SUPPLEMENT

**Таблица 1.** Координаты некоторых нонвариантных точек в системах LiF - RF3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| R | эвтектика | перитектика | эвтектика | плавлениеLiRF4 | источник |
| RF3, мол.% | *t*,°С | RF3, мол. % | RF3, мол.% | *t*,°С | *t*,°С |
| La | 20 | 770 |  |  |  |  | [2] |
| La | 18 | 755 |  |  |  |  | [10] |
| Сe | 19 | 755 |  |  |  |  | [65] |
| Ce | 19 | 741 |  |  |  |  | [10] |
| Pr | 19 | 750 |  |  |  |  | [2] |
| Pr | 20 | 723 |  |  |  |  | [10] |
| Nd | 23 | 738 |  |  |  |  | [2] |
| Nd | 20 | 716 |  |  |  |  | [10] |
| Pm | (21) | (695) |  |  |  |  | [10] |
| Sm | 27 | 698 |  |  |  |  | [2] |
| Sm | 25 | 667 |  |  |  | 470-630\*\*\* | [10] |
| Eu | 27 | 688 | 40 |  |  | 760\* | [2] |
| Gd | 26 | 700 | 39 |  |  | 755\* | [2] |
| Gd | 23.5 | 675 | 36 |  |  | 748\* | [10] |
| Tb | 24 | 700 | 39 |  |  | 790\* | [2] |
| Tb | 24 | 676 | 38 |  |  | 756\* | [10] |
| Dy | 24 | 700 | 46 |  |  | 820\* | [2] |
| Dy | 22.5 | 675 | 45 |  |  | 793\* | [10] |
| Ho | 24 | 710 | 46 |  |  | 798\* | [2] |
| Ho | 20 | 692 | 48 |  |  | 816\* | [10] |
| Er | 21 | 700 | 48 |  |  | 840\* | [2] |
| Er | 20 | 693 | 50 |  |  | 840\*\* | [10] |
| Tm | 21 | 692 |  | 53 | 824 | 835 | [2] |
| Tm | 20 | 700 |  | 51 | 840 | 842 | [10] |
| Yb | 21 | 700 |  | 53.5 | 840 | 850 | [2] |
| Yb | 19 | 687 |  | 55 | 815 | 822 | [10] |
| Lu | 22 | 695 |  | 54 | 810 | 825 | [2] |
| Lu | 21 | 695 |  | 55 | 841 | 846 | [10] |
| Lu | 20 | 704 |  | 58 | 832 | 850 | [55] |
| Lu | 20 | 695 |  | 58 | 842 | 853 | [60] |
| Lu |  |  |  |  |  | 843 | [24] |
| Y |  |  | 49 |  |  | 819\* | [1] |
| Y | 20 | 695 | 49 |  |  | 828\*\* | [10] |
| Y |  |  |  |  |  | 837 | [24] |

\*Инконгруэнтное плавление.

\*\*Переходная точка.

\*\*\*Область существования LiSmF4 в твердом состоянии.

**Таблица 2.** Параметры решетки LiRF4

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| R | *a,* Å[3] | *с*, Å[3] | *a* ± 0.002 Å[10] | *с* ± 0.004 Å[10] | *a,* Å[26] | *с*, Å[26] |
| Eu | 5.228 | 11.03 |  |  | 5.232 | 11.06 |
| Gd | 5.219 | 10.97 | 5.225 | 10.983 | 5.206 | 10.95 |
| Tb | 5.200 | 10.89 | 5.203 | 10.897 | 5.206 | 10.90 |
| Dy | 5.188 | 10.83 | 5.193 | 10.830 | 5.185 | 10.84 |
| Ho | 5.175 | 10.75 | 5.177 | 10.769 | 5.164 | 10.78 |
| Er | 5.162 | 10.70 | 5.161 | 10.707 | 5.150 | 10.68 |
| Tm | 5.145 | 10.64 | 5.147 | 10.645 | 5.141 | 10.62 |
| Yb | 5.132 | 10.59 | 5.136 | 10.592 | 5.130 | 10.56 |
| Lu | 5.124 | 10.54 | 5.125 | 10.546 | 5.123 | 10.52 |
| Y | 5.175 | 10.74 | 5.169 | 10.735 |  |  |