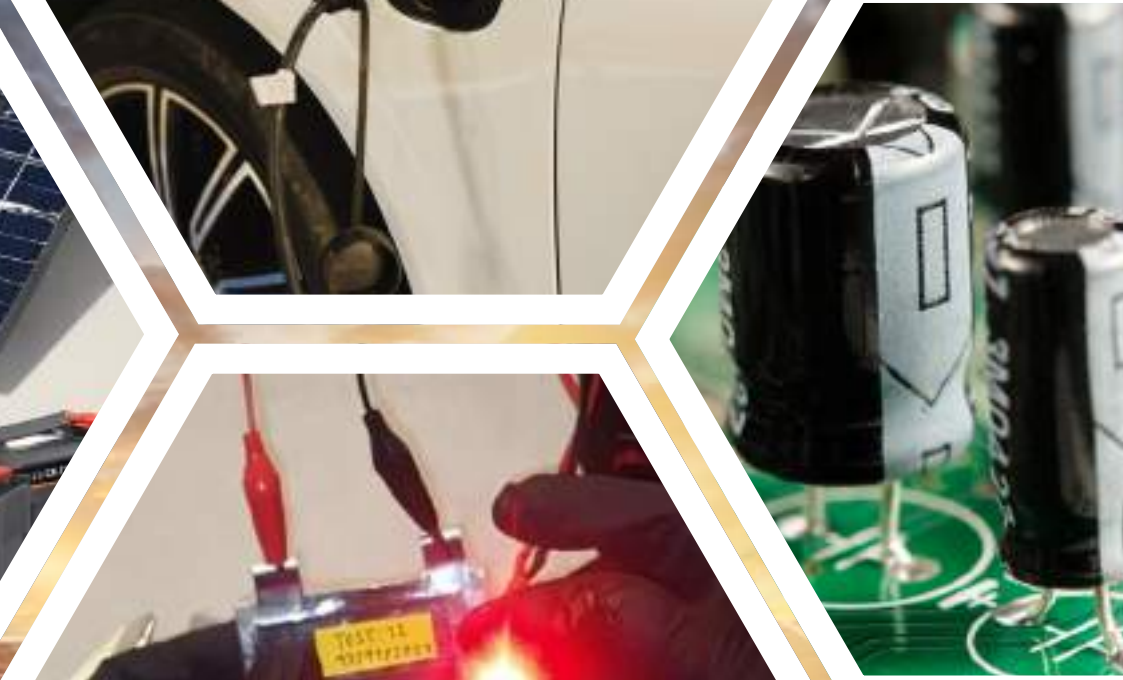


# 2024

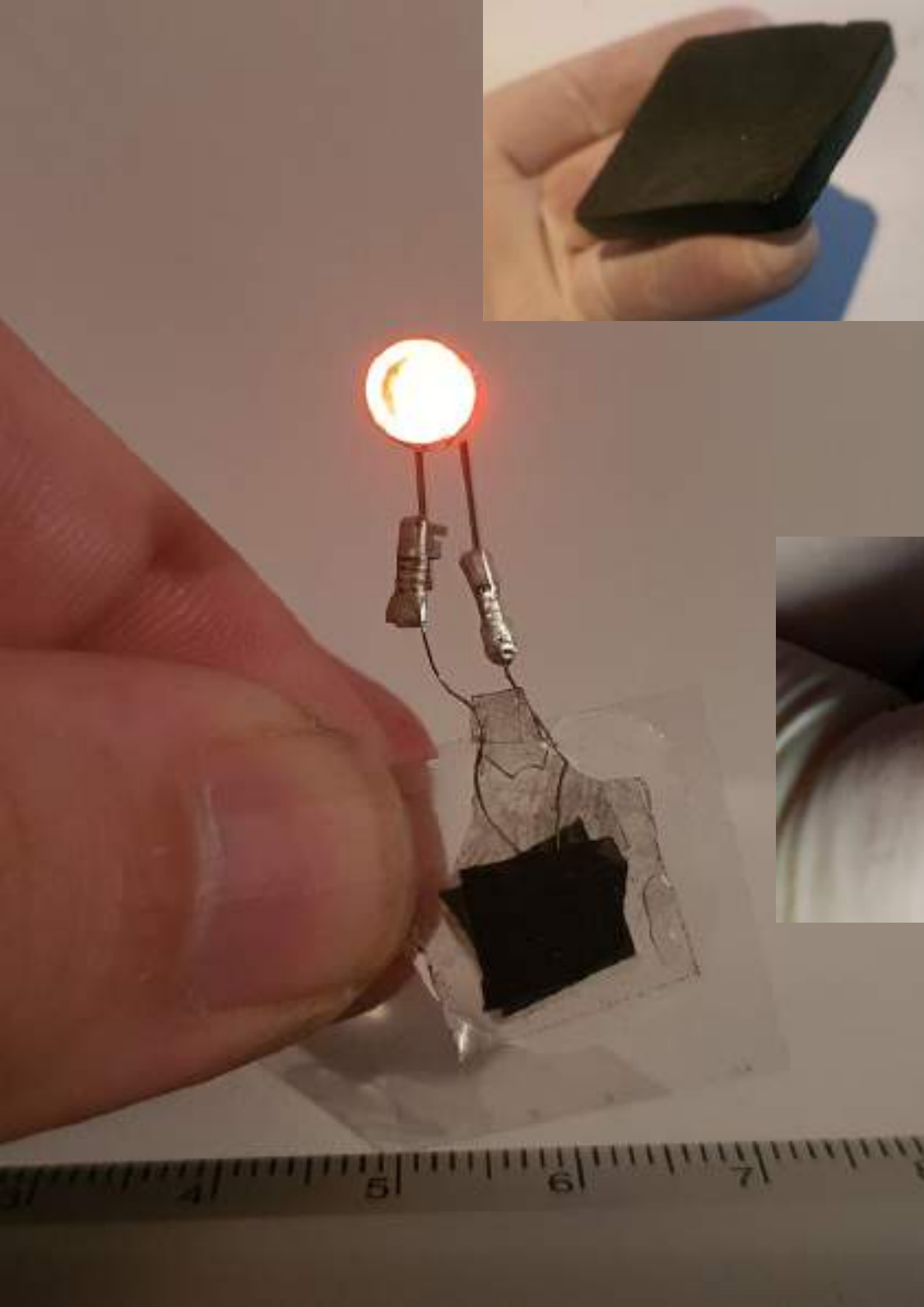


## SOLID ELECTROLYTE For Batteries and other Applications



# WHAT IS SOLID ELECTROLYTE?

A solid electrolyte is an innovative component in battery technology that replaces traditional liquid electrolytes with a solid material, significantly improving the energy efficiency and safety of the device.



This innovation eliminates the risk of short circuits, increases the flexibility of the batteries and facilitates their integration into various applications. In particular, the solid electrolyte can take ceramic or polymeric forms, among other solid configurations, offering versatility in its application.



# WHAT PROPERTIES DOES SOLID ELECTROLYTE HAVE?

Our solid electrolyte is highly flexible: it can be cut, drilled and bent without affecting its performance, offering exceptional durability. With a thickness of only 0.1 mm and the possibility of applying nanotechnology to reduce it even further to the micron level, the door opens to the creation of microbatteries with promising performance for the future. This technology allows the development of extremely light and compact batteries, ideal for SMD Microchip applications, as well as larger, more powerful batteries intended for electric vehicles. Its simple formula facilitates application in the creation of batteries of various sizes, from tiny devices to large vehicles.



# WHAT ADVANTAGES DO SOLID ELECTROLYTE BATTERIES HAVE?

Solid electrolyte batteries outperform traditional batteries with contaminating liquids and acids, standing out for their design that eliminates risks of leaks, corrosion and short circuits.

In addition, they are sustainable and ecological as they do not depend on liquid materials, being compact and flexible to integrate into various devices. With higher ionic conductivity, they offer energy efficiency and improved charging times.

These advantages make them an attractive option for applications ranging from portable electronics to electric vehicles, presenting a safe, durable and environmentally friendly alternative compared to conventional technologies.



# WHAT IS THE SOLID ELECTROLYTE MARKET AND WHAT FUTURE DOES IT HAVE?

It is evident that the batteries of the future will be made up of solid electrolyte, their efficiency and autonomy is so great that they will replace current batteries.

This is why the bet is safe regarding this invention, the automotive sector is investing large amounts in developing these batteries, they are the future of electric vehicles and electronic devices, the Renewable Energy sector is also of great importance, as is the storage of electrical energy that comes from Solar Panels.





## Solid Electrolyte Improvements Compared to Current Electrolytes on the Market.



### **SOLID ELECTROLYTE**

Patent Solid Electrolyte For electric car batteries.

Currently, Lithium and Lithium Ion Batteries, as well as Sodium Batteries, use ions diluted in oil. so that it can impregnate the micro-perforated plastic, trying to simulate a solid electrolyte.

### **OTHER ELECTROLYTES**

Current electrolytes on the market

#### **Solid and Flexible**

It is solid and flexible, it can also be liquid, ceramic or paint.

#### **Safe and Efficient**

Avoid explosions and short circuits. Can be drilled and cut.

#### **They are not biodegradable**

They contaminate with elements such as Lithium, heavy metals, etc...

#### **They are not safe**

These electrolytes are not safe due to the liquid and oxidizing elements, they are also contaminants.

#### **Sustainable and Economical**

Easy to manufacture and reduces considerable manufacturing costs in the electric car batteries currently on the market.

#### **Does not heat**

Reduces heating by 80% compared to other electrolytes. Reducing the number of Radiators currently needed.

#### **They are not Sustainable or Economical.**

The manufacturing process of diluting ions in oil and microperforated plastics is expensive and unsustainable.

#### **They get warm**

They heat up and can explode, putting the safety of people, the safety of systems and the environment at risk.

#### **Electrical Efficiency**

Much more efficient in loading and unloading with almost a 200% improvement.

#### **Compatible and Universal**

Compatible with all current batteries on the market. Only replacing the Current Electrolyte with the Solid, maintaining the same manufacturing process.

#### **They are not solid**

In attempting to imitate a solid appearance, batteries may risk catching fire.



### Biodegradable

Respectful and non-polluting to the environment.

### Increases Durability

Greater durability with shorter charging time

### They are not Compatible or Universal

The electrolytes are specifically designed for one type of battery and cannot be put in other batteries that are not compatible with the anodes and cathodes that they have.

### Lower Electrical Efficiency

They are substantially less efficient because they use plastic materials and oils.

### Reusable

can be used sustainably, extracting the electrolyte from the batteries where it has been applied

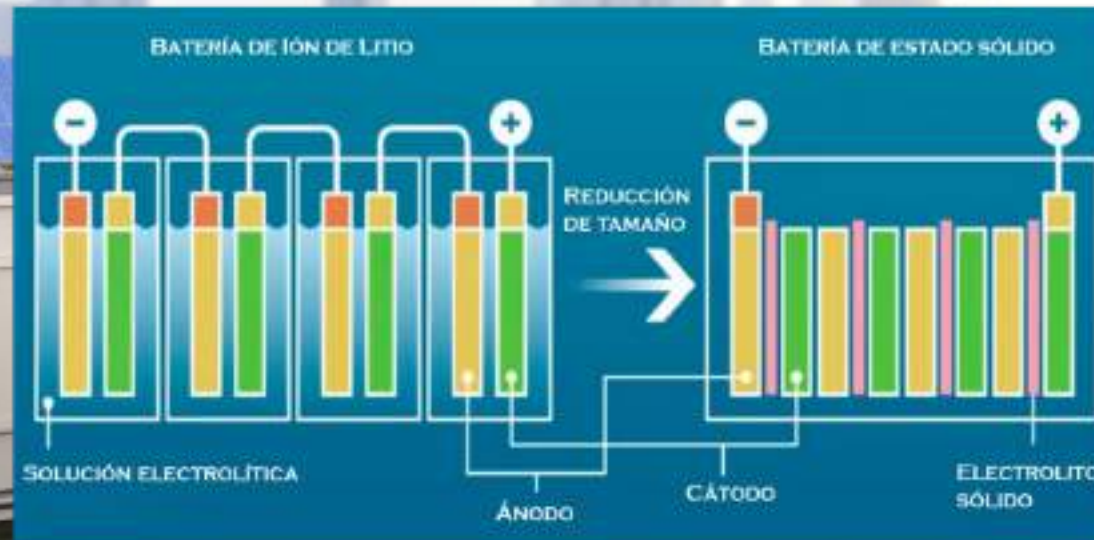
### Avoid Oxidation

Maintaining a Stable Ph that prevents oxidation of the Anode and Cathode.

### Lower Durability

They wear out and rust so they last much less and with each charge cycle they lose effectiveness.

## Example of Current Lithium Battery Versus Solid Electrolyte Battery.



With the solid Electrolyte, a Reduction in the Size and Weight of the battery is achieved, maintaining the same power and an increase in autonomy, oxidation between anode and cathode is also avoided, increasing the life cycle as well as all the previously mentioned improvements.





# IN WHAT SECTORS CAN SOLID ELECTROLYTE BE USED?

In the vast spectrum of battery-powered devices, spanning from the automotive industry to the telecommunications sphere, microchips and renewable energy play a crucial role.

These energy storage systems not only power electric vehicles and mobile devices, but also play an essential role in collecting and storing solar energy by charging solar panels. Our Solid Electrolyte is compatible and universal with all systems and batteries on the market, significantly improving durability and energy efficiency.





# SOLID ELECTROLYTE FOR SOLAR PANELS?

Solid electrolyte emerges as an innovative alternative to boost the efficiency of solar panels. Replacing current batteries with solid electrolyte versions promises to significantly improve charging capacity. This technology offers advantages such as greater safety, durability and energy efficiency.

By eliminating risks associated with liquid electrolytes, solar energy collection and storage is optimized. This advance not only boosts sustainability, but also predicts considerable improvements in the autonomy and performance of solar-powered systems, marking a milestone in the evolution of renewable energy solutions.





# BENEFITS OF SOLAR PANELS

The use of solid electrolyte in batteries for solar panels carries a number of notable benefits that positively impact efficiency and costs. Firstly, solid electrolyte improves the stability and safety of batteries, reducing the risks associated with leakage and short circuits, which contributes to a longer lifespan of the solar system.

In addition, this type of electrolyte provides greater energy efficiency, optimizing the capture and storage of solar energy. In economic terms, being more durable and efficient, the use of solid electrolyte can result in a decrease in costs in the long term, making the adoption of this technology a more profitable investment in photovoltaic systems.







# **SOLID ELECTROLYTE IN CONVENTIONAL BATTERIES**

The implementation of solid electrolyte in conventional batteries presents an innovative way to reduce production costs. Its simplified process involves simply refilling the batteries, allowing the electrolyte to solidify, thus improving the performance of any existing battery. By replacing the current electrolyte with solid electrolyte, a significant advance in efficiency and durability is achieved. This efficient method not only makes production cheaper, but also offers a practical solution to improve the performance of existing batteries, highlighting the versatility and potential of this technology to optimize the functionality of already established energy storage systems.

# SOLID ELECTROLYTE IN CAPACITORS

The application of solid electrolyte in capacitors marks a qualitative leap in the efficiency and performance of these devices. The solid formation of the electrolyte, when filling the capacitors, not only optimizes their capacity, but also ensures greater stability and durability. This technological advancement offers an innovative method to improve the efficiency of capacitors, allowing for more effective charge storage and more controlled discharge. The transition to solid electrolyte in capacitors represents a significant evolution in energy storage engineering, promoting the reliability and efficiency of these fundamental components in various electronic applications.







# **SOLID ELECTROLYTE IN CONSUMER ELECTRONICS**

The introduction of solid electrolyte in consumer electronics marks a momentous change. By implementing this advance in devices such as smartphones and wearables, a substantial improvement in energy efficiency and battery life is achieved.

The robust electrolyte formation optimizes storage capacity, enabling thinner and lighter devices without compromising performance. Solid electrolyte technology offers a reliable and durable solution to the growing demand for more efficient and compact electronic devices. This innovation positions consumer electronics at the forefront of energy efficiency and practicality, offering tangible benefits to users.



# SOLID ELECTROLYTE IN ELECTRIC VEHICLES

The integration of solid electrolyte in electric vehicles represents a transformative advance in sustainable mobility. By adopting this innovative electrolyte in vehicle batteries, greater energy efficiency and improved range are achieved. The solidification capacity of the electrolyte not only increases the safety and durability of the batteries, but also allows for more compact and lighter designs, maximizing the available space. This technology not only addresses the critical need to improve range in electric vehicles, but also contributes to the transition towards cleaner and more efficient mobility, positioning the solid electrolyte as an essential component in the electric vehicle revolution.





# SOLID ELECTROLYTE IN AEROSPACE TECHNOLOGY

The implementation of solid electrolyte in aerospace technology, rockets and satellites marks a milestone in space exploration. Its solid state confers crucial advantages in conditions of variable gravity and extreme environments. The stability of the solid electrolyte ensures consistent performance, avoiding the challenges associated with liquid electrolytes in space. This revolutionary technology not only improves the efficiency of batteries in rockets and satellites, but also contributes to the durability and safety of electronic systems on space missions. The transition to solid electrolyte redefines the standards of space exploration by providing a reliable and rugged solution to address the unique challenges of space and different gravities in planetary exploration.



# SOLID ELECTROLYTE FOR PLANETARY COLONIZATION

The application of solid electrolyte in bases on other planets represents a crucial advance for space exploration and eventual colonization. Its solid state confers stability and durability, essential in extraterrestrial environments. By using solid electrolyte in energy storage systems, a reliable and efficient energy supply is guaranteed for the bases, avoiding the challenges presented by liquid electrolytes in different gravities. This technology not only optimizes the performance of facilities on other planets, but also contributes to energy self-sufficiency.





# SOLID ELECTROLYTE IN MILITARY TECHNOLOGY

The application of solid electrolyte in military technology represents a crucial strategic advance. Its robustness and stability make it ideal for powering critical devices, such as encrypted communications and surveillance systems, improving reliability on the battlefield. The solidification ability of the electrolyte is especially valuable under extreme conditions, ensuring consistent performance in challenging environments. Its use in batteries for military vehicles and equipment offers improved autonomy, crucial for long missions. This technology not only reinforces operational security, but also supports the mobility and efficiency of the armed forces, positioning the solid electrolyte as a key innovation in improving military capabilities.



# SOLID ELECTROLYTE IN THE NAVAL INDUSTRY

The implementation of solid electrolyte in the naval industry marks a revolution in electric propulsion and energy storage on board ships and submarines. Its stability and safety are essential for operating in challenging marine environments, offering a reliable power source for critical navigation and communication systems. By using solid electrolyte in naval batteries, energy efficiency is optimized and weight is reduced, contributing to the agility and sustainability of operations. This innovation not only improves the autonomy of vessels, but also positions the naval industry at the forefront of technology, guaranteeing greater efficiency and safety in maritime missions.





# SOLID ELECTROLYTE IN UNMANNED VEHICLES (DRONES)

The incorporation of solid electrolyte in unmanned vehicles (drones) marks a milestone in the efficiency and versatility of these technologies. Its application in drone batteries offers notable benefits, significantly improving flight autonomy and energy efficiency. The stability and durability of the solid electrolyte ensure consistent performance, critical for extended missions and diverse applications, from surveillance to package delivery. The solidification ability of the electrolyte also provides an additional layer of safety and stability, crucial in variable environments. This technology not only expands the operational capabilities of drones, but also opens up new opportunities in areas such as exploration, agriculture and aerial mapping.



# SOLID ELECTROLYTE IN ROBOTIC TECHNOLOGY

The introduction of solid electrolyte in robotic technology redefines the capabilities and efficiency of robots in various applications. Its solid state provides a more stable and durable energy source, improving the autonomy and performance of industrial and service robots. By incorporating solid electrolyte into robotic batteries, mobility challenges are overcome and integration into diverse environments is facilitated. This not only increases operational efficiency, but also opens up new possibilities for applications in space exploration, healthcare and automated manufacturing. Solid electrolyte technology stands as a catalyst to drive the next generation of advances in robotics.





# SOLID ELECTROLYTE FOR MEDICAL DEVICES

The integration of solid electrolyte into medical devices marks a significant advance in healthcare. Its stability and safety make it ideal for applications in pacemakers, monitors and other implantable devices, ensuring a reliable and long-lasting power source. The solidification ability of the electrolyte improves the integrity of batteries, ensuring consistent performance for critical medical devices. Furthermore, its application in wearable healthcare technology, such as infusion pumps and ambulatory monitors, promises greater efficiency and comfort for patients. Solid electrolyte is emerging as an innovative solution to boost reliability and performance in advanced medical technology.



# SOLID ELECTROLYTE IN RAILWAY INDUSTRY

The implementation of solid electrolyte in the railway industry marks a significant advance towards efficiency and sustainability in railway transport. By employing this innovative technology in electric propulsion and energy storage systems, operational efficiency is improved and emissions are reduced. Batteries with solid electrolyte offer greater autonomy and durability, resulting in more efficient and environmentally friendly trains. Furthermore, the stability of the solid electrolyte is essential to ensure constant power supply on railway routes, thus contributing to more advanced, sustainable and reliable railway mobility.







# **SOLID ELECTROLYTE FOR CONSTRUCTION AND RENEWABLE ENERGY IN BUILDINGS**

The integration of solid electrolyte in building construction and renewable energy marks a significant advance. In solar energy storage systems, solid electrolyte optimizes efficiency, allowing for more effective capture and release of generated solar energy. Furthermore, in the management of surplus electrical energy, this technology offers an efficient and sustainable solution. By incorporating solid electrolyte into building batteries, storage capacity is improved, reducing dependence on the grid and maximizing the use of renewable energy. This innovative approach not only promotes energy self-sufficiency, but also contributes to environmental sustainability in modern construction and intelligent energy management.





# **BENEFITS OF INVESTING IN THE PROJECT**

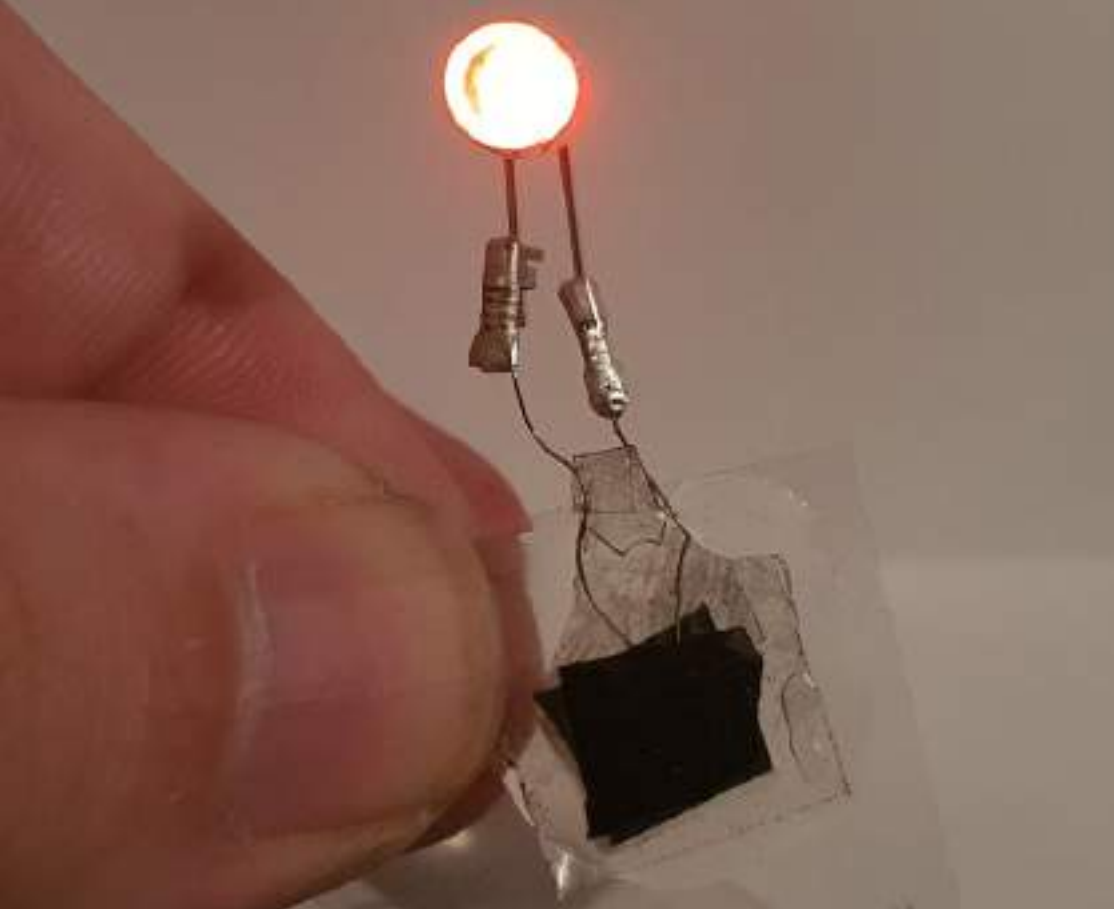
Investing in this solid electrolyte project offers notable advantages given the breadth and rapid growth of the market. A small investment can translate into significant benefits in a short period. Solid electrolyte technology has expansive applications in sectors such as electric vehicles, electronics and renewable energy, expanding the potential for return on investment. Furthermore, the constant advancement in demand for sustainable energy solutions supports the long-term viability of the project. Investing early in this innovative field not only capitalizes on emerging market opportunities, but also positions investors to reap substantial returns over a relatively short time horizon.





# WHY INVEST IN SOLID ELECTROLYTE?

Investing in solid electrolyte is an insightful strategy, given its transformative potential in various industries. This innovative component improves the efficiency and safety of batteries, driving the transition to more advanced energy storage solutions. Benefits include increased durability, reduced risk of short circuits, and application flexibility in electric vehicles, portable electronics, and more. With the continued growth of renewable energy, solid electrolyte is emerging as a key technology. Investing not only supports technological evolution, but also opens opportunities in a constantly expanding market, positioning itself as a strategic bet in the landscape of sustainable and technological investments.



# HOW CAN I INVEST IN THE PROJECT?

To participate in the project investment, there are two possible approaches. As an investor, you can acquire a percentage of the patent rights, which implies financial support for the project and obtaining proportional benefits when sales materialize. Alternatively, you can choose to become the exclusive purchaser of the patent, either in its entirety or for specific sectors. This modality grants you exclusive rights to solid electrolyte technology in those designated areas. Both options represent strategic ways to participate in this innovative project, allowing you to adapt your investment according to your financial objectives and participation preferences.





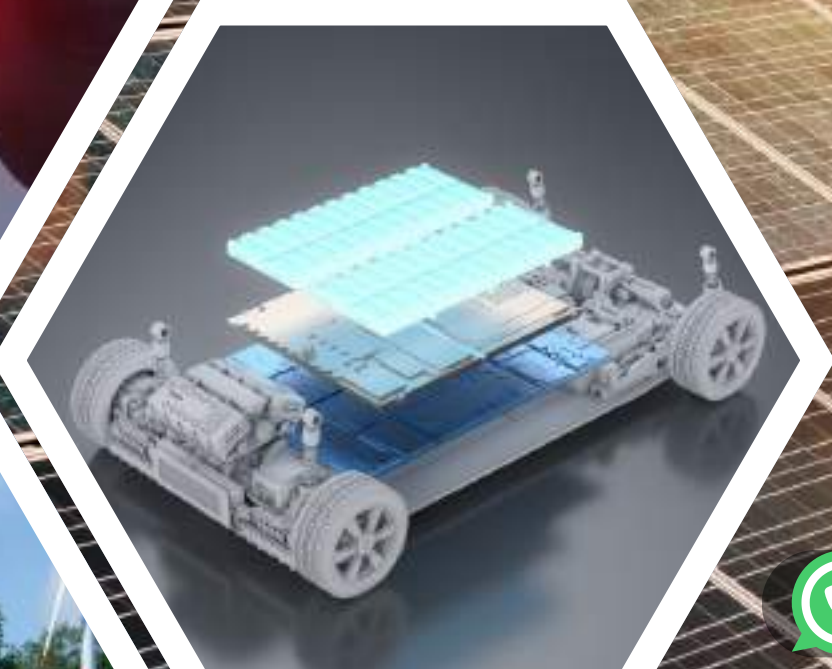
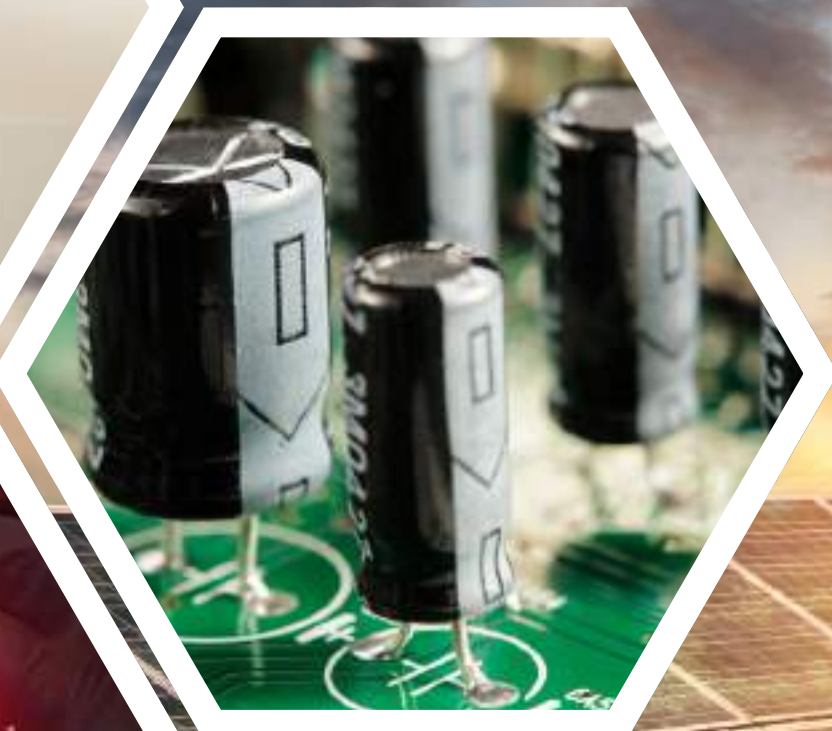


## **SOLID ELECTROLYTE, IS IT PATENTED?**

Yes, the solid electrolyte is patented and meets all the regulations necessary for a regulatory patent. The innovative formula was discovered by scientific researcher and inventor, Jorge Díaz-Crespo Valdés, marking a revolution in the energy storage technologies market. Patenting not only ensures legal protection of this invention, but also confirms its inventive novelty.

The patented solid electrolyte represents a milestone in the advancement of batteries and related technologies, highlighting the effort and significant contribution of Jorge Díaz-Crespo Valdés to the field of energy innovation. The application of this patented solid electrolyte promises to boost efficiency and safety in diverse applications, from portable electronics to renewable energy systems.





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