



## Patterning with Quantum Dots

Quantum dots are at the forefront of research into devices such as diodes, transistors, photodetectors and light emitting diodes. Quantum dots may also be used to make the logic elements of a quantum computer. However, for these devices to be made practical, the quantum dots must be able to be made uniformly in size and they must be able to be placed precisely in repeatable patterns.

University of Arkansas scientists and researchers have developed a simple and reliable method for producing quantum dots in a regular pattern and of relatively uniform size. The method allows for very precise placement of quantum dots into virtually any pattern desired and the method is repeatable such that manufactured patterns of quantum dots are virtually exactly the same.

The result of this breakthrough in the creation and positioning of quantum dots holds great promise for the creation of devices with extraordinary properties and capabilities.

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