

Spanish scientists develop new crystals

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Scientists working at the University of Navarra in Spain say they have developed a more efficient laser crystal.

The group of professors from the university's departments of chemistry, soil science, physics and applied mathematics worked in the preparation and characterization of "photonic crystals," which have optical properties with many uses.

The research, they said, will lead to the creation of more powerful and effective lasers.

The crystals are required to have a periodicity of an optical magnitude. That means the materials have a structure of energy bands for photons similar to that which metals possess for electrons.

The researchers say the crystals provide ideal characteristics for the development of instruments with important applications in such diverse areas as communications, optical electronics and medicine.

The research being performed at the University of Navarra was developed as a multidisciplinary effort, involving professors from various departments and was funded by the Spanish Ministry of Education and Science.

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