

$^{185}\text{W}$        $Z = 74$        $N = 111$       adopted link      ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 1478.688 ( 0.001) MeV

Qbeta- = 0.431 ( 0.001) MeV

|          | Energy T | J+       | J-    | J-other                 | T1/2        |
|----------|----------|----------|-------|-------------------------|-------------|
| -----    |          |          |       |                         |             |
| S-alpha= | -1.590   | ( 0.002) | ----- |                         |             |
| 185W 1   |          |          | 0.000 | 3/2-                    | 1 75.1 D 3  |
| 185W 2   |          |          | 0.024 | 1/2-                    | 2           |
| 185W 3   |          |          | 0.066 | 5/2-                    | 3           |
| 185W 4   |          |          | 0.093 | 3/2-                    | 4           |
| 185W 5   |          |          | 0.174 | 7/2-                    | 5 1.5 NS LT |
| 185W 6   |          |          | 0.188 | 5/2-                    | 6           |
| 185W 7   | 0.197    | 11/2+    |       |                         | 7 1.67 M 3  |
| 185W 8   |          |          | 0.244 | 7/2-                    | 8 19.3 NS 5 |
| 185W 9   |          |          |       | 0.302 (9/2-)            | 9           |
| 185W 10  |          |          |       | 0.334 (7/2-)            | 10          |
| -----    |          |          |       |                         |             |
| 185W 11  |          |          |       | 0.384 (13/2+)           | 11          |
| 185W 12  |          |          |       | 0.391 (9/2-)            | 12          |
| 185W 13  |          |          |       | 0.478 (11/2-)           | 13          |
| 185W 14  |          |          |       | 0.492 (9/2-)            | 14          |
| 185W 15  |          |          |       | 0.570 (11/2-)           | 15          |
| 185W 16  |          |          | 0.663 | 3/2-                    | 16          |
| 185W 17  |          |          |       | 0.706 (11/2-)           | 17          |
| 185W 18  |          |          |       | 0.716 (9/2+)            | 18          |
| 185W 19  |          |          | 0.730 | 3/2-                    | 19          |
| 185W 20  |          |          |       | 0.768 1/2-, 3/2-        | 20          |
| -----    |          |          |       |                         |             |
| 185W 21  |          |          |       | 0.774 1/2, 3/2, 5/2+    | 21          |
| 185W 22  |          |          |       | 0.785 (9/2-)            | 22          |
| 185W 23  |          |          |       | 0.801                   | 23          |
| 185W 24  |          |          |       | 0.823 1/2-, 3/2-        | 24          |
| 185W 25  |          |          |       | 0.827 (1/2-, 3/2-)      | 25          |
| 185W 26  |          |          |       | 0.842 (5/2)             | 26          |
| 185W 27  |          |          | 0.889 | 5/2-                    | 27          |
| 185W 28  |          |          |       | 0.904                   | 28          |
| 185W 29  |          |          |       | 0.918 1/2, 3/2          | 29          |
| 185W 30  |          |          |       | 0.921                   | 30          |
| -----    |          |          |       |                         |             |
| 185W 31  |          |          |       | 0.968 (1/2-, 3/2)       | 31          |
| 185W 32  |          |          |       | 0.971                   | 32          |
| 185W 33  |          |          |       | 0.979 1/2(-), 3/2, 5/2+ | 33          |
| 185W 34  |          |          | 0.986 | 7/2-                    | 34          |
| 185W 35  |          |          | 1.006 | 1/2-                    | 35          |
| 185W 36  |          |          | 1.013 | 1/2-                    | 36          |

|       |    |  |       |       |                |     |
|-------|----|--|-------|-------|----------------|-----|
| 185W  | 37 |  |       | 1.020 | (13/2+)        | 37  |
| 185W  | 38 |  | 1.036 | 3/2-  |                | 38  |
| 185W  | 39 |  |       | 1.042 | (3/2-,5/2+)    | 39  |
| 185W  | 40 |  | 1.059 | 7/2-  |                | 40  |
| ----- |    |  |       |       |                |     |
| 185W  | 41 |  |       | 1.062 | (5/2+)         | 41  |
| 185W  | 42 |  | 1.068 | 3/2-  |                | 42  |
| 185W  | 43 |  |       | 1.073 | (5/2-)         | 43  |
| 185W  | 44 |  |       | 1.077 | (3/2-,5/2+)    | 44  |
| 185W  | 45 |  |       | 1.087 | (3/2-,5/2+)    | 45  |
| 185W  | 46 |  | 1.101 | 3/2-  |                | 46  |
| 185W  | 47 |  | 1.106 | 3/2-  |                | 47  |
| 185W  | 48 |  |       | 1.107 |                | 48  |
| 185W  | 49 |  |       | 1.118 | (5/2-)         | 49  |
| 185W  | 50 |  |       | 1.118 | (9/2-)         | 50  |
| ----- |    |  |       |       |                |     |
| 185W  | 51 |  |       | 1.120 |                | 51  |
| 185W  | 52 |  |       | 1.145 | (1/2-,3/2-)    | 52  |
| 185W  | 53 |  |       | 1.147 | (3/2-,5/2+)    | 53  |
| 185W  | 54 |  |       | 1.154 | (7/2-)         | 54  |
| 185W  | 55 |  | 1.181 | 1/2-  |                | 55  |
| 185W  | 56 |  | 1.219 | 3/2-  |                | 56  |
| 185W  | 57 |  |       | 1.219 | (9/2-)         | 57  |
| 185W  | 58 |  |       | 1.246 |                | 58  |
| 185W  | 59 |  |       | 1.279 |                | 59  |
| 185W  | 60 |  |       | 1.284 | 1/2,3/2,5/2+   | 60  |
| ----- |    |  |       |       |                |     |
| 185W  | 61 |  |       | 1.287 | 1/2-,3/2-      | 61  |
| 185W  | 62 |  |       | 1.313 | 1/2,3/2,5/2+   | 62  |
| 185W  | 63 |  |       | 1.317 |                | 63  |
| 185W  | 64 |  |       | 1.328 | 1/2,3/2,5/2+   | 64  |
| 185W  | 65 |  |       | 1.335 | (7/2-)         | 65  |
| 185W  | 66 |  |       | 1.343 |                | 66  |
| 185W  | 67 |  |       | 1.346 |                | 67  |
| 185W  | 68 |  |       | 1.353 | 1/2,3/2,5/2+   | 68  |
| 185W  | 69 |  |       | 1.359 |                | 69  |
| 185W  | 70 |  |       | 1.361 | (9/2-)         | 70  |
| ----- |    |  |       |       |                |     |
| 185W  | 71 |  |       | 1.366 | (1/2-,3/2-)    | 71  |
| 185W  | 72 |  |       | 1.370 | 1/2(-),3/2,5/2 | 72+ |
| 185W  | 73 |  |       | 1.382 |                | 73  |
| 185W  | 74 |  |       | 1.401 | 1/2,3/2,5/2+   | 74  |
| 185W  | 75 |  |       | 1.402 |                | 75  |
| 185W  | 76 |  |       | 1.410 |                | 76  |
| 185W  | 77 |  |       | 1.424 | (5/2)          | 77  |
| 185W  | 78 |  |       | 1.428 |                | 78  |
| 185W  | 79 |  |       | 1.441 | 1/2-,3/2-      | 79  |
| 185W  | 80 |  |       | 1.443 | (1/2-,3/2)     | 80  |
| ----- |    |  |       |       |                |     |
| 185W  | 81 |  |       | 1.445 |                | 81  |

|       |     |  |  |  |       |                  |       |
|-------|-----|--|--|--|-------|------------------|-------|
| 185W  | 82  |  |  |  | 1.448 |                  | 82    |
| 185W  | 83  |  |  |  | 1.496 | 1/2-, 3/2-       | 83    |
| 185W  | 84  |  |  |  | 1.504 | 1/2, 3/2, 5/2+   | 84    |
| 185W  | 85  |  |  |  | 1.535 | (1/2-, 3/2)      | 85    |
| 185W  | 86  |  |  |  | 1.561 | (13/2+)          | 86    |
| 185W  | 87  |  |  |  | 1.561 |                  | 87    |
| 185W  | 88  |  |  |  | 1.562 | (1/2, 3/2)       | 88    |
| 185W  | 89  |  |  |  | 1.571 | 1/2, 3/2, 5/2+   | 89    |
| 185W  | 90  |  |  |  | 1.573 | (3/2-)           | 90    |
| ----- |     |  |  |  |       |                  |       |
| 185W  | 91  |  |  |  | 1.577 | 1/2, 3/2, 5/2+   | 91    |
| 185W  | 92  |  |  |  | 1.603 |                  | 92    |
| 185W  | 93  |  |  |  | 1.613 | (3/2-, 5/2+)     | 93    |
| 185W  | 94  |  |  |  | 1.623 |                  | 94    |
| 185W  | 95  |  |  |  | 1.627 |                  | 95    |
| 185W  | 96  |  |  |  | 1.644 | (1/2-, 3/2)      | 96    |
| 185W  | 97  |  |  |  | 1.650 | 1/2, 3/2, 5/2+   | 97    |
| 185W  | 98  |  |  |  | 1.658 | (1/2-, 3/2)      | 98    |
| 185W  | 99  |  |  |  | 1.663 |                  | 99    |
| 185W  | 100 |  |  |  | 1.666 | (9/2+)           | 100   |
| ----- |     |  |  |  |       |                  |       |
| 185W  | 101 |  |  |  | 1.670 | 1/2(-), 3/2, 5/2 | 101+  |
| 185W  | 102 |  |  |  | 1.674 | (1/2-, 3/2)      | 102   |
| 185W  | 103 |  |  |  | 1.677 |                  | 103   |
| 185W  | 104 |  |  |  | 1.684 | (1/2, 3/2)       | 104   |
| 185W  | 105 |  |  |  | 1.687 | (3/2-, 5/2+)     | 105   |
| 185W  | 106 |  |  |  | 1.690 | 1/2, 3/2, 5/2+   | 106   |
| 185W  | 107 |  |  |  | 1.695 | 1/2, 3/2, 5/2+   | 107   |
| 185W  | 108 |  |  |  | 1.699 |                  | 108   |
| 185W  | 109 |  |  |  | 1.701 |                  | 109   |
| 185W  | 110 |  |  |  | 1.717 | 1/2(-), 3/2, 5/2 | 110+  |
| ----- |     |  |  |  |       |                  |       |
| 185W  | 111 |  |  |  | 1.719 | (3/2-)           | 111   |
| 185W  | 112 |  |  |  | 1.729 | 1/2(-), 3/2, 5/2 | 1122+ |
| 185W  | 113 |  |  |  | 1.735 | 1/2, 3/2, 5/2+   | 113   |
| 185W  | 114 |  |  |  | 1.739 | 1/2, 3/2, 5/2+   | 114   |
| 185W  | 115 |  |  |  | 1.747 | (3/2-, 5/2+)     | 115   |
| 185W  | 116 |  |  |  | 1.754 | 1/2, 3/2, 5/2+   | 116   |
| 185W  | 117 |  |  |  | 1.775 | (1/2-, 3/2)      | 117   |
| 185W  | 118 |  |  |  | 1.795 | (1/2, 3/2)       | 118   |
| 185W  | 119 |  |  |  | 1.797 | (3/2-)           | 119   |
| 185W  | 120 |  |  |  | 1.826 | 1/2(-), 3/2, 5/2 | 120+  |
| ----- |     |  |  |  |       |                  |       |
| 185W  | 121 |  |  |  | 1.830 |                  | 121   |
| 185W  | 122 |  |  |  | 1.839 | (3/2-)           | 122   |
| 185W  | 123 |  |  |  | 1.842 | (1/2-, 3/2)      | 123   |
| 185W  | 124 |  |  |  | 1.845 | 1/2, 3/2, 5/2+   | 124   |
| 185W  | 125 |  |  |  | 1.846 | (13/2+)          | 125   |
| 185W  | 126 |  |  |  | 1.851 | 1/2(-), 3/2, 5/2 | 1262+ |
| 185W  | 127 |  |  |  | 1.860 |                  | 127   |

|       |     |  |  |  |       |                |       |
|-------|-----|--|--|--|-------|----------------|-------|
| 185W  | 128 |  |  |  | 1.867 | (1/2,3/2)      | 128   |
| 185W  | 129 |  |  |  | 1.874 |                | 129   |
| 185W  | 130 |  |  |  | 1.883 | 1/2(-),3/2,5/2 | 130+  |
| ----- |     |  |  |  |       |                |       |
| 185W  | 131 |  |  |  | 1.888 | 1/2,3/2,5/2+   | 131   |
| 185W  | 132 |  |  |  | 1.907 | 1/2,3/2,5/2+   | 132   |
| 185W  | 133 |  |  |  | 1.915 |                | 133   |
| 185W  | 134 |  |  |  | 1.922 | (1/2-,3/2)     | 134   |
| 185W  | 135 |  |  |  | 1.926 | 1/2,3/2,5/2+   | 135   |
| 185W  | 136 |  |  |  | 1.931 | (1/2-,3/2)     | 136   |
| 185W  | 137 |  |  |  | 1.935 | 1/2,3/2,5/2+   | 137   |
| 185W  | 138 |  |  |  | 1.949 | 1/2,3/2,5/2+   | 138   |
| 185W  | 139 |  |  |  | 1.953 | 1/2(-),3/2,5/  | 1392+ |
| 185W  | 140 |  |  |  | 1.956 | (1/2-,3/2)     | 140   |
| ----- |     |  |  |  |       |                |       |
| 185W  | 141 |  |  |  | 1.959 |                | 141   |
| 185W  | 142 |  |  |  | 1.972 | 1/2,3/2,5/2+   | 142   |
| 185W  | 143 |  |  |  | 1.977 | (1/2-,3/2)     | 143   |
| 185W  | 144 |  |  |  | 1.980 | 1/2(-),3/2,5/  | 1442+ |
| 185W  | 145 |  |  |  | 1.985 | (1/2,3/2)      | 145   |
| 185W  | 146 |  |  |  | 1.986 |                | 146   |
| 185W  | 147 |  |  |  | 1.991 | 1/2(-),3/2,5/  | 1472+ |
| 185W  | 148 |  |  |  | 2.000 | (1/2-,3/2)     | 148   |
| 185W  | 149 |  |  |  | 2.003 | 1/2(-),3/2,5/2 | 149+  |
| 185W  | 150 |  |  |  | 2.007 | 1/2(-),3/2,5/2 | 150+  |
| ----- |     |  |  |  |       |                |       |
| 185W  | 151 |  |  |  | 2.009 | (1/2,3/2)      | 151   |
| 185W  | 152 |  |  |  | 2.031 |                | 152   |
| 185W  | 153 |  |  |  | 2.038 | (1/2-,3/2)     | 153   |
| 185W  | 154 |  |  |  | 2.043 | 1/2(-),3/2,5/2 | 154+  |
| 185W  | 155 |  |  |  | 2.062 | 1/2(-),3/2,5/2 | 155+  |
| 185W  | 156 |  |  |  | 2.067 | (1/2-,3/2)     | 156   |
| 185W  | 157 |  |  |  | 2.074 | 1/2(-),3/2,5/  | 1572+ |
| 185W  | 158 |  |  |  | 2.079 | 1/2(-),3/2,5/2 | 158+  |
| 185W  | 159 |  |  |  | 2.081 | 1/2(-),3/2,5/2 | 159+  |
| 185W  | 160 |  |  |  | 2.095 | 1/2(-),3/2,5/2 | 160+  |
| ----- |     |  |  |  |       |                |       |
| 185W  | 161 |  |  |  | 2.098 | 1/2(-),3/2,5/2 | 161+  |
| 185W  | 162 |  |  |  | 2.109 | 1/2,3/2,5/2+   | 162   |
| 185W  | 163 |  |  |  | 2.117 | (1/2,3/2)      | 163   |
| 185W  | 164 |  |  |  | 2.123 | 1/2(-),3/2,5/  | 1642+ |
| 185W  | 165 |  |  |  | 2.131 | (1/2,3/2)      | 165   |
| 185W  | 166 |  |  |  | 2.135 | 1/2,3/2,5/2+   | 166   |
| 185W  | 167 |  |  |  | 2.138 | 1/2(-),3/2,5/  | 1672+ |
| 185W  | 168 |  |  |  | 2.143 | 1/2,3/2,5/2+   | 168   |
| 185W  | 169 |  |  |  | 2.150 | (3/2-,5/2+)    | 169   |
| 185W  | 170 |  |  |  | 2.154 | (1/2,3/2)      | 170   |
| ----- |     |  |  |  |       |                |       |
| 185W  | 171 |  |  |  | 2.158 | (1/2,3/2)      | 171   |
| 185W  | 172 |  |  |  | 2.161 | 1/2,3/2,5/2+   | 172   |

|          |  |  |       |                |       |
|----------|--|--|-------|----------------|-------|
| 185W 173 |  |  | 2.164 | (1/2,3/2)      | 173   |
| 185W 174 |  |  | 2.178 | (1/2-,3/2)     | 174   |
| 185W 175 |  |  | 2.186 | 1/2(-),3/2,5/  | 1752+ |
| 185W 176 |  |  | 2.191 | 1/2,3/2,5/2+   | 176   |
| 185W 177 |  |  | 2.195 | 1/2,3/2,5/2+   | 177   |
| 185W 178 |  |  | 2.206 | 1/2(-),3/2,5/  | 1782+ |
| 185W 179 |  |  | 2.211 | (1/2,3/2)      | 179   |
| 185W 180 |  |  | 2.217 | (3/2-,5/2+)    | 180   |
| -----    |  |  |       |                |       |
| 185W 181 |  |  | 2.226 | (1/2-,3/2)     | 181   |
| 185W 182 |  |  | 2.233 | 1/2,3/2,5/2+   | 182   |
| 185W 183 |  |  | 2.237 | 1/2(-),3/2,5/  | 1832+ |
| 185W 184 |  |  | 2.241 | (3/2-)         | 184   |
| 185W 185 |  |  | 2.249 | 1/2(-),3/2,5/  | 1852+ |
| 185W 186 |  |  | 2.253 | (1/2,3/2)      | 186   |
| 185W 187 |  |  | 2.255 | (3/2-)         | 187   |
| 185W 188 |  |  | 2.268 | (1/2,3/2)      | 188   |
| 185W 189 |  |  | 2.275 | 1/2(-),3/2,5/  | 1892+ |
| 185W 190 |  |  | 2.277 | 1/2,3/2,5/2+   | 190   |
| -----    |  |  |       |                |       |
| 185W 191 |  |  | 2.284 | (1/2-,3/2)     | 191   |
| 185W 192 |  |  | 2.288 | 1/2(-),3/2,5/  | 1922+ |
| 185W 193 |  |  | 2.293 | (1/2,3/2)      | 193   |
| 185W 194 |  |  | 2.295 | 1/2(-),3/2,5/  | 1942+ |
| 185W 195 |  |  | 2.312 | (1/2-,3/2)     | 195   |
| 185W 196 |  |  | 2.315 | 1/2(-),3/2,5/  | 1962+ |
| 185W 197 |  |  | 2.327 | 1/2,3/2,5/2+   | 197   |
| 185W 198 |  |  | 2.335 | 1/2,3/2,5/2+   | 198   |
| 185W 199 |  |  | 2.339 | (3/2-)         | 199   |
| 185W 200 |  |  | 2.350 | (1/2,3/2)      | 200   |
| -----    |  |  |       |                |       |
| 185W 201 |  |  | 2.353 | 1/2,3/2,5/2+   | 201   |
| 185W 202 |  |  | 2.363 | 1/2(-),3/2,5/2 | 202+  |
| 185W 203 |  |  | 2.368 | (1/2-,3/2)     | 203   |
| 185W 204 |  |  | 2.371 | 1/2(-),3/2,5/2 | 204+  |
| 185W 205 |  |  | 2.376 | (3/2-,5/2+)    | 205   |
| 185W 206 |  |  | 2.380 | 1/2(-),3/2,5/  | 2062+ |
| 185W 207 |  |  | 2.384 | (1/2,3/2)      | 207   |
| 185W 208 |  |  | 2.391 | 1/2(-),3/2,5/  | 2082+ |
| 185W 209 |  |  | 2.401 | (1/2-,3/2)     | 209   |
| 185W 210 |  |  | 2.407 | (3/2-)         | 210   |
| -----    |  |  |       |                |       |
| 185W 211 |  |  | 2.415 | 1/2,3/2,5/2+   | 211   |
| 185W 212 |  |  | 2.418 | (3/2-,5/2+)    | 212   |
| 185W 213 |  |  | 2.422 | 1/2,3/2,5/2+   | 213   |
| 185W 214 |  |  | 2.425 | (1/2-,3/2)     | 214   |
| 185W 215 |  |  | 2.434 | 1/2,3/2,5/2+   | 215   |
| 185W 216 |  |  | 2.440 | (1/2,3/2)      | 216   |
| 185W 217 |  |  | 2.442 | (1/2-,3/2)     | 217   |
| 185W 218 |  |  | 2.451 | (1/2,3/2)      | 218   |

|          |  |  |  |       |                |       |
|----------|--|--|--|-------|----------------|-------|
| 185W 219 |  |  |  | 2.453 | 1(1/2,3/2)     | 219   |
| 185W 220 |  |  |  | 2.459 | 1/2,3/2,5/2+   | 220   |
| -----    |  |  |  |       |                |       |
| 185W 221 |  |  |  | 2.461 | (1/2,3/2)      | 221   |
| 185W 222 |  |  |  | 2.466 | (1/2,3/2)      | 222   |
| 185W 223 |  |  |  | 2.471 | 1/2(-),3/2,5/  | 2232+ |
| 185W 224 |  |  |  | 2.475 | (1/2-,3/2)     | 224   |
| 185W 225 |  |  |  | 2.480 | (1/2-,3/2)     | 225   |
| 185W 226 |  |  |  | 2.483 | 1/2,3/2,5/2+   | 226   |
| 185W 227 |  |  |  | 2.485 | (1/2-,3/2)     | 227   |
| 185W 228 |  |  |  | 2.500 | 1/2(-),3/2,5/  | 2282+ |
| 185W 229 |  |  |  | 2.503 | (1/2-,3/2)     | 229   |
| 185W 230 |  |  |  | 2.509 | 1/2,3/2,5/2+   | 230   |
| -----    |  |  |  |       |                |       |
| 185W 231 |  |  |  | 2.513 | (1/2-,3/2)     | 231   |
| 185W 232 |  |  |  | 2.517 | (3/2-)         | 232   |
| 185W 233 |  |  |  | 2.521 | (1/2-,3/2)     | 233   |
| 185W 234 |  |  |  | 2.528 | 1/2,3/2,5/2+   | 234   |
| 185W 235 |  |  |  | 2.548 | (1/2,3/2)      | 235   |
| 185W 236 |  |  |  | 2.552 | 1/2,3/2,5/2+   | 236   |
| 185W 237 |  |  |  | 2.555 | 1/2(-),3/2,5/  | 2372+ |
| 185W 238 |  |  |  | 2.560 | (1/2-,3/2)     | 238   |
| 185W 239 |  |  |  | 2.568 | 1/2,3/2,5/2+   | 239   |
| 185W 240 |  |  |  | 2.575 | (1/2-,3/2)     | 240   |
| -----    |  |  |  |       |                |       |
| 185W 241 |  |  |  | 2.578 | 1/2,3/2,5/2+   | 241   |
| 185W 242 |  |  |  | 2.582 | (1/2,3/2)      | 242   |
| 185W 243 |  |  |  | 2.590 | (1/2-,3/2)     | 243   |
| 185W 244 |  |  |  | 2.601 | 1/2,3/2,5/2+   | 244   |
| 185W 245 |  |  |  | 2.605 | (1/2-,3/2)     | 245   |
| 185W 246 |  |  |  | 2.610 | (1/2-,3/2)     | 246   |
| 185W 247 |  |  |  | 2.613 | (1/2,3/2)      | 247   |
| 185W 248 |  |  |  | 2.616 | 1/2(-),3/2,5/  | 2482+ |
| 185W 249 |  |  |  | 2.620 | 1/2(-),3/2,5/2 | 249+  |
| 185W 250 |  |  |  | 2.624 | (1/2,3/2)      | 250   |
| -----    |  |  |  |       |                |       |
| 185W 251 |  |  |  | 2.626 | 1/2,3/2,5/2+   | 251   |
| 185W 252 |  |  |  | 2.629 | (1/2-,3/2)     | 252   |
| 185W 253 |  |  |  | 2.632 | (1/2-,3/2)     | 253   |
| 185W 254 |  |  |  | 2.639 | (1/2,3/2)      | 254   |
| 185W 255 |  |  |  | 2.642 | 1/2,3/2,5/2+   | 255   |
| 185W 256 |  |  |  | 2.645 | 1/2(-),3/2,5/  | 2562+ |
| 185W 257 |  |  |  | 2.650 | (1/2,3/2)      | 257   |
| 185W 258 |  |  |  | 2.652 | 1/2(-),3/2,5/2 | 258+  |
| 185W 259 |  |  |  | 2.653 | (1/2,3/2)      | 259   |
| 185W 260 |  |  |  | 2.654 | 1/2,3/2,5/2+   | 260   |
| -----    |  |  |  |       |                |       |
| 185W 261 |  |  |  | 2.655 | 1/2(-),3/2,5/2 | 261+  |
| 185W 262 |  |  |  | 2.658 | 1/2,3/2,5/2+   | 262   |
| 185W 263 |  |  |  | 2.663 | (1/2-,3/2)     | 263   |

|       |     |  |  |  |       |                |       |
|-------|-----|--|--|--|-------|----------------|-------|
| 185W  | 264 |  |  |  | 2.668 | (1/2,3/2)      | 264   |
| 185W  | 265 |  |  |  | 2.671 | (1/2-,3/2)     | 265   |
| 185W  | 266 |  |  |  | 2.675 | (1/2,3/2)      | 266   |
| 185W  | 267 |  |  |  | 2.680 | (1/2,3/2)      | 267   |
| 185W  | 268 |  |  |  | 2.682 | (1/2,3/2)      | 268   |
| 185W  | 269 |  |  |  | 2.685 | 1/2,3/2,5/2+   | 269   |
| 185W  | 270 |  |  |  | 2.695 | 1/2(-),3/2,5/  | 2702+ |
| ----- |     |  |  |  |       |                |       |
| 185W  | 271 |  |  |  | 2.697 | (3/2-,5/2+)    | 271   |
| 185W  | 272 |  |  |  | 2.703 | 1/2,3/2,5/2+   | 272   |
| 185W  | 273 |  |  |  | 2.707 | (1/2-,3/2)     | 273   |
| 185W  | 274 |  |  |  | 2.710 | (1/2-,3/2)     | 274   |
| 185W  | 275 |  |  |  | 2.713 | (3/2-)         | 275   |
| 185W  | 276 |  |  |  | 2.717 | 1/2,3/2,5/2+   | 276   |
| 185W  | 277 |  |  |  | 2.718 | 1/2(-),3/2,5/  | 2772+ |
| 185W  | 278 |  |  |  | 2.723 | 1/2(-),3/2,5/  | 2782+ |
| 185W  | 279 |  |  |  | 2.726 | 1/2(-),3/2,5/2 | 279+  |
| 185W  | 280 |  |  |  | 2.728 | (1/2,3/2)      | 280   |
| ----- |     |  |  |  |       |                |       |
| 185W  | 281 |  |  |  | 2.731 | 1/2,3/2,5/2+   | 281   |
| 185W  | 282 |  |  |  | 2.737 | (1/2-,3/2)     | 282   |
| 185W  | 283 |  |  |  | 2.740 | 1/2(-),3/2,5/  | 2832+ |
| 185W  | 284 |  |  |  | 2.752 | 1/2(-),3/2,5/2 | 284+  |
| 185W  | 285 |  |  |  | 2.756 | 1/2(-),3/2,5/2 | 285+  |
| 185W  | 286 |  |  |  | 2.760 | (1/2,3/2)      | 286   |
| 185W  | 287 |  |  |  | 2.765 | (3/2-)         | 287   |
| 185W  | 288 |  |  |  | 2.770 | 1/2(-),3/2,5/2 | 288+  |
| 185W  | 289 |  |  |  | 2.772 | 1/2(-),3/2,5/2 | 289+  |
| 185W  | 290 |  |  |  | 2.778 | 1/2(-),3/2,5/2 | 290+  |
| ----- |     |  |  |  |       |                |       |
| 185W  | 291 |  |  |  | 2.783 | 1/2,3/2,5/2+   | 291   |
| 185W  | 292 |  |  |  | 2.785 | (1/2,3/2)      | 292   |
| 185W  | 293 |  |  |  | 2.788 | 1/2,3/2,5/2+   | 293   |
| 185W  | 294 |  |  |  | 2.790 | 1/2(-),3/2,5/  | 2942+ |
| 185W  | 295 |  |  |  | 2.794 | (3/2-)         | 295   |
| 185W  | 296 |  |  |  | 2.797 | 1/2,3/2,5/2+   | 296   |
| 185W  | 297 |  |  |  | 2.799 | (1/2,3/2)      | 297   |
| 185W  | 298 |  |  |  | 2.804 | (1/2-,3/2)     | 298   |
| 185W  | 299 |  |  |  | 2.812 | (1/2-,3/2)     | 299   |
| 185W  | 300 |  |  |  | 2.815 | 1/2(-),3/2,5/2 | 300+  |
| ----- |     |  |  |  |       |                |       |
| 185W  | 301 |  |  |  | 2.821 | (1/2,3/2)      | 301   |
| 185W  | 302 |  |  |  | 2.836 | (1/2-,3/2)     | 302   |
| 185W  | 303 |  |  |  | 2.838 | 1/2,3/2,5/2+   | 303   |
| 185W  | 304 |  |  |  | 2.840 | 1/2(-),3/2,5/  | 3042+ |
| 185W  | 305 |  |  |  | 2.857 | 1/2(-),3/2,5/2 | 305+  |
| 185W  | 306 |  |  |  | 2.867 | 1/2(-),3/2,5/2 | 306+  |
| 185W  | 307 |  |  |  | 2.869 | 1/2(-),3/2,5/2 | 307+  |
| 185W  | 308 |  |  |  | 2.872 | (1/2-,3/2)     | 308   |
| 185W  | 309 |  |  |  | 2.875 | 1/2(-),3/2,5/  | 3092+ |

|          |  |  |  |       |                |       |
|----------|--|--|--|-------|----------------|-------|
| 185W 310 |  |  |  | 2.881 | (1/2-,3/2)     | 310   |
| -----    |  |  |  |       |                |       |
| 185W 311 |  |  |  | 2.882 | 1/2(-),3/2,5/2 | 311+  |
| 185W 312 |  |  |  | 2.892 | 1/2(-),3/2,5/2 | 312+  |
| 185W 313 |  |  |  | 2.902 | (1/2,3/2)      | 313   |
| 185W 314 |  |  |  | 2.910 | (1/2-,3/2)     | 314   |
| 185W 315 |  |  |  | 2.913 | (1/2-,3/2)     | 315   |
| 185W 316 |  |  |  | 2.914 | 1/2(-),3/2,5/  | 3162+ |
| 185W 317 |  |  |  | 2.922 | (1/2-,3/2)     | 317   |
| 185W 318 |  |  |  | 2.928 | (1/2-,3/2)     | 318   |
| 185W 319 |  |  |  | 2.934 | 1/2(-),3/2,5/  | 3192+ |
| 185W 320 |  |  |  | 2.944 | 1/2(-),3/2,5/  | 3202+ |
| -----    |  |  |  |       |                |       |
| 185W 321 |  |  |  | 2.945 | 1/2,3/2,5/2+   | 321   |
| 185W 322 |  |  |  | 2.950 | 1/2(-),3/2,5/  | 3222+ |
| 185W 323 |  |  |  | 2.956 | 1/2(-),3/2,5/2 | 323+  |
| 185W 324 |  |  |  | 2.964 | 1/2(-),3/2,5/2 | 324+  |
| 185W 325 |  |  |  | 2.967 | 1/2,3/2,5/2+   | 325   |
| 185W 326 |  |  |  | 2.977 | 1/2(-),3/2,5/  | 3262+ |
| 185W 327 |  |  |  | 2.986 | 1/2(-),3/2,5/  | 3272+ |
| 185W 328 |  |  |  | 2.991 | (1/2-,3/2)     | 328   |
| 185W 329 |  |  |  | 3.005 | (1/2-,3/2)     | 329   |
| 185W 330 |  |  |  | 3.010 | 1/2,3/2,5/2+   | 330   |
| -----    |  |  |  |       |                |       |
| 185W 331 |  |  |  | 3.033 | 1/2,3/2,5/2+   | 331   |
| 185W 332 |  |  |  | 3.037 | (1/2-,3/2)     | 332   |
| 185W 333 |  |  |  | 3.048 | 1/2,3/2,5/2+   | 333   |
| 185W 334 |  |  |  | 3.053 | 1/2,3/2,5/2+   | 334   |
| 185W 335 |  |  |  | 3.064 | 1/2,3/2,5/2+   | 335   |
| 185W 336 |  |  |  | 3.069 | 1/2,3/2,5/2+   | 336   |
| 185W 337 |  |  |  | 3.088 | (1/2,3/2)      | 337   |
| 185W 338 |  |  |  | 3.092 | 1/2,3/2,5/2+   | 338   |
| 185W 339 |  |  |  | 3.095 | 1/2,3/2,5/2+   | 339   |
| 185W 340 |  |  |  | 3.100 | 1/2,3/2,5/2+   | 340   |
| -----    |  |  |  |       |                |       |
| 185W 341 |  |  |  | 3.106 | 1/2,3/2,5/2+   | 341   |
| 185W 342 |  |  |  | 3.124 | 1/2,3/2,5/2+   | 342   |
| 185W 343 |  |  |  | 3.200 | 1/2,3/2,5/2+   | 343   |
| 185W 344 |  |  |  | 3.242 | 1/2,3/2,5/2+   | 344   |
| 185W 345 |  |  |  | 3.249 | 1/2,3/2,5/2+   | 345   |
| 185W 346 |  |  |  | 3.263 | 1/2,3/2,5/2+   | 346   |
| 185W 347 |  |  |  | 3.277 | 1/2,3/2,5/2+   | 347   |

S-p = 7.837 ( 0.026)-----  
S-n = 5.754 ( 0.001)-----  
S-2p = 14.682 ( 0.030)-----  
S-2n = 13.165 ( 0.001)-----  
S-alpha= -1.590 ( 0.002)-----



S+p = -5.828 ( 0.001)  
S+n = -7.192 ( 0.001)  
S+2p = -12.409 ( 0.001)  
S+2n = -12.659 ( 0.001)  
S+alpha = 1.976 ( 0.001)

gap p = 2.009 ( 0.026)  
gap n = -1.438 ( 0.002)  
gap 2p = 2.273 ( 0.030)  
gap 2n = 0.506 ( 0.002)  
gap alpha = 0.386 ( 0.002)