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Hooray, Graphene Biosensing Tattoos are Here!

Exciting.

Tessa Lena

13 hr ago

76

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The wait is almost over. We are getting very excited! The benefits consist of using a new thing as opposed to the **old** thing, a robust and steady supply of medical data to the data hoarders, and new profits for the investors. The side effects are worth it.

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Continuous cuffless monitoring of arterial blood pressure via graphene bioimpedance tattoos

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Abstract

Continuous monitoring of arterial blood pressure (BP) in non-clinical (ambulatory) settings is essential for understanding numerous health conditions, including cardiovascular diseases. Besides their importance in medical diagnosis, ambulatory BP monitoring platforms can advance disease correlation with individual behaviour, daily habits and lifestyle, potentially enabling analysis of root causes, prognosis and disease prevention. Although conventional ambulatory BP devices exist, they are uncomfortable, bulky and intrusive. Here we introduce a wearable continuous BP monitoring platform that is based on electrical bioimpedance and leverages atomically thin, self-adhesive, lightweight and unobtrusive graphene electronic tattoos as human bioelectronic interfaces. The graphene electronic tattoos are used to monitor arterial BP for >300 min,



How does it work? [Here](#) is how it works for now.

“The device takes its measurements by shooting an electrical current into the skin and then analyzing the body’s response, which is known as bioimpedance. There is a correlation between bioimpedance and changes in blood pressure that has to do with blood volume changes. However, **the correlation is not particularly obvious, so the team had to create a machine learning model to analyze the connection to get accurate blood pressure readings.**”

Maaaaan, Elizabeth Holmes was so cool and so ahead of her time. Had she waited a few years to come up with her revolutionary inventions, we would all be praying to her right now.



Seriously though. Can a smaller blood pressure measuring device be cool, in theory? No doubt! But at the price of disrupting the tiny electrical currents that our bodies use to regulate intricate internal processes—in ways that the scientists don't understand—and at the price of adding **another toxin** to the massive load of toxins that our bodies are already handling? I don't know about it...

That's a little bit like shooting a *very* lucrative, insurance-paid-for nuke at the house to kill the annoying mosquito that bothers the peasant! The mosquito may be killed—but look at that beautiful pile of nuclear dust where the house was! Also has anybody seen the peasant?

A philosophical point

Our civilization seems to run on addiction. Addiction to data monitoring is a real addiction, even in a peasant. We knew how to manage a lot of things in life when we didn't

have so many devices—but once we got the devices, we now feel naked and helpless without them! And of course, there have been numerous meaningful books written about the negative impact of automation prior to 2020—Nicholas Carr is great, for example—but here we are, and the destructive and temporarily lucrative 4IR is still marching! :(

So right now, again, it's their confident shamelessness vs. our clarity and focus. And even though the 4IR is marching, we are still here! We have to cling to our souls and not let go, especially at this time.

My theory is that in earnest, the 4IR will likely try to prance in on a white horse—perhaps on the white horse called “Theranos,” or in front some other white horse—as a carrot. They'll say, “See, you've cooperated, and this particular pandemic is over ... kind of so hooray but be careful, you can live your life for a second but don't forget that the old normal is gone-gone!” And then they'll start rolling out various “smart” monsters, like new programmable money, new trendy-sounding toxins, **self-spreading synthetic biology bandits**, and other unseemly gimmicks.

The ordinary nature of stealing beauty is so heartbreaking. It's happened so many times already. So many reforms of the past followed that route! I think that if a person who lived seven thousand years ago were brought to a modern city, he'd be completely flabbergasted as to why we are so obsessed with objects, why everything around us is so sterile and boring, why we are in such a lamentable physical shape and so emotionally poor.

Like all of us, I spend a lot of time thinking about what will happen in the near future—and I think that on a macro level, things will get crazier before they get better. So far, it looks like the aspiring masters have lost all their marbles and are acting like addicts in the last phase of addiction, trying to push through every destructive measure, impacting everything in life, from finance to weather.



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will get somewhat ugly, and some people will survive the onslaught of abusive measures and carve out new niches, and some may not survive it (unfortunately, it's already started to happen, and the media is covering it up in a cruel manner).

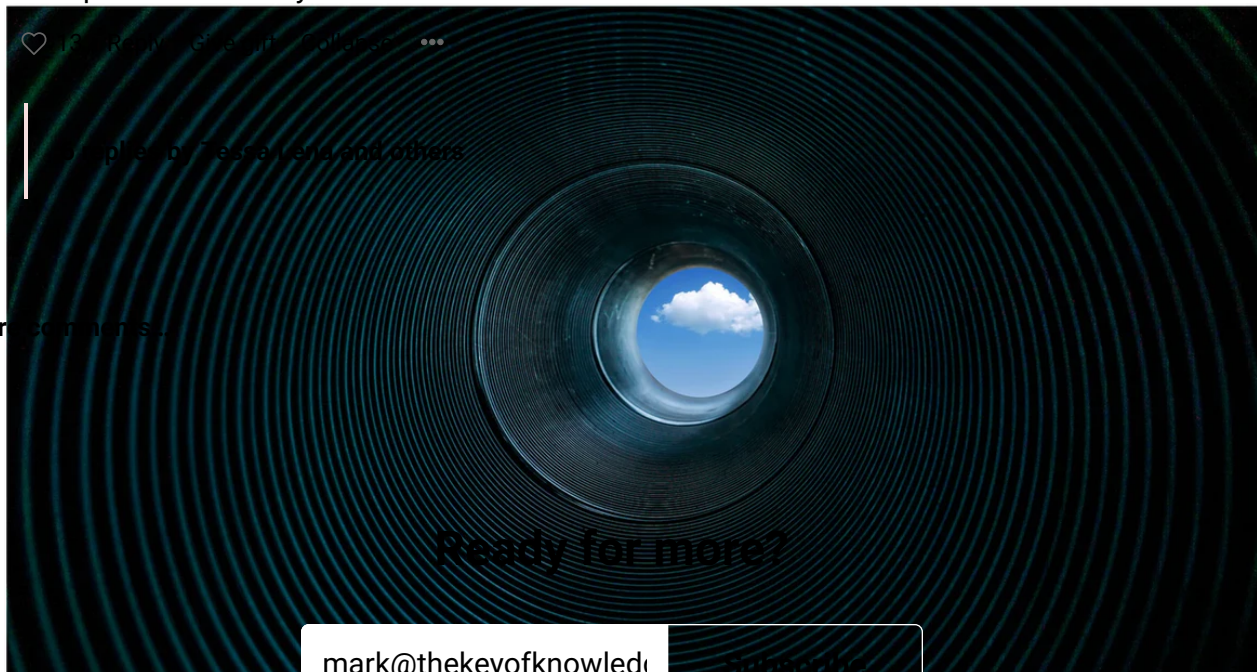
In the process, as things get really stupid, a few aspects of our natural expression and feelings may get temporarily stolen, a rainbow of expensive unnatural sensory stimulants may appear, and the new children born into the ridiculous new normal may have a harder time being truly happy, a harder time connecting to others, a harder time remembering

30 Comments
while they are here. But they will remember. They will remember because human soul is stronger than the crazies. At least some of them will remember. I have no doubt that on the

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...n't deny how I managed to turn a post about graphene into a post about existence will be quite surprised if we can't think humanity is being stalked. All of this never did look around, and the mind goes straight to the existential. We are not robots! They are trying to treat us like we are robots - but we are not robots!

nymusicdaily, 13 hr ago Liked by Tessa Lena
side remark, I'd like to share this one again, it's relevant to the story.
tessa, it all boils down to the existential. "the aspiring masters have lost all their marbles and are acting like addicts in the last phase of addiction, trying to push through every destructive measure, impacting everything in life, from finance to weather.
Deprecating Free Will: A Future We Don't Have to Accept
gaining an addiction. right? reducing everything to the ultimate risk-averse algorithm because there's nothing left in the stock market so they have to start gambling on what's under our skin. This is how it all went down.
when tyrants run out of ideas they recycle them again and again. think you said something like that in the summer of 2020. just hope we can escape them before the bill gates mosquitoes escape the florida keys



(Thank you for your support I depend on it)