

Abstract:

Zyvex is the first molecular nanotechnology company, with a vision of developing adaptable, affordable, molecularly precise manufacturing. New tools are required to manipulate nanoscale objects, and Zyvex has built a family of nanomanipulators capable of flexible 3D nanomanipulation. In addition to providing the state of art nanotools for accelerating global nanotech R & D and business, Zyvex is actively conducting cutting edge R & D in pursuing atomically precise manufacturing technologies in partnership with global leaders worldwide. We will give an overview of how Zyvex commercializes its nanotechnology in the areas of tools, materials, and structures. The talk will then show how these nanomanipulators are used for a variety of applications, such as probing integrated circuits down to the 45nm node, manipulating biological nanostructures, and building complex micro- and nanosystems via 3D assembly.