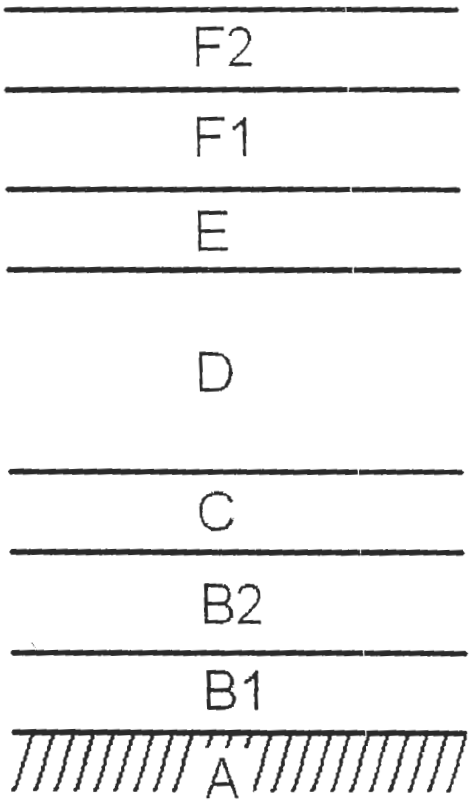


Fig. 1

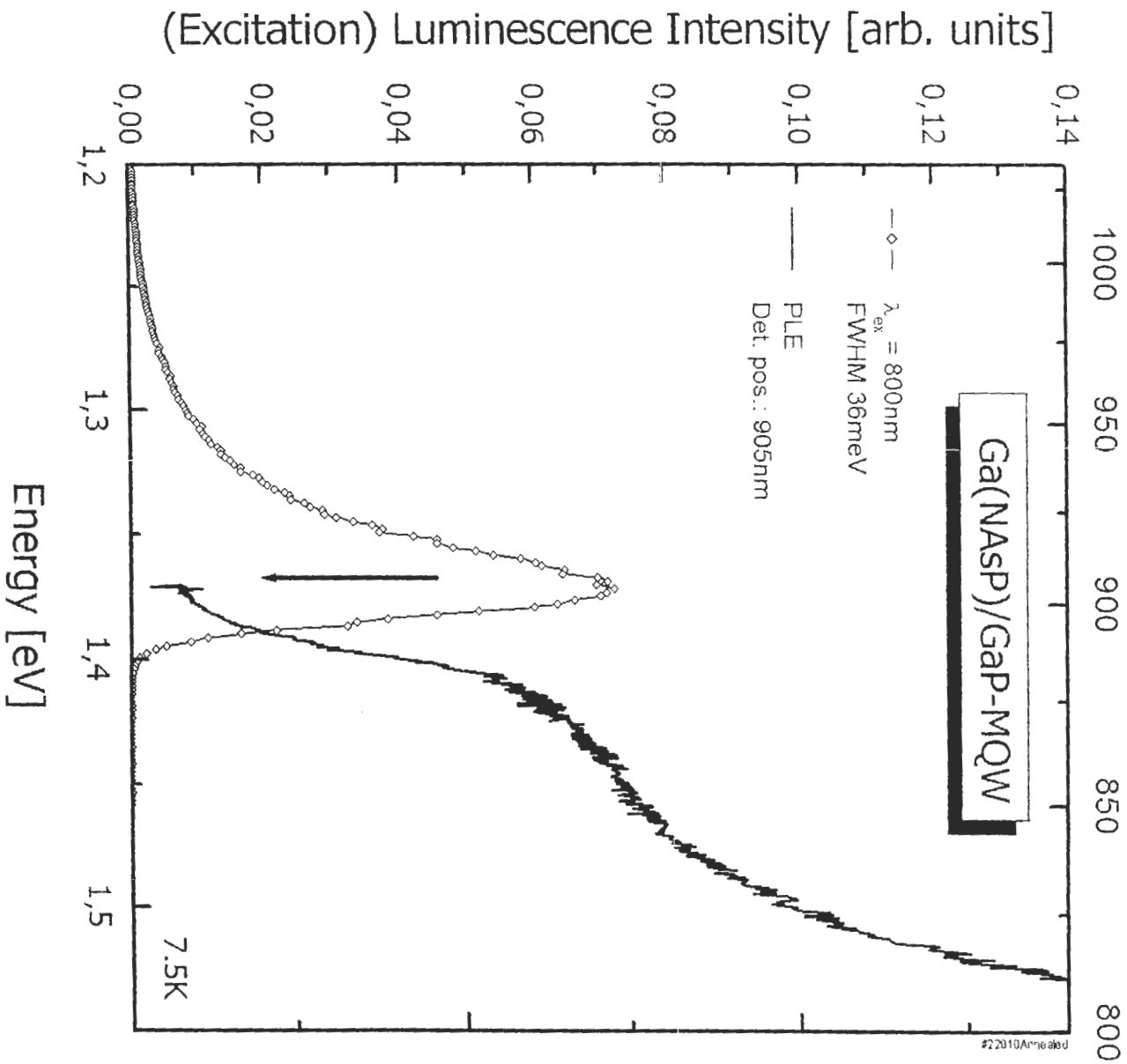

(Excitation) Luminescence Intensity [arb. units]
0,00
0,02
0,04
0,06
0,08
0,10
0,12
0,14
1000
950
900
850
800
1,2
1,3
1,4
1,5
Energy [eV]
Ga(NAsP)/GaP-MQW
λex = 800nm
FWHM 36meV
PLE
Det. pos.: 905nm
7.5K
#22010Annealed

FIG 2

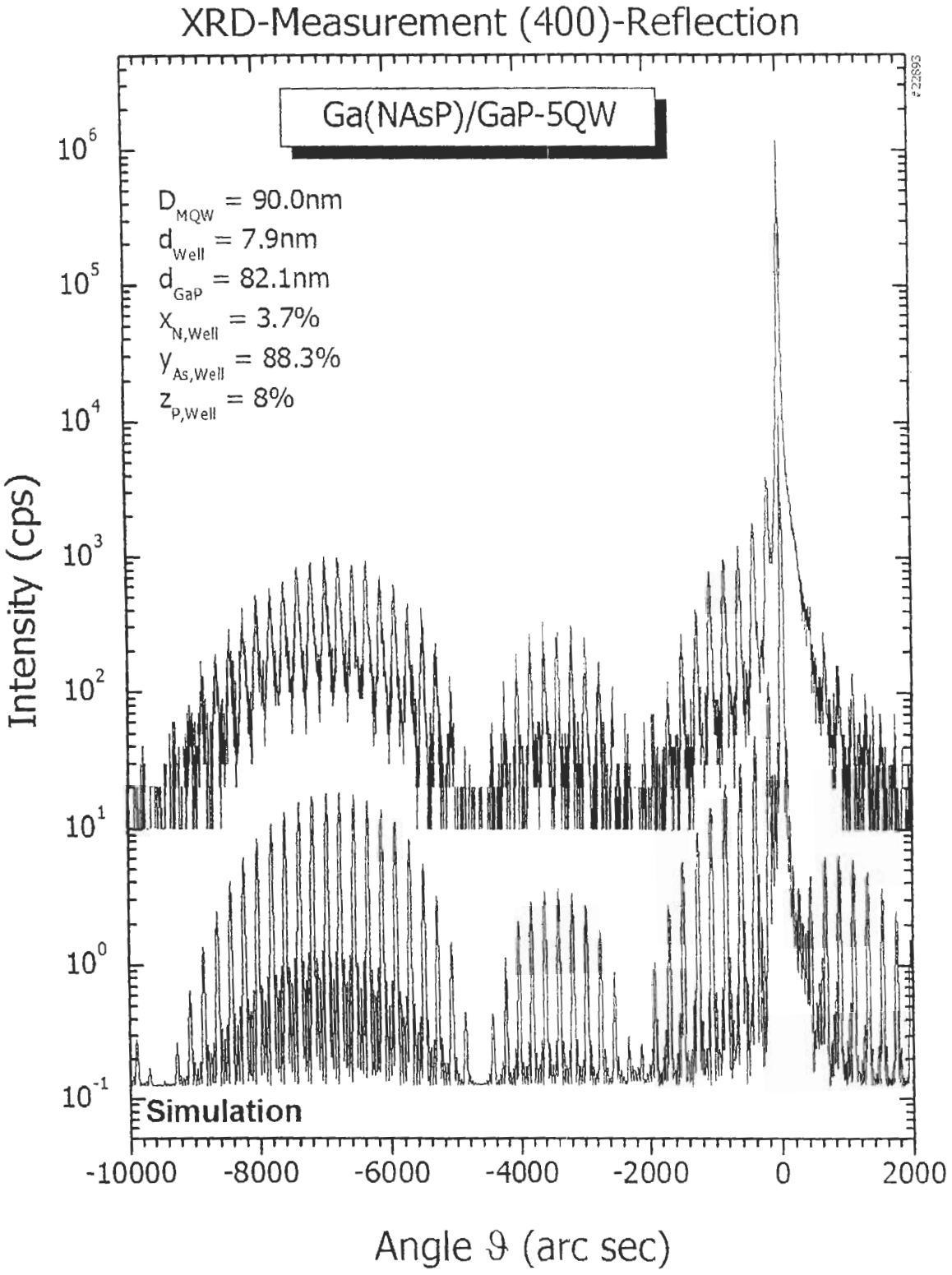

XRD-Measurement (400)-Reflection
Ga(NAsP)/GaP-5QW
D_MQW = 90.0nm
d_Well = 7.9nm
d_GaP = 82.1nm
x_N,Well = 3.7%
y_As,Well = 88.3%
z_P,Well = 8%
Simulation
Intensity (cps)
10^6
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
-10000
-8000
-6000
-4000
-2000
0
2000
Angle ϑ (arc sec)

FIG 3

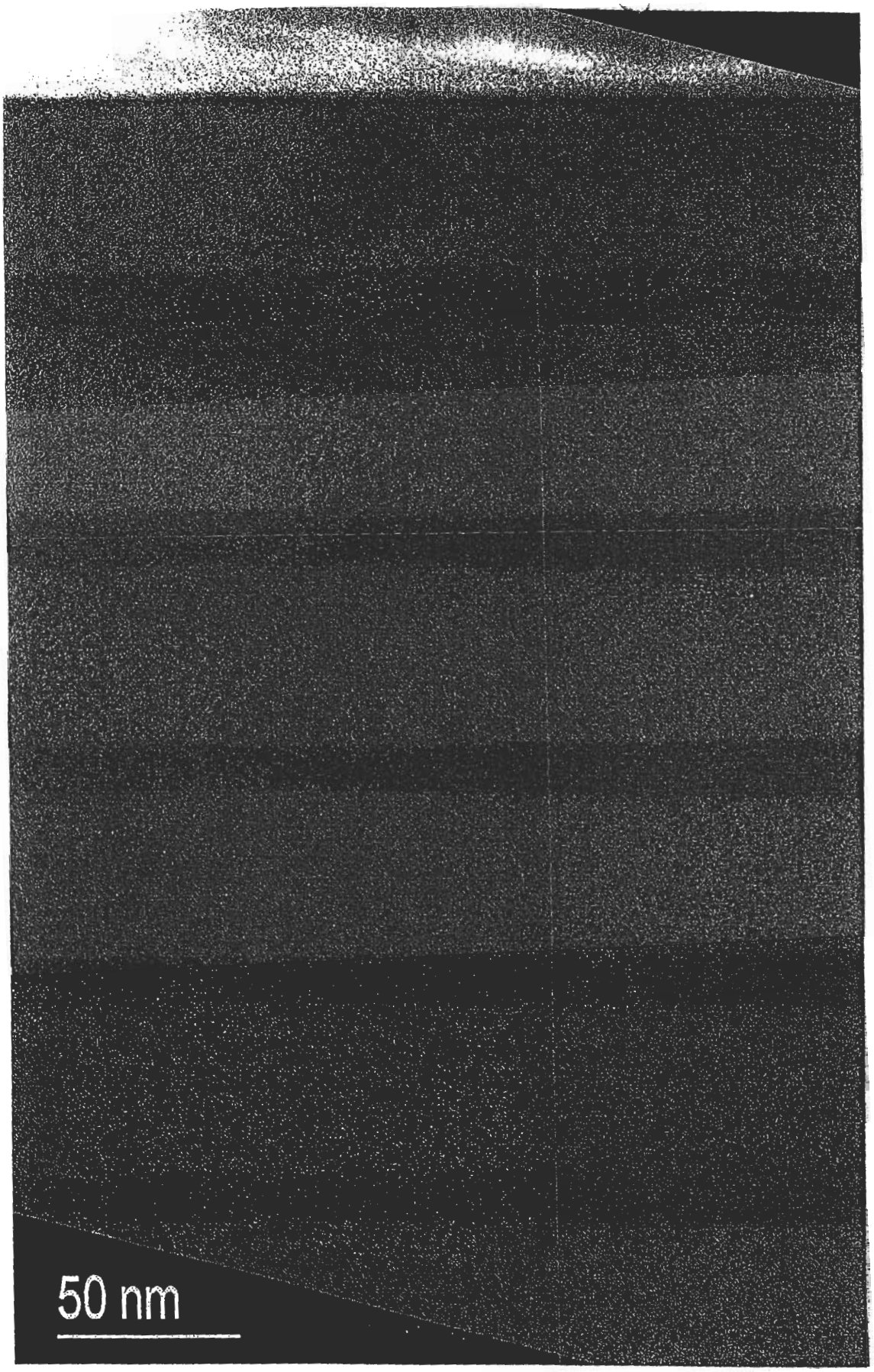


FIG 4

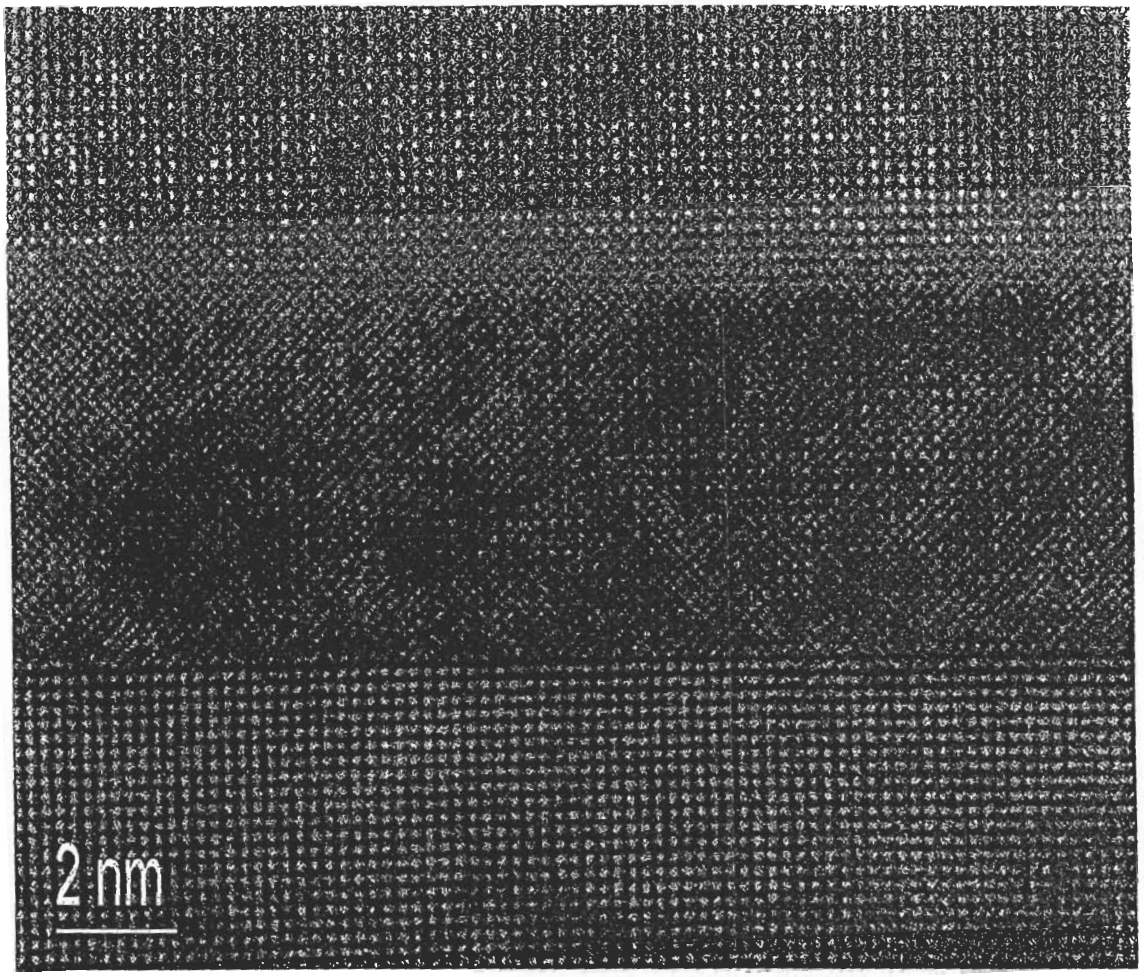


FIG 5