



Silicon Quantum Dots



Could humans actually create an atom? To quantum computing scientists—yes! But all they care about is the electron. In quantum computing, electrons are the most important part of the atom, and researchers are able to trap individual electrons and create artificial atoms. To do this, scientists use layers of material to sandwich electrons into a two-dimensional area and trap single electrons in the places they want, creating nanocrystals called **quantum dots**. This technology might even be in your living room already! Engineers use a version of these quantum dots for creating vibrant images in QLED television screens. Certain properties of the electron in the quantum dot can be used as building blocks to make qubits. When the quantum dots interact, they can be used to solve problems and calculate mathematical equations.