Called the Chilica–pod, the device detects capsaicin, a chemical compound that helps give peppers their sometimes painful kick.The Chilica–pod is sensitive, capable of detecting extremely low levels of the fiery molecule, researchers report in the Oct. 23 ACS Applied Nano Materials.A pepper's relative spiciness typically is conveyed in Scoville heat units an imperfect measurement determined by a panel of human taste testers.The device could someday be used to test cooked meals or fresh peppers, says analytical chemist Warakorn Limbut of Prince of Songkla University in Hat Yai, Thailand.People with a capsaicin allergy could use the gadget to avoid the compound, or farmers could test harvested peppers to better indicate their spiciness, he says.When a drop of a chili pepper and ethanol solution is added to the sensor, the capsaicin from the pepper triggers the movement of electrons among the graphene atoms.Other more precise methods for determining spiciness are time–intensive and involve expensive equipment, making the methods unsuitable for a quick answer.Built by Limbut and colleagues, the instrument's sensor is composed of stacks of graphene sheets.Enter the portable, smartphone–compatible Chilica–pod.