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Scientists Demonstrate First Silicon Laser

“Researchers at UCLA have demonstrated the first silicon laser.”

“In the past, many researchers have attempted, without success, to create a silicon laser by introducing impurities in the material, or by using exotic and complex device structures. Even if successful, such processes render the

device incompatible with standard silicon manufacturing technology.

In addition, these techniques generate light only at fixed wavelengths, and often do not correspond to the optimum wavelength for most applications.”

“While silicon is the so-called ‘bread-and-butter’ material of the electronic industry, said Jalali, conventional wisdom contends that it cannot be used to generate light. The UCLA researchers exploited several properties of silicon in order to successfully demonstrate their silicon laser device.”