Our Company

Intecells, Inc. is a VC-funded startup based in Michigan, cofounded in 2018 by Dr. Xiaohong Gayden and Plasmatreat GmbH. Intecells invented cold plasma based additive manufacturing techniques to enable low-cost, high performing batteries in 3D printable shapes.

Our Innovation

The ever-increasing range of applications powered by batteries - such as smart devices, electric mobility, and energy storage - is driving drastic changes in the requirements for batteries. Intecells uses cold plasma powder coating (CPC) processes to produce binder-free electrodes and cells aiming to significantly reduce costs and carbon footprint associated with today's lithium-ion battery manufacturing.

This process innovation further enables the production of ultra-thick electrodes with tunable structures without trading high energy density for power performance. This solid-state process paves the way for Industry 4.0 in battery manufacturing and exciting products inspired by the 3D topologies and exceptional performance of batteries.
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INTECELLS

Manufacturing platform liberated from today's limitations across the entire battery value chain
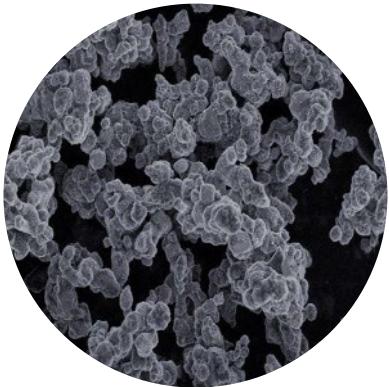
MATERIALS
Cost advantages through strategic partnerships

ELECTRODES
Electrodes for any chemistry, any shape, at any scale

BATTERY/CELL
You design it, we build it

PACK
"Powder to pack" technology with unlimited possibilities

INTECELLS

The Intecells Advantage
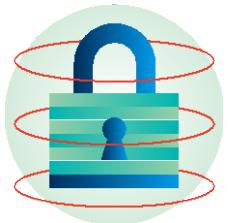
Safety & Cycle Life

- 10x improvement in electrode coating adhesion
- Improved separator stability
- Improved cycle life due to robust coating process and cell design
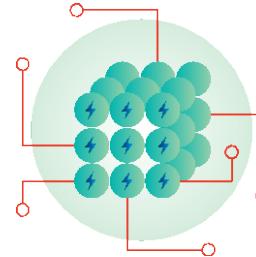
Power & Energy Density

- Over 2x Energy and Power Density of Battery Cell
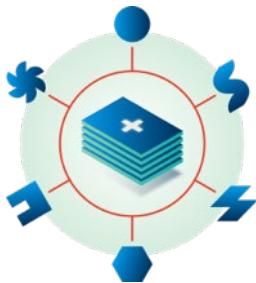
Size & Shape

- Limitless Battery Cell Shape & Configuration
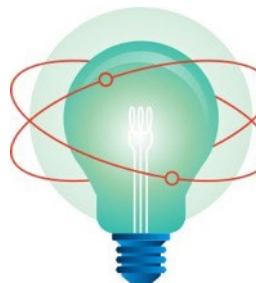
Footprint & Energy Usage

- 50x Less Electricity Consumption
- 60x Lower Manufacturing Footprint

Cost

- 93% Manufacturing Cost Reduction
- Over 40% Battery Cost Reduction

Environmental Impact

- 50% Lower Carbon Emissions
- No Toxic Solvents

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