

$\Gamma \dots 1$

N	E	E
$l = 2$	<ul style="list-style-type: none"> $\dots_2 \neq 0, \dots_2 \neq 0$ \dots_2 \dots_2 	$(\dots_2 \equiv 0, \dots_2 = 0)$
$l = 2$	<ul style="list-style-type: none"> $\dots_1 \neq 0$ \dots_1 \dots_1 	$(\dots_1 \equiv 0)$
2	<ul style="list-style-type: none"> $\dots (110) \neq (\bar{1}10)$ \dots 	

$\Gamma \dots (\dots)$
 $\sim 100 \Gamma$
 $\dots 10.1$
 (\dots)

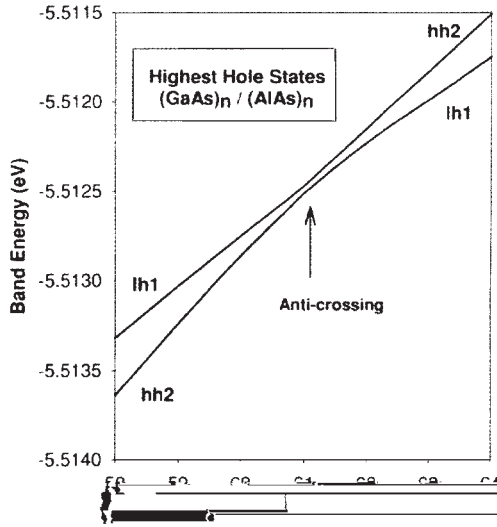
$$F(\dots) \dots (1),$$

2. The Oscillating Eigenvalues of a Thin Film

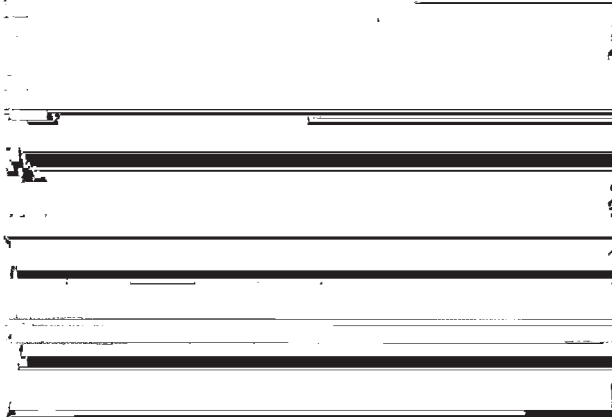
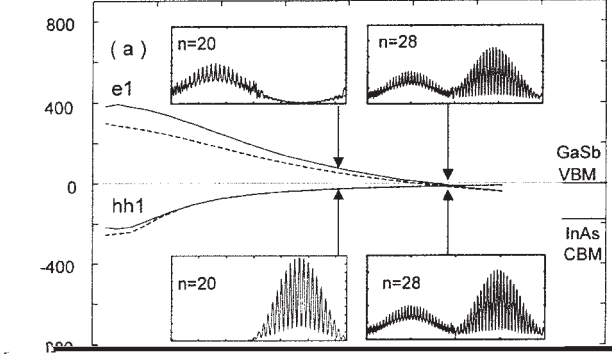
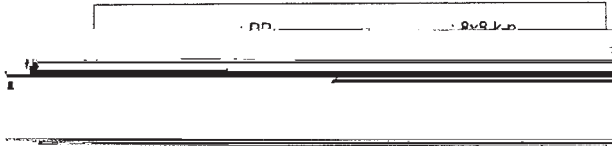
$\dots, 0 \text{ \AA} \dots 2 \text{ \AA}$
 $\Gamma \dots$
 $\dots 1 \dots (001) \dots (\dots 1),$

3. The Oscillating Γ -X Coupling in $(\text{AlAs})_n/(\text{GaAs})_n$

$(\Gamma \sim 10 \dots), \dots \Gamma$
 \dots
 $\dots 1, 1, \dots$
 $\dots 1, 20, \dots$
 $\dots 21, \dots \Gamma \dots 22,$



$$\frac{1}{2} \left(\frac{1}{2} \right) / \left(\frac{1}{2} \right)$$



$$\left(\frac{1}{2} \right) / \left(\frac{1}{2} \right)$$

5. The lh1-hh1 Coupling at $K_{\parallel} = 0$ for No-Common-Atom Superlattices

Γ_1 and Γ_2 are the conduction and valence bands, respectively, at $K_{\parallel} = 0$. The coupling between these bands is determined by the matrix element $\langle \Gamma_1 | T | \Gamma_2 \rangle$. For a superlattice with no common atoms, the coupling is zero, $\langle \Gamma_1 | T | \Gamma_2 \rangle = 0$.

6. Quantum Dots and Piezoelectric Charges

In a quantum dot, the piezoelectric charges are determined by the piezoelectric tensor ϵ_{ijk} . The piezoelectric charges are given by $Q_i = \epsilon_{ijk} \sigma_{jk}$, where σ_{jk} is the stress tensor. For a quantum dot, the piezoelectric charges are zero, $Q_i = 0$.

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T $2^2 T$
 T
 (\dots)
 2
 l
 γ_1
 γ_2

7. Keep Fitting until Agreeing with Atomistic Theory or Experiment on Dots?

..... (\dots)
 γ_1
 γ_2 $0, T$

..... (2,), ()
..... (0, 1.2), ()
..... () (2)
100

..... 1, T 0 Å, 0 Å,
..... (,)
..... 1, ()

...).

...Т...

... (

...Т...

10. 1, 2, 0, 1

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