表一 力敏传感器定标

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 物质质量m/g | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 |
| 输出电压U/mV | 5.3 | 10.6 | 15.7 | 19.9 | 24.5 | 29.4 | 34.3 |

则线性相关系数为r=0.9996.

表二 水的表面张力系数测量

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 次数 | D1/mm | D2/mm | U1/mV | U2/mV | △U/mV | f/(\*0.001N) | α/(\*0.001N) |
| 1 | 34.96 | 32.76 | 19.6 | 3.5 | 16.1 | 1.690 | 7.116 |
| 2 | 34.94 | 32.70 | 20.6 | 3.4 | 17.2 | 1805 | 7.602 |
| 3 | 94.92 | 32.80 | 20.0 | 3.6 | 16.4 | 1.721 | 7.249 |
| 4 | 均值=  34.94 | 均值=  32.75 | 19.8 | 3.4 | 16.4 | 1.721 | 7.249 |
| 5 | 20.8 | 3.5 | 16.4 | 1.816 | 7.646 |
| 6 | 20.5 | 3.4 | 17.3 | 1.795 | 7.558 |

则α的均值为7.403。