Control of Graphene Through Sound Waves

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by **Orwellito**, *Orwell City*
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The incident of the 'heart attack avalanches' that occurred in Texas while Travis Scott was performing a concert at Astroworld has caught the attention of the whole world.

What could have happened that caused such a chain reaction in people? One of the hypotheses that **La Quinta Columna** has is that the graphene in the body of the inoculated people present at the concert was stimulated by sound. Sound crazy? Not to those who know that it's, in fact, highly probable.

Below, **Orwell City** brings a video in which biostatistician Ricardo Delgado and Dr. Sevillano discuss a study that could explain the phenomenon.

[Video available at Rumble.]

Ricardo Delgado:

> Well. That's, precisely, what we were talking about. I found an article –which we also discussed at the time– that talks about graphene and sound waves. How do they affect graphene?
>
> It says, **'Control of graphene by sound. 2017. Research and Science.'** A theoretical study suggests the possibility of using mechanical waves to govern the behavior of electrons in this two-dimensional material.

The finding could find applications in electronics and in the design of smart materials. In recent years, materials with a single-layer thickness of two-dimensional atoms have sparked a revolution in nanotechnology.

Well, here's a little bit of the story.

The ability to control the behavior of electrons in these materials is of fundamental interest. Graphene has been dubbed the wonder material. It is the best-known conductor of electricity and heat. And combines the lightness of graphite with the strength of diamond. Let's see what else it says. Graphene's deformations generate all sorts of changes in the behavior of its electrons. This has led to the idea of developing smart materials that, in a controlled manner, modify their electronic properties according to the stress applied.

Let's see.

In a recent theoretical work carried out together with Maurice Oliva-Leyva, from the Materials Research Institute of the UNAM, we have analyzed the effect of sound waves on the electronic behavior of graphene. Our results, published in the Journal of Physics, suggest the possibility of using mechanical deformations to calibrate the electrons of the material. That is, to generate a beam that propagates in a given direction. The finding represents a first step toward the manipulation of electrons and graphene by sound waves and opens the door to several applications.

Here it is. That is, electrons in graphene can be manipulated by sound waves.

Dr. Sevillano:

That's it. The moment you can vary the molecular

configuration of a molecule of this material through sound waves means that graphene also absorbs the energy that comes through sound waves. My friend, you know how it can be excited in front of a loudspeaker, for example. It can be excited there. That’s where it can. You have it there.

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