

Fig. 9. Isosurfaces of (a) the absolute squares of hydrogen imaginary atomic orbitals and (b) real functionalized atomic orbitals.

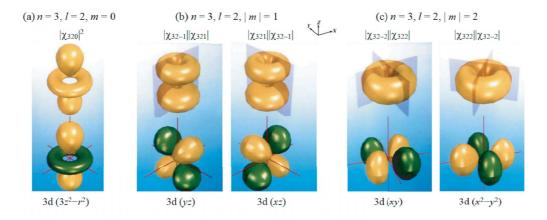


Fig. 10. Obtaining the "real function form" (bottom) by slicing up the "absolute square of complex function form" (top) with |m| planar node(s) [17–19].



Fig. 11. (a) A 4f $(zx^2 - zy^2)$ (or 4f (xyz)) hydrogen atomic orbital model set on a plate for revolving. (b) Side view of the revolving image. (c) Top view of the revolving image.

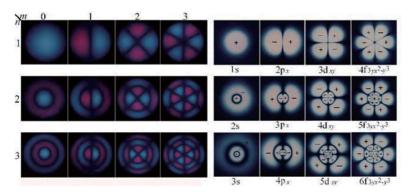


Fig. 12. (a) Characteristic pattern of standing waves of a 2-dimensional circular membrane of uniform thickness, attached to a rigid frame (n: number of radial nodes; m: number of azimuthal nodes). (b) Cross section on the x-y plane of 3-dimensional hydrogen atomic orbitals.