

HW # 7

Physics 406

(due 04/19)

Reading-

(i) Omar (0) Ch. 6 & Ch. 7

(ii) Handout 7 : "Electronics with carbon nanotubes" by P. Avouris

Problems :

1. 0 Ch. 6 Pr. 8

Note: solve for the Hall constant rather than mobility (not enough info to get that)

2. 0 Ch. 6 Pr. 19

3. 0 Ch. 7 Q. 1

4. 0 Ch. 7 Q. 6

5. 0 Ch. 7 Pr. 1

6. 0 Ch. 7 Pr. 4

7. 0 Ch. 7 Pr. 6

8. 0 Ch. 7 Pr. 7

9. Using Handout 7, please describe recent studies of nanoscale devices based on carbon nanotubes. Please use ≥ 4 sentences in your answer.