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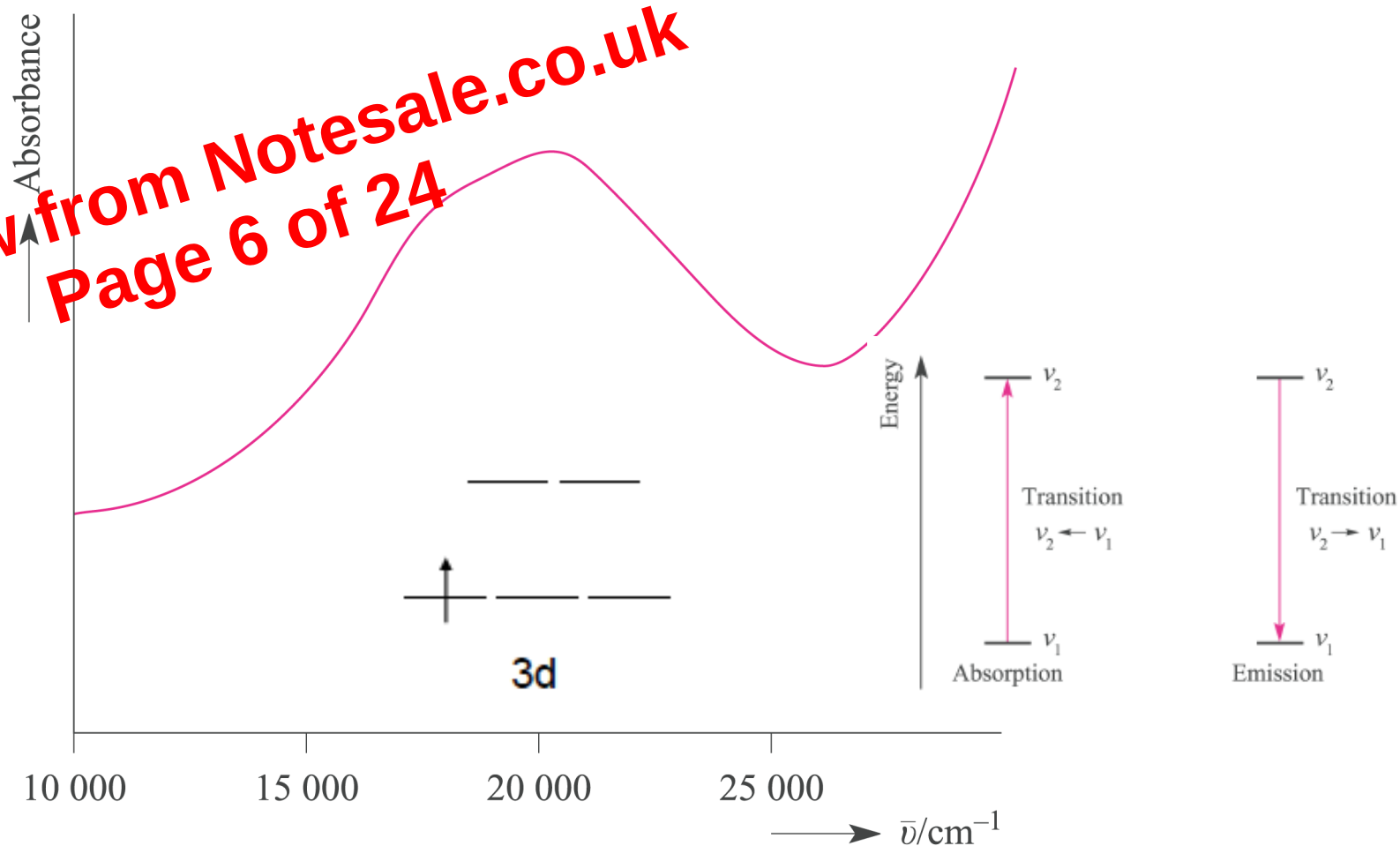


Fig. 21.4 The electronic spectrum of $[\text{Ti}(\text{OH}_2)_6]^{3+}$ in aqueous solution.

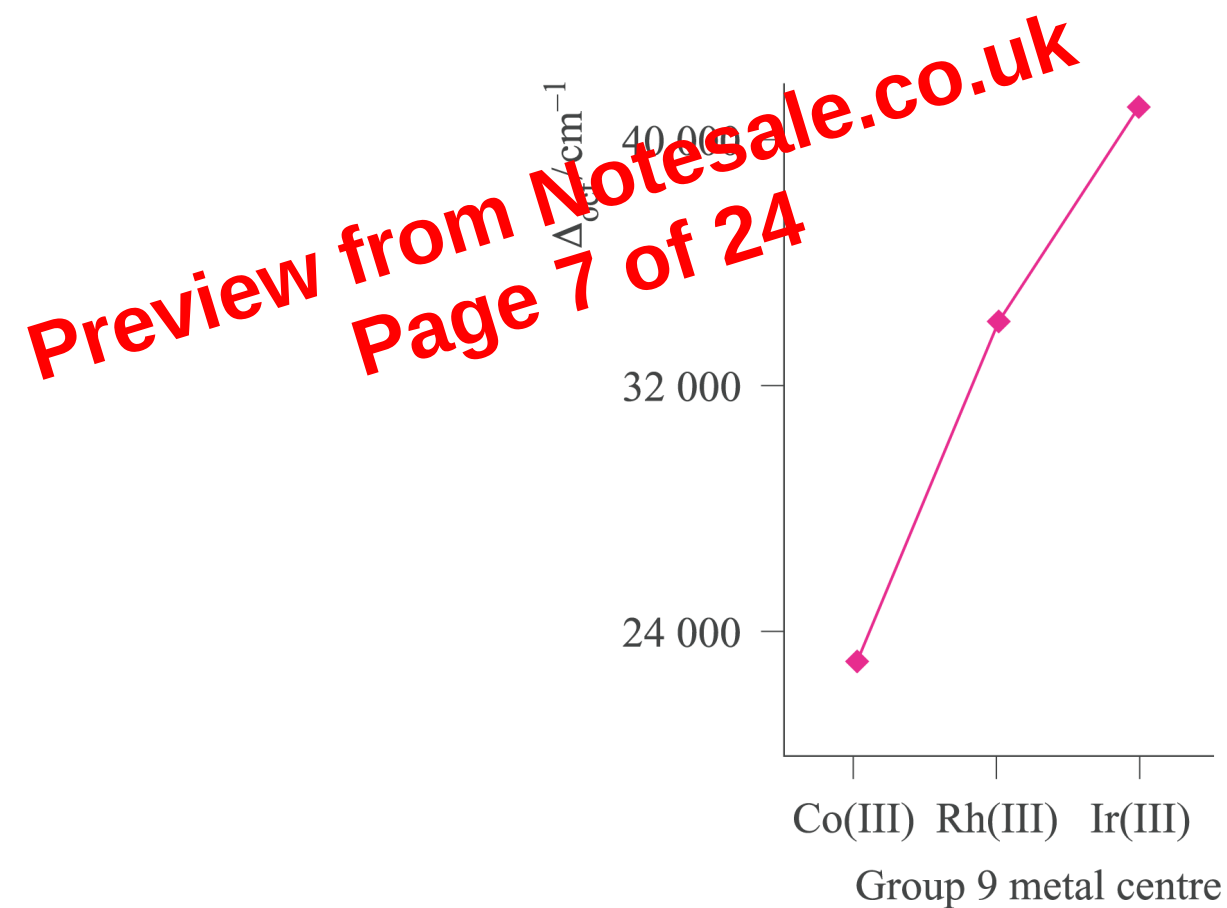


Fig. 21.5 The trend in values of Δ_{oct} for the complexes $[\text{M}(\text{NH}_3)_6]^{3+}$ where $\text{M} = \text{Co}, \text{Rh}, \text{Ir}$.

Kesan Herotan Jahn-Teller

- Contoh – Cu^{2+} ion (d^9).
 - Terdapat kekosongan pada orbital e_g dengan konfigurasi samada pada $d_{(x^2 - y^2)}$ atau d_{z^2}
 - Dalam keadaan benar tetrahedral konfigurasi $d^2_{(x^2 - y^2)} d^1_{(z^2)}$ atau $d^1_{(x^2 - y^2)} d^2_{(z^2)}$ mempunyai tenaga yang sama
 - Tergenerat ganda dua
 - Menurut Teorem Jahn-Teller keadaan di atas adalah tidak stabil
 - Struktur oktahedron Cu^{2+} mesti mengherot untuk menghilangkan keadaan terdegenerat

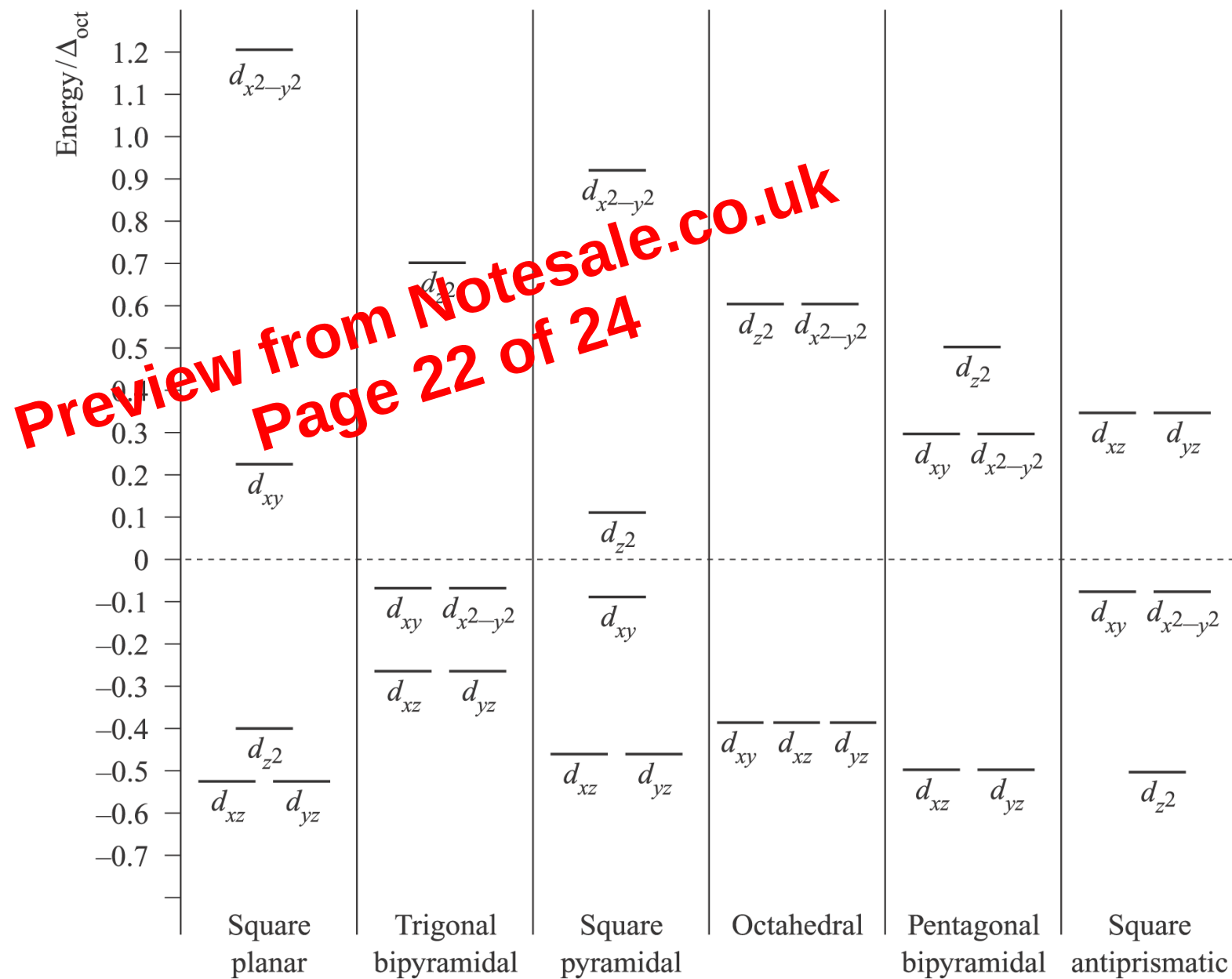


Fig. 20.10 Crystal field splitting diagrams for some common fields referred to a common barycentre; splittings are given with respect to Δ_{oct} . For tetrahedral splitting, see [Figure 20.8](#).