APPROACH

Graphene-Enhanced Smart Clothing

Stella Maragkaki, FORTH

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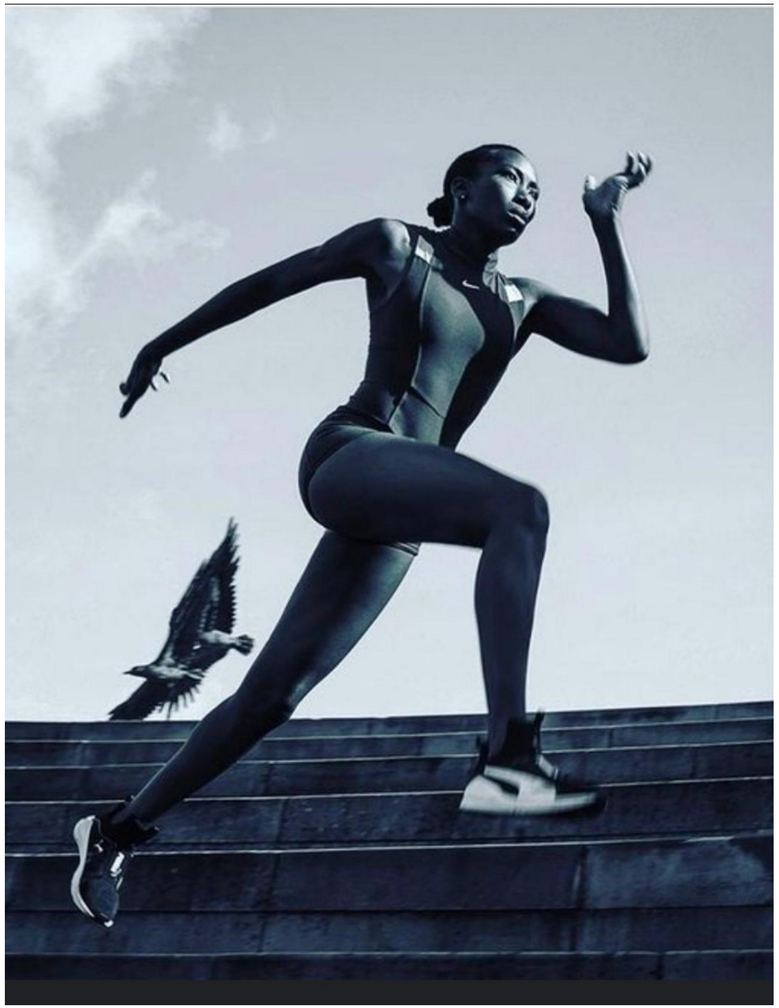
The Problem

Limitations in Adaptive Sportswear and Performance Monitoring

Current limitations

- Existing sportswear lacks real-time adaptability.
- Performance monitoring is often inconvenient and inaccurate.



Market Opportunity

Emerging Trends in Wearable Technology & Athletic Performance

1 Wearable Tech Growth

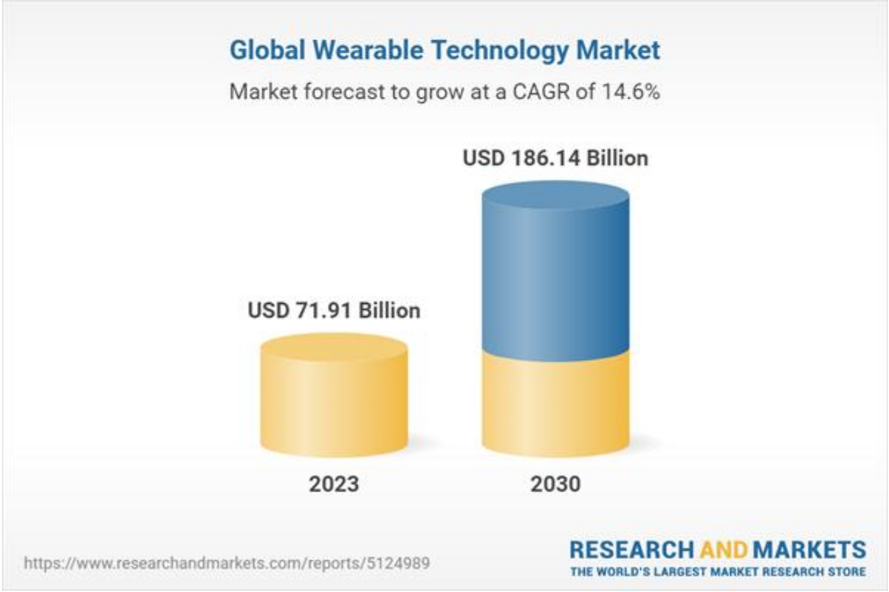
The wearable technology market is rapidly expanding. Consumers demand more sophisticated solutions.

2 Performance

Athletes are increasingly focused on data-driven training. They need precise, actionable insights.

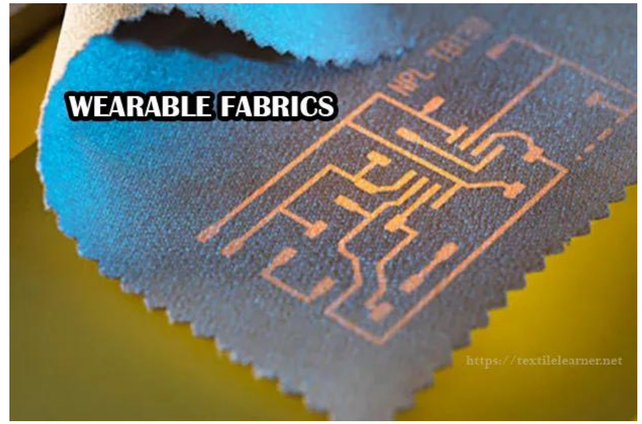
3 Potential

Smart clothing offers unique advantages over traditional wearables. It provides seamless integration and comfort.



The Solution

Graphene – Integrated Intelligent Textile Systems



Seamless Integration

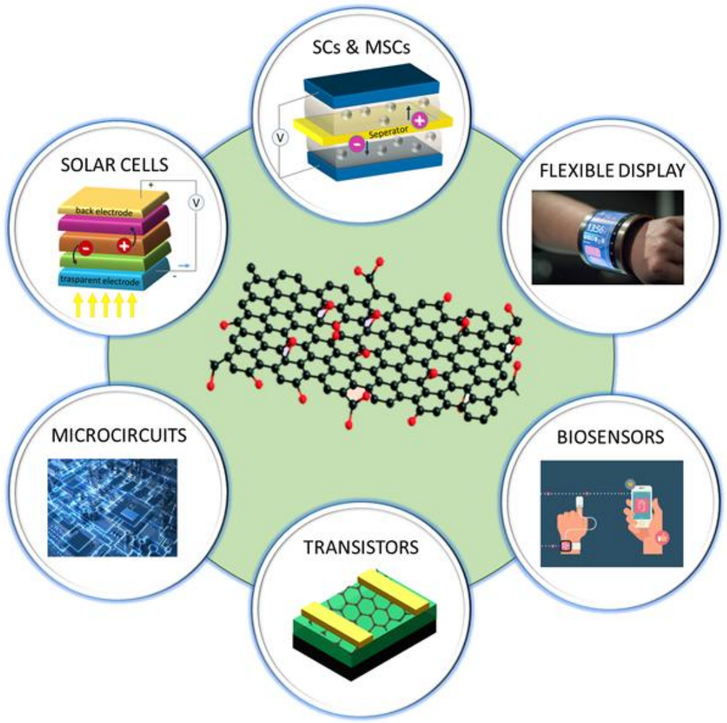
Graphene sensors are woven directly into the fabric. This creates comfortable, unobtrusive monitoring.

Real-Time Data

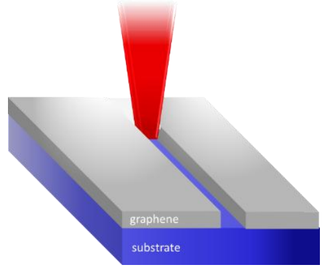
The system provides continuous, accurate physiological data. Users gain insights into performance metrics.

Adaptive Response

Clothing can adapt to changing conditions. It optimizes temperature and support levels.

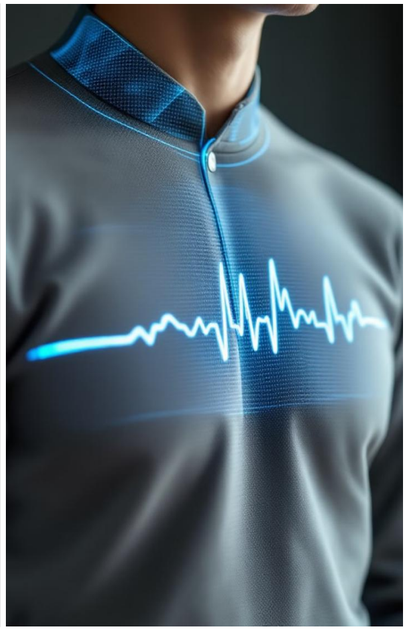


Impact – technical breakthrough

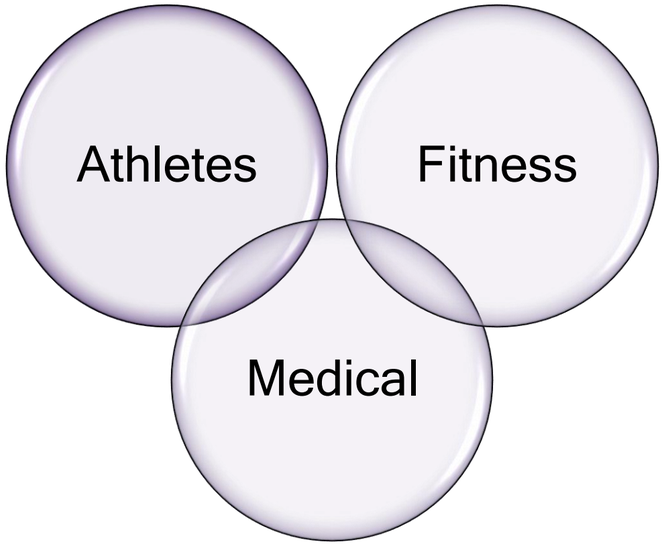


How Graphene Transforms Clothing into Active Performance Sensors

1. **Enhanced Conductivity**
   Graphene's superior conductivity enables precise sensing.
2. **Flexibility**
   Graphene maintains performance even when stretched.
3. **Durability**
   Textiles are durable and withstand regular wear.



Target market



Call to Action

Turning Cutting-Edge Research into Transformative Product Innovation

R&D

~ 2M €

- Material optimization
- Sensor development
- Scalability & testing

Pilot production

~ € 10M €

- Pilot production setup
- Initial market entry

Cost Efficiency reducing material cost by > 50%

Market Readiness: EU's project are already advancing graphene pilot lines

APPROACH

THANK YOU

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