UC San Die

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Nanoengineers, computer scientists and oceanographers at UC San Diego collaboratively developed a method to identify the molecular structures of natural products that is significantly faster and more accurate than existing methods. It works like facial recognition for molecular structures: a piece of spectral data unique to each molecule is run through a deep learning neural network to place the unknown molecule in a cluster of molecules with similar structures. This development could represent a paradigm shift in the chemical analysis, pharmaceutical and drug discovery fields since 70 percent of all FDA-approved drugs are based on natural products.

Learn more bit.ly/MolecularStructure

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Researchers have demonstrated, and published in *Science*, the first laser cavity that can confine and propagate light in any shape imaginable, even pathways with sharp bends and angles. The new cavity, called a topological cavity, could enable laser components to be packed more densely on a chip, leading to higher speed optical communication technologies that can be fabricated in an efficient and scalable manner using photonic integra

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