High-Powered Lasers on a Chip

Northwestern researchers have discovered a way to make high-powered lasers on a computer chip, which "should lead to a whole new generation of commercial high-powered lasers that will be reliable, long-lasting and precise," says Manijeh Razeghi, Walter P. Murphy Professor of Electrical Engineering and Computer Science.

High-powered lasers are used in medicine, information storage, high-definition television and military applications. The previous ways of making them produced lasers with short lives and limited applications.

Tests show that the lasers on chips are more reliable and stable, according to Dmitri Garboozov, visiting scholar from the Russian Academy of Sciences, who collaborated with Razeghi. The research was funded by the Advanced Research Project Agency through the U.S. Army.

Manijeh Razeghi