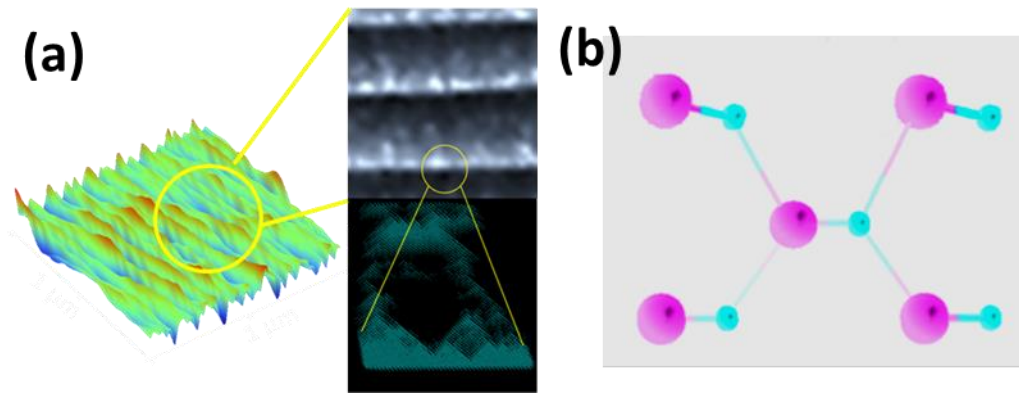**Figure1.** The effect of including periodically faceted surfaces into MQW heterostructure interfaces. (a) Coupling strength factor (CF) as a function of the H_p. The inset shows an schematic indicating H_p, L_p, facets A, and facet B. (b) Computed H_p dependence of energy shifts for transitions related to the first two heavy hole eigenstates.

Figure 2. (a) Kinetic Monte Carlo simulation results. They provided an outstanding comprehension of the surface anisotropic diffusion processes and its variability as function of the growth parameters. AFM characterization confirmed such results. (b) The GaAs (631) buckling-like (1x1) reconstruction found to be analogous to that current in the GaAs (110) surface.