times 10^{-1}$	$1.548 122 44 \times 10^{-1}$	$1.546 646 80 \times 10^{-1}$	$1.474 845 22 \times 10^{-1}$	$1.471 610 03 \times 10^{-1}$
1.77	$3.198 428 90 \times 10^{-1}$	$1.505 500 39 \times 10^{-1}$	$1.503 837 54 \times 10^{-1}$	$1.434 545 50 \times 10^{-1}$	$1.431 362 19 \times 10^{-1}$
1.78	$3.119 374 70 \times 10^{-1}$	$1.464 487 26 \times 10^{-1}$	$1.462 665 68 \times 10^{-1}$	$1.395 730 87 \times 10^{-1}$	$1.392 602 49 \times 10^{-1}$
1.79	$3.043 099 25 \times 10^{-1}$	$1.425 004 68 \times 10^{-1}$	$1.423 050 25 \times 10^{-1}$	$1.358 331 59 \times 10^{-1}$	$1.355 260 64 \times 10^{-1}$
1.80	$2.969 477 84 \times 10^{-1}$	$1.386 978 99 \times 10^{-1}$	$1.384 915 25 \times 10^{-1}$	$1.322 281 96 \times 10^{-1}$	$1.319 270 48 \times 10^{-1}$
1.81	$2.898 392 58 \times 10^{-1}$	$1.350 340 93 \times 10^{-1}$	$1.348 189 22 \times 10^{-1}$	$1.287 520 03 \times 10^{-1}$	$1.284 569 65 \times 10^{-1}$
1.82	$2.829 731 94 \times 10^{-1}$	$1.315 025 31 \times 10^{-1}$	$1.312 804 97 \times 10^{-1}$	$1.253 987 35 \times 10^{-1}$	$1.251 099 33 \times 10^{-1}$
1.83	$2.763 390 39 \times 10^{-1}$	$1.280 970 72 \times 10^{-1}$	$1.278 699 24 \times 10^{-1}$	$1.221 628 77 \times 10^{-1}$	$1.218 804 02 \times 10^{-1}$
1.84	$2.699 267 97 \times 10^{-1}$	$1.248 119 29 \times 10^{-1}$	$1.245 812 46 \times 10^{-1}$	$1.190 392 14 \times 10^{-1}$	$1.187 631 31 \times 10^{-1}$
1.85	$2.637 269 99 \times 10^{-1}$	$1.216 416 41 \times 10^{-1}$	$1.214 088 48 \times 10^{-1}$	$1.160 228 18 \times 10^{-1}$	$1.157 531 65 \times 10^{-1}$
1.86	$2.577 306 65 \times 10^{-1}$	$1.185 810 55 \times 10^{-1}$	$1.183 474 33 \times 10^{-1}$	$1.131 090 27 \times 10^{-1}$	$1.128 458 18 \times 10^{-1}$
1.87	$2.519 292 79 \times 10^{-1}$	$1.156 253 03 \times 10^{-1}$	$1.153 920 02 \times 10^{-1}$	$1.102 934 25 \times 10^{-1}$	$1.100 366 55 \times 10^{-1}$

α	$1s^2 1S^e$	1s2s		1s3s	
		$1S^e$	$3S^e$	$1S^e$	$3S^e$
1.88	$2.463\,147\,57 \times 10^{-1}$	$1.127\,697\,84 \times 10^{-1}$	$1.125\,378\,34 \times 10^{-1}$	$1.075\,718\,31 \times 10^{-1}$	$1.073\,214\,79 \times 10^{-1}$
1.89	$2.408\,794\,24 \times 10^{-1}$	$1.100\,101\,45 \times 10^{-1}$	$1.097\,804\,66 \times 10^{-1}$	$1.049\,402\,82 \times 10^{-1}$	$1.046\,963\,09 \times 10^{-1}$
1.90	$2.356\,159\,88 \times 10^{-1}$	$1.073\,422\,69 \times 10^{-1}$	$1.071\,156\,79 \times 10^{-1}$	$1.023\,950\,18 \times 10^{-1}$	$1.021\,573\,74 \times 10^{-1}$
1.91	$2.305\,175\,18 \times 10^{-1}$	$1.047\,622\,54 \times 10^{-1}$	$1.045\,394\,79 \times 10^{-1}$	$9.993\,247\,27 \times 10^{-2}$	$9.970\,109\,42 \times 10^{-2}$
1.92	$2.255\,774\,21 \times 10^{-1}$	$1.022\,664\,05 \times 10^{-1}$	$1.020\,480\,85 \times 10^{-1}$	$9.754\,925\,68 \times 10^{-2}$	$9.732\,407\,17 \times 10^{-2}$
1.93	$2.207\,894\,27 \times 10^{-1}$	$9.985\,121\,69 \times 10^{-2}$	$9.963\,791\,70 \times 10^{-2}$	$9.524\,215\,29 \times 10^{-2}$	$9.502\,308\,02 \times 10^{-2}$
1.94	$2.161\,475\,65 \times 10^{-1}$	$9.751\,336\,48 \times 10^{-2}$	$9.730\,557\,73 \times 10^{-2}$	$9.300\,810\,18 \times 10^{-2}$	$9.279\,505\,33 \times 10^{-2}$
1.95	$2.116\,461\,51 \times 10^{-1}$	$9.524\,969\,28 \times 10^{-2}$	$9.504\,784\,60 \times 10^{-2}$	$9.084\,419\,43 \times 10^{-2}$	$9.063\,707\,56 \times 10^{-2}$
1.96	$2.072\,797\,68 \times 10^{-1}$	$9.305\,720\,33 \times 10^{-2}$	$9.286\,166\,64 \times 10^{-2}$	$8.874\,766\,19 \times 10^{-2}$	$8.854\,637\,36 \times 10^{-2}$
1.97	$2.030\,432\,53 \times 10^{-1}$	$9.093\,304\,79 \times 10^{-2}$	$9.074\,413\,62 \times 10^{-2}$	$8.671\,586\,92 \times 10^{-2}$	$8.652\,030\,76 \times 10^{-2}$
1.98	$1.989\,316\,84 \times 10^{-1}$	$8.887\,451\,80 \times 10^{-2}$	$8.869\,249\,79 \times 10^{-2}$	$8.474\,630\,59 \times 10^{-2}$	$8.455\,636\,41 \times 10^{-2}$
1.99	$1.949\,403\,64 \times 10^{-1}$	$8.687\,903\,71 \times 10^{-2}$	$8.670\,413\,05 \times 10^{-2}$	$8.283\,658\,00 \times 10^{-2}$	$8.265\,214\,84 \times 10^{-2}$
2.00	$1.910\,648\,11 \times 10^{-1}$	$8.494\,415\,29 \times 10^{-2}$	$8.477\,654\,09 \times 10^{-2}$	$8.098\,441\,11 \times 10^{-2}$	$8.080\,537\,79 \times 10^{-2}$
2.10	$1.578\,226\,01 \times 10^{-1}$	$6.846\,442\,45 \times 10^{-2}$	$6.837\,314\,36 \times 10^{-2}$	$6.519\,516\,79 \times 10^{-2}$	$6.506\,386\,41 \times 10^{-2}$
2.20	$1.324\,520\,65 \times 10^{-1}$	$5.604\,483\,67 \times 10^{-2}$	$5.602\,379\,15 \times 10^{-2}$	$5.328\,651\,90 \times 10^{-2}$	$5.319\,224\,27 \times 10^{-2}$
2.30	$1.127\,115\,26 \times 10^{-1}$	$4.649\,623\,01 \times 10^{-2}$	$4.653\,226\,54 \times 10^{-2}$	$4.413\,166\,21 \times 10^{-2}$	$4.406\,552\,85 \times 10^{-2}$
2.40	$9.709\,235\,72 \times 10^{-2}$	$3.902\,903\,23 \times 10^{-2}$	$3.910\,851\,01 \times 10^{-2}$	$3.697\,678\,34 \times 10^{-2}$	$3.693\,186\,11 \times 10^{-2}$
2.50	$8.455\,162\,24 \times 10^{-2}$	$3.310\,285\,36 \times 10^{-2}$	$3.321\,395\,48 \times 10^{-2}$	$3.130\,358\,13 \times 10^{-2}$	$3.127\,459\,94 \times 10^{-2}$
2.60	$7.435\,135\,14 \times 10^{-2}$	$2.833\,835\,33 \times 10^{-2}$	$2.847\,159\,77 \times 10^{-2}$	$2.674\,727\,14 \times 10^{-2}$	$2.673\,026\,14 \times 10^{-2}$
2.70	$6.595\,859\,82 \times 10^{-2}$	$2.446\,344\,03 \times 10^{-2}$	$2.461\,152\,62 \times 10^{-2}$	$2.304\,586\,73 \times 10^{-2}$	$2.303\,784\,84 \times 10^{-2}$
2.80	$5.898\,146\,69 \times 10^{-2}$	$2.127\,927\,79 \times 10^{-2}$	$2.143\,671\,57 \times 10^{-2}$	$2.000\,783\,15 \times 10^{-2}$	$2.000\,656\,22 \times 10^{-2}$
2.90	$5.312\,709\,66 \times 10^{-2}$	$1.863\,816\,63 \times 10^{-2}$	$1.880\,089\,43 \times 10^{-2}$	$1.749\,089\,71 \times 10^{-2}$	$1.749\,468\,69 \times 10^{-2}$
3.00	$4.817\,343\,95 \times 10^{-2}$	$1.642\,878\,69 \times 10^{-2}$	$1.659\,383\,68 \times 10^{-2}$	$1.538\,788\,10 \times 10^{-2}$	$1.539\,545\,02 \times 10^{-2}$
3.10	$4.394\,991\,59 \times 10^{-2}$	$1.456\,614\,02 \times 10^{-2}$	$1.473\,136\,87 \times 10^{-2}$	$1.361\,698\,81 \times 10^{-2}$	$1.362\,736\,45 \times 10^{-2}$
3.20	$4.032\,391\,22 \times 10^{-2}$	$1.298\,455\,44 \times 10^{-2}$	$1.314\,843\,40 \times 10^{-2}$	$1.211\,506\,45 \times 10^{-2}$	$1.212\,750\,68 \times 10^{-2}$
3.30	$3.719\,120\,14 \times 10^{-2}$	$1.163\,274\,26 \times 10^{-2}$	$1.179\,420\,32 \times 10^{-2}$	$1.083\,282\,54 \times 10^{-2}$	$1.084\,676\,65 \times 10^{-2}$
3.40	$3.446\,904\,27 \times 10^{-2}$	$1.047\,025\,58 \times 10^{-2}$	$1.062\,856\,61 \times 10^{-2}$	$9.731\,429\,83 \times 10^{-3}$	$9.746\,435\,14 \times 10^{-3}$
3.50	$3.209\,114\,48 \times 10^{-2}$	$9.464\,902\,24 \times 10^{-3}$	$9.619\,581\,03 \times 10^{-3}$	$8.779\,989\,56 \times 10^{-3}$	$8.795\,725\,27 \times 10^{-3}$
3.60	$3.000\,394\,10 \times 10^{-2}$	$8.590\,846\,21 \times 10^{-3}$	$8.741\,596\,28 \times 10^{-3}$	$7.953\,734\,00 \times 10^{-3}$	$7.969\,943\,60 \times 10^{-3}$
3.70	$2.816\,380\,39 \times 10^{-2}$	$7.827\,191\,16 \times 10^{-3}$	$7.973\,850\,15 \times 10^{-3}$	$7.232\,643\,36 \times 10^{-3}$	$7.249\,129\,79 \times 10^{-3}$
3.80	$2.653\,493\,95 \times 10^{-2}$	$7.156\,912\,54 \times 10^{-3}$	$7.299\,416\,34 \times 10^{-3}$	$6.600\,419\,79 \times 10^{-3}$	$6.617\,031\,95 \times 10^{-3}$
3.90	$2.508\,777\,95 \times 10^{-2}$	$6.566\,046\,18 \times 10^{-3}$	$6.704\,401\,74 \times 10^{-3}$	$6.043\,705\,31 \times 10^{-3}$	$6.060\,327\,70 \times 10^{-3}$
4.00	$2.379\,774\,17 \times 10^{-2}$	$6.043\,065\,38 \times 10^{-3}$	$6.177\,330\,33 \times 10^{-3}$	$5.551\,481\,84 \times 10^{-3}$	$5.568\,026\,65 \times 10^{-3}$
4.10	$2.264\,426\,74 \times 10^{-2}$	$5.578\,398\,65 \times 10^{-3}$	$5.708\,666\,26 \times 10^{-3}$	$5.114\,607\,06 \times 10^{-3}$	$5.131\,008\,10 \times 10^{-3}$
4.20	$2.161\,006\,64 \times 10^{-2}$	$5.164\,053\,54 \times 10^{-3}$	$5.290\,441\,36 \times 10^{-3}$	$4.725\,452\,54 \times 10^{-3}$	$4.741\,660\,46 \times 10^{-3}$
4.30	$2.068\,052\,06 \times 10^{-2}$	$4.793\,320\,84 \times 10^{-3}$	$4.915\,962\,34 \times 10^{-3}$	$4.377\,619\,33 \times 10^{-3}$	$4.393\,597\,98 \times 10^{-3}$
4.40	$1.984\,321\,06 \times 10^{-2}$	$4.460\,540\,45 \times 10^{-3}$	$4.579\,578\,79 \times 10^{-3}$	$4.065\,713\,00 \times 10^{-3}$	$4.081\,436\,57 \times 10^{-3}$
4.50	$1.908\,753\,57 \times 10^{-2}$	$4.160\,914\,78 \times 10^{-3}$	$4.276\,498\,21 \times 10^{-3}$	$3.785\,164\,50 \times 10^{-3}$	$3.800\,615\,26 \times 10^{-3}$
4.60	$1.840\,440\,86 \times 10^{-2}$	$3.890\,359\,17 \times 10^{-3}$	$4.002\,637\,65 \times 10^{-3}$	$3.532\,086\,52 \times 10^{-3}$	$3.547\,253\,07 \times 10^{-3}$
4.70	$1.778\,600\,71 \times 10^{-2}$	$3.645\,381\,17 \times 10^{-3}$	$3.754\,503\,93 \times 10^{-3}$	$3.303\,157\,74 \times 10^{-3}$	$3.318\,033\,61 \times 10^{-3}$
4.80	$1.722\,557\,23 \times 10^{-2}$	$3.422\,982\,65 \times 10^{-3}$	$3.529\,096\,42 \times 10^{-3}$	$3.095\,528\,96 \times 10^{-3}$	$3.110\,111\,53 \times 10^{-3}$
4.90	$1.671\,724\,26 \times 10^{-2}$	$3.220\,579\,99 \times 10^{-3}$	$3.323\,827\,78 \times 10^{-3}$	$2.906\,746\,65 \times 10^{-3}$	$2.921\,036\,27 \times 10^{-3}$
5.00	$1.625\,591\,81 \times 10^{-2}$	$3.035\,938\,62 \times 10^{-3}$	$3.136\,458\,87 \times 10^{-3}$	$2.734\,690\,23 \times 10^{-3}$	$2.748\,689\,54 \times 10^{-3}$
5.10	$1.583\,714\,67 \times 10^{-2}$	$2.867\,119\,11 \times 10^{-3}$	$2.965\,045\,17 \times 10^{-3}$	$2.577\,520\,54 \times 10^{-3}$	$2.591\,233\,92 \times 10^{-3}$
5.20	$1.545\,703\,08 \times 10^{-2}$	$2.712\,432\,65 \times 10^{-3}$	$2.807\,892\,42 \times 10^{-3}$	$2.433\,637\,14 \times 10^{-3}$	$2.447\,070\,28 \times 10^{-3}$
5.30	$1.511\,214\,86 \times 10^{-2}$	$2.570\,403\,92 \times 10^{-3}$	$2.663\,519\,76 \times 10^{-3}$	$2.301\,642\,92 \times 10^{-3}$	$2.314\,802\,49 \times 10^{-3}$
5.40	$1.479\,948\,85 \times 10^{-2}$	$2.439\,740\,24 \times 10^{-3}$	$2.530\,628\,87 \times 10^{-3}$	$2.180\,314\,55 \times 10^{-3}$	$2.193\,207\,90 \times 10^{-3}$

α	1s2s			1s3s	
	$1s^2 1s^e$	$1s^e$	$3s^e$	$1s^e$	$3s^e$
5.50	$1.451\,639\,34 \times 10^{-2}$	$2.319\,305\,63 \times 10^{-3}$	$2.408\,078\,22 \times 10^{-3}$	$2.068\,577\,75 \times 10^{-3}$	$2.081\,212\,72 \times 10^{-3}$
5.60	$1.426\,051\,41 \times 10^{-2}$	$2.208\,099\,02 \times 10^{-3}$	$2.294\,861\,32 \times 10^{-3}$	$1.965\,486\,45 \times 10^{-3}$	$1.977\,871\,19 \times 10^{-3}$
5.70	$1.402\,976\,93 \times 10^{-2}$	$2.105\,235\,88 \times 10^{-3}$	$2.190\,088\,37 \times 10^{-3}$	$1.870\,205\,30 \times 10^{-3}$	$1.882\,348\,13 \times 10^{-3}$
5.80	$1.382\,231\,21 \times 10^{-2}$	$2.009\,932\,66 \times 10^{-3}$	$2.092\,970\,71 \times 10^{-3}$	$1.781\,994\,80 \times 10^{-3}$	$1.793\,904\,10 \times 10^{-3}$
5.90	$1.363\,650\,09 \times 10^{-2}$	$1.921\,493\,50 \times 10^{-3}$	$2.002\,807\,63 \times 10^{-3}$	$1.700\,198\,65 \times 10^{-3}$	$1.711\,882\,82 \times 10^{-3}$
6.00	$1.347\,087\,44 \times 10^{-2}$	$1.839\,298\,97 \times 10^{-3}$	$1.918\,975\,05 \times 10^{-3}$	$1.624\,233\,04 \times 10^{-3}$	$1.635\,700\,38 \times 10^{-3}$
6.10	$1.332\,413\,10 \times 10^{-2}$	$1.762\,796\,43 \times 10^{-3}$	$1.840\,915\,92 \times 10^{-3}$	$1.553\,577\,44 \times 10^{-3}$	$1.564\,836\,13 \times 10^{-3}$
6.20	$1.319\,510\,95 \times 10^{-2}$	$1.691\,491\,70 \times 10^{-3}$	$1.768\,131\,86 \times 10^{-3}$	$1.487\,766\,71 \times 10^{-3}$	$1.498\,824\,76 \times 10^{-3}$
6.30	$1.308\,277\,43 \times 10^{-2}$	$1.624\,941\,99 \times 10^{-3}$	$1.700\,176\,11 \times 10^{-3}$	$1.426\,384\,32 \times 10^{-3}$	$1.437\,249\,57 \times 10^{-3}$
6.40	$1.298\,620\,07 \times 10^{-2}$	$1.562\,749\,69 \times 10^{-3}$	$1.636\,647\,31 \times 10^{-3}$	$1.369\,056\,50 \times 10^{-3}$	$1.379\,736\,58 \times 10^{-3}$
6.50	$1.290\,456\,37 \times 10^{-2}$	$1.504\,557\,10 \times 10^{-3}$	$1.577\,184\,20 \times 10^{-3}$	$1.315\,447\,22 \times 10^{-3}$	$1.325\,949\,52 \times 10^{-3}$
6.60	$1.283\,712\,71 \times 10^{-2}$	$1.450\,041\,75 \times 10^{-3}$	$1.521\,461\,02 \times 10^{-3}$	$1.265\,253\,74 \times 10^{-3}$	$1.275\,585\,45 \times 10^{-3}$
6.70	$1.278\,323\,49 \times 10^{-2}$	$1.398\,912\,47 \times 10^{-3}$	$1.469\,183\,42 \times 10^{-3}$	$1.218\,202\,87 \times 10^{-3}$	$1.228\,370\,92 \times 10^{-3}$
6.80	$1.274\,230\,29 \times 10^{-2}$	$1.350\,905\,83 \times 10^{-3}$	$1.420\,085\,01 \times 10^{-3}$	$1.174\,047\,59 \times 10^{-3}$	$1.184\,058\,69 \times 10^{-3}$
6.90	$1.271\,381\,23 \times 10^{-2}$	$1.305\,783\,09 \times 10^{-3}$	$1.373\,924\,27 \times 10^{-3}$	$1.132\,564\,20 \times 10^{-3}$	$1.142\,424\,83 \times 10^{-3}$
7.00	$1.269\,730\,31 \times 10^{-2}$	$1.263\,327\,55 \times 10^{-3}$	$1.330\,481\,88 \times 10^{-3}$	$1.093\,549\,76 \times 10^{-3}$	$1.103\,266\,15 \times 10^{-3}$
7.10	$1.269\,236\,91 \times 10^{-2}$	$1.223\,342\,17 \times 10^{-3}$	$1.289\,558\,34 \times 10^{-3}$	$1.056\,819\,86 \times 10^{-3}$	$1.066\,398\,03 \times 10^{-3}$
7.20	$1.269\,865\,31 \times 10^{-2}$	$1.185\,647\,52 \times 10^{-3}$	$1.250\,971\,89 \times 10^{-3}$	$1.022\,206\,67 \times 10^{-3}$	$1.031\,652\,41 \times 10^{-3}$
7.30	$1.271\,584\,29 \times 10^{-2}$	$1.150\,079\,97 \times 10^{-3}$	$1.214\,556\,72 \times 10^{-3}$	$9.895\,572\,26 \times 10^{-4}$	$9.988\,761\,15 \times 10^{-4}$
7.40	$1.274\,366\,72 \times 10^{-2}$	$1.116\,490\,04 \times 10^{-3}$	$1.180\,161\,32 \times 10^{-3}$	$9.587\,318\,89 \times 10^{-4}$	$9.679\,292\,92 \times 10^{-4}$
7.50	$1.278\,189\,30 \times 10^{-2}$	$1.084\,741\,03 \times 10^{-3}$	$1.147\,647\,05 \times 10^{-3}$	$9.296\,030\,18 \times 10^{-4}$	$9.386\,841\,02 \times 10^{-4}$
7.60	$1.283\,032\,24 \times 10^{-2}$	$1.054\,707\,72 \times 10^{-3}$	$1.116\,886\,87 \times 10^{-3}$	$9.020\,537\,68 \times 10^{-4}$	$9.110\,235\,05 \times 10^{-4}$
7.70	$1.288\,879\,01 \times 10^{-2}$	$1.026\,275\,27 \times 10^{-3}$	$1.087\,764\,25 \times 10^{-3}$	$8.759\,770\,37 \times 10^{-4}$	$8.848\,402\,09 \times 10^{-4}$
7.80	$1.295\,716\,15 \times 10^{-2}$	$9.993\,382\,14 \times 10^{-4}$	$1.060\,172\,11 \times 10^{-3}$	$8.512\,745\,21 \times 10^{-4}$	$8.600\,357\,33 \times 10^{-4}$
7.90	$1.303\,533\,03 \times 10^{-2}$	$9.737\,995\,70 \times 10^{-4}$	$1.034\,011\,96 \times 10^{-3}$	$8.278\,558\,79 \times 10^{-4}$	$8.365\,195\,61 \times 10^{-4}$
8.00	$1.312\,321\,70 \times 10^{-2}$	$9.495\,700\,59 \times 10^{-4}$	$1.009\,193\,10 \times 10^{-3}$	$8.056\,379\,84 \times 10^{-4}$	$8.142\,084\,03 \times 10^{-4}$
8.10	$1.322\,076\,77 \times 10^{-2}$	$9.265\,673\,85 \times 10^{-4}$	$9.856\,319\,10 \times 10^{-4}$	$7.845\,442\,55 \times 10^{-4}$	$7.930\,255\,19 \times 10^{-4}$
8.20	$1.332\,795\,23 \times 10^{-2}$	$9.047\,156\,05 \times 10^{-4}$	$9.632\,511\,71 \times 10^{-4}$	$7.645\,040\,62 \times 10^{-4}$	$7.729\,001\,27 \times 10^{-4}$
8.30	$1.344\,476\,35 \times 10^{-2}$	$8.839\,445\,59 \times 10^{-4}$	$9.419\,795\,44 \times 10^{-4}$	$7.454\,521\,82 \times 10^{-4}$	$7.537\,668\,62 \times 10^{-4}$
8.40	$1.357\,121\,60 \times 10^{-2}$	$8.641\,893\,58 \times 10^{-4}$	$9.217\,510\,25 \times 10^{-4}$	$7.273\,283\,28 \times 10^{-4}$	$7.355\,652\,97 \times 10^{-4}$
8.50	$1.370\,734\,55 \times 10^{-2}$	$8.453\,899\,23 \times 10^{-4}$	$9.025\,044\,85 \times 10^{-4}$	$7.100\,767\,08 \times 10^{-4}$	$7.182\,395\,08 \times 10^{-4}$
8.60	$1.385\,320\,79 \times 10^{-2}$	$8.274\,905\,75 \times 10^{-4}$	$8.841\,832\,51 \times 10^{-4}$	$6.936\,456\,38 \times 10^{-4}$	$7.017\,376\,88 \times 10^{-4}$
8.70	$1.400\,887\,86 \times 10^{-2}$	$8.104\,396\,55 \times 10^{-4}$	$8.667\,347\,32 \times 10^{-4}$	$6.779\,871\,91 \times 10^{-4}$	$6.860\,117\,90 \times 10^{-4}$
8.80	$1.417\,445\,23 \times 10^{-2}$	$7.941\,891\,92 \times 10^{-4}$	$8.501\,100\,75 \times 10^{-4}$	$6.630\,568\,81 \times 10^{-4}$	$6.710\,172\,12 \times 10^{-4}$
8.90	$1.435\,004\,23 \times 10^{-2}$	$7.786\,945\,91 \times 10^{-4}$	$8.342\,638\,58 \times 10^{-4}$	$6.488\,133\,72 \times 10^{-4}$	$6.567\,125\,13 \times 10^{-4}$
9.00	$1.453\,578\,02 \times 10^{-2}$	$7.639\,143\,64 \times 10^{-4}$	$8.191\,538\,09 \times 10^{-4}$	$6.352\,182\,23 \times 10^{-4}$	$6.430\,591\,45 \times 10^{-4}$