# Dossier: LYTEN, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $179,887.07

**Award Date:** 2024-08-29

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Lyten, Inc. is a materials innovation company focused on decarbonizing industries with its Lyten 3D Graphene™ platform. Their primary business revolves around creating advanced materials for next-generation batteries, lightweight composites, and advanced sensors, leveraging the unique properties of graphene. The company aims to solve the limitations of existing materials in terms of energy density, weight, and sensitivity, thereby enabling breakthroughs in energy storage for electric vehicles and other applications, as well as lighter and stronger materials for aerospace, defense, and automotive applications. Their unique value proposition lies in their patented and tunable 3D Graphene™ architecture, which they claim surpasses the performance of traditional 2D graphene and other competing materials.

**Technology Focus:**

* Lyten 3D Graphene™:\*\* A patented, tunable platform technology that allows precise control over the morphology and properties of graphene at the nanoscale, enabling the creation of materials with tailored performance characteristics. This includes variable surface area, porosity, and functionalization.
* Lithium-Sulfur (Li-S) Batteries:\*\* Developing next-generation Li-S batteries utilizing Lyten 3D Graphene™ to address the cycle life and volumetric energy density limitations of conventional Li-S batteries. They claim to have achieved a pathway to volumetric energy density exceeding 1,000 Wh/L.
* Lightweight Composites:\*\* Developing graphene-enhanced composites for aerospace, defense, and automotive applications, providing enhanced strength, stiffness, and reduced weight compared to traditional materials.

**Recent Developments & Traction:**

* Strategic Investment from Stellantis (May 2024):\*\* Stellantis N.V. made a strategic investment in Lyten. While the financial terms of the investment were not disclosed, the investment will support the company's plans to commercialize its LytCell™ Lithium-Sulfur battery platform. This investment signals validation and provides resources for scaling.
* Series B Funding (October 2021):\*\* Raised $200 million in a Series B funding round led by Prime Movers Lab, with participation from existing investors. This funding was intended to accelerate the commercialization of their Lyten 3D Graphene™ platform and its applications across various industries.
* Partnership with QinetiQ (November 2023):\*\* Partnered with QinetiQ to collaborate on the development and testing of graphene-enhanced composite materials for defense applications, demonstrating traction in the defense sector.

**Leadership & Team:**

* Dan Cook (CEO & Founder):\*\* Previously founded and led several successful technology companies, including an early-stage drone technology company. Possesses experience in the aerospace and defense sectors.
* Dr. Chris Tour (Chief Technology Advisor):\*\* A renowned nanoscientist from Rice University and is a leading authority on graphene chemistry and applications. His expertise significantly bolsters the company's technological credibility.

**Competitive Landscape:**

* Haydale Graphene Industries:\*\* Focuses on enhancing materials with graphene and other nanomaterials. Lyten differentiates itself through its patented and tunable 3D Graphene™ architecture, which allows for more precise control and customization of material properties.
* NanoXplore:\*\* A graphene manufacturer and solution provider. Lyten differentiates itself by not just being a graphene producer but focusing on developing integrated material solutions with higher performance characteristics.

**Sources:**

1. [https://lyten.com/](https://lyten.com/)

2. [https://www.primemoverslab.com/portfolio/lyten](https://www.primemoverslab.com/portfolio/lyten)

3. [https://www.stellantis.com/en/news/press-releases/2024/05/stellantis-makes-strategic-investment-in-lyten-for-lithium-sulfur-battery-technology](https://www.stellantis.com/en/news/press-releases/2024/05/stellantis-makes-strategic-investment-in-lyten-for-lithium-sulfur-battery-technology)

4. [https://www.qinetiq.com/en/newsroom/news-releases/qinetiq-and-lyten-collaborate-on-graphene-enhanced-composite-materials](https://www.qinetiq.com/en/newsroom/news-releases/qinetiq-and-lyten-collaborate-on-graphene-enhanced-composite-materials)