**Appendix B: Table and Figure Format**

Table 1.1. Electrical properties of recyclic growth epi-layer with added Ga solution and GaAs source.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sample | Source (repetitions) | µRTa)(cm2V-1.s-1) | µ77 Kb)( cm2V-1.s-1) | nRTa)(cm-3) | n77 Kb)(cm-3) |
| S1 | A(1) | 5600 | 4.01×104 | 3.90×1014 | 4.99×1014 |
| S2 | A(2) | 4310 | 8.48×104 | 4.29×1013 | 1.75×1014 |
| S3c) | A(3) | 5230 | 9.19×104 | 1.14×1013 | 1.41×1014 |
| S4 c) | A(4) | 5830 | 1.12×105 | 3.81×1013 | 9.68×1013 |
| S5 c) | A(5) | 7140 | 1.55×105 | 3.73×1012 | 7.35×1013 |

a) Measured in dark.

b) Measured under light illumination.

c) These samples were used for the photoluminescence measurements.

**Figure format Page**



Fig. 1.1 Cross section of a Schottky diode used for capacitance-voltage measurement.



Fig. 2.1 PL intensity versus mobility at 77 K for samples from different lots at three different wavelengths. (Solid lines Lot A; thick broken lines Lot B; thin broken lines Lot D). Joined lines indicate the same lot.