

Corrigendum (03.04.2024) by the author to thesis “Molecular beam epitaxy of InAs/Al and InSb heterostructures for hybrid semiconductor/superconductor devices “

1. The units of the charge carrier mobility " μ " or " μ " in tables 5.1, 5.2, 5.3 had a wrong prefactor in the units, which should read 1000 or 1e3. The numbers in the text are correct and the corrected version of the tables would look as follows:

- Table 5.1

10 nm top barrier	Before illumination		After illumination	
Ashing time (150 W)	μ_{dark} [1e3 cm ² /(V s)]	n_{dark} [1e11 cm ⁻²]	μ_{ill} [1e3 cm ² /(V s)]	n_{ill} [1e11 cm ⁻²]
0 s	9.4	2.3	11.3	3.2
60 s	41.7	5.5	43.9	7.3
60 s + 7 d in air	16.8	3.0	16.8	3.8
60 s again after 7 d in air	40.6	5.2	43.0	6.6
0 s, AZ 400K etch	9.6	4.2	10.9	6.0
60 s, AZ 400K etch	39.5	8.1	38.7	7.7

- Table 5.2

14.5 nm top barrier	Before illumination		After illumination	
Ashing time (150 W)	μ_{dark} [1e3 cm ² /(V s)]	n_{dark} [1e11 cm ⁻²]	μ_{ill} [1e3 cm ² /(V s)]	n_{ill} [1e11 cm ⁻²]
0 s	62.3	3.7	71.0	4.0
60 s	16.1	7.8	17.1	8.0
60 s + 4 d in air	25.4	6.7	26.4	7.1
60 s + 7 d in air	29.7	6.5	30.8	6.8

- Table 5.3

standard QW design	Before illumination		After illumination	
Type	μ_{dark} [1e3 cm ² /(V s)]	n_{dark} [1e11 cm ⁻²]	μ_{ill} [1e3 cm ² /(V s)]	n_{ill} [1e11 cm ⁻²]
2 ML GaAs (std.)	53.2	4.0	58.0	4.2
4 ML GaAs	46.3	4.8	48.4	4.9
5 ML GaAs	50.7	3.5	59.2	3.8
30 nm step-grading	42.2	4.3	41.0	4.7
GaAs substrate	41.7	3.9	55.8	4.3

2. The caption of Fig. 5.19 should read "left" and "right" instead of "top" and "bottom" to assign the subfigures correctly.