-dimensional Symmetry Catalysts for A-Z Gas Loading Fusion
TALBOTT CHUBB, Greenwich Corp., Arlington, VA 22207 — An epitaxial mating of a metal layer to a chemically stable ionic crystal minimizes system energy for cold fusion based on Bloch function symmetry and using gas loading and nm-Pd at a favored interface.[1] To achieve epitaxy second and third metal layers need to have imperfections. One thinks of the stable ionic crystal as a template and the nano-Pd solid as a malleable lattice. The interior volume of the nano-Pd solid has a face-centered cubic structure. ZrO2 was the template ionic crystal used in A-Z gas loading studies at elevated T in (2005). A template crystal using the sapphire crystal equivalent of a double-layer graphene crystal is suggested. Impurity Rh and Ru are suggested as impurity atoms in the nano-metal (as in gem-quality Zircon) and a small amount of interstitial H in addition to dominant D as involved in diffusion. Ref. [1] “Interface Modeling of Cold Fusion,” Talbot A. Chubb, Proc. ICCF14, Book 2, pp 534-539 (2008).