

BATTERY STREAK®

2022

CHARGE LIGHTNING FAST

CATCH UP WITH Battery Streak!



Open for Business!

At the end of August, Battery Streak officially presented our new facility located in Camarillo, California. We held an open house with company employees, investors, partners, as well as friends and family. We celebrated with a ribbon cutting ceremony and tours of the new facility. We are thrilled to announce our new home!



Letter from the President

I'm proud to share that 2022 was an incredible year for Battery Streak.

We celebrated our 5-year anniversary with an Open House at our new production facility in Camarillo, CA. Our demonstration cells have gone to companies around the world, and we are now producing 800 mAh, 1 Ah, and 3 Ah pouch cells to satisfy various requirements for customer testing protocols.

Our team has presented live demonstrations of our fast-charging technology at various trade shows and for prospective customers. Battery Streak has joined both NAATBatt International and the Soteria Battery Innovation Group focused on standards and safety for advanced batteries. We've also presented to the Department of Energy for their Li-Bridge effort to strategically support the US battery supply chain.

DoD interest continues to grow including our acceptance and participation at the Advanced Naval Technology Exercise - Coastal Trident '22 with a Technology Demonstration. Our work continues with NSWC Crane and we are currently awaiting final approval for an OECIF FY '23 project; our materials are also showing promising results in testing by the US Army.

We have received and shipped our first commercial orders and are in discussions with prospective partners to increase production by

200 times our in-house capability.

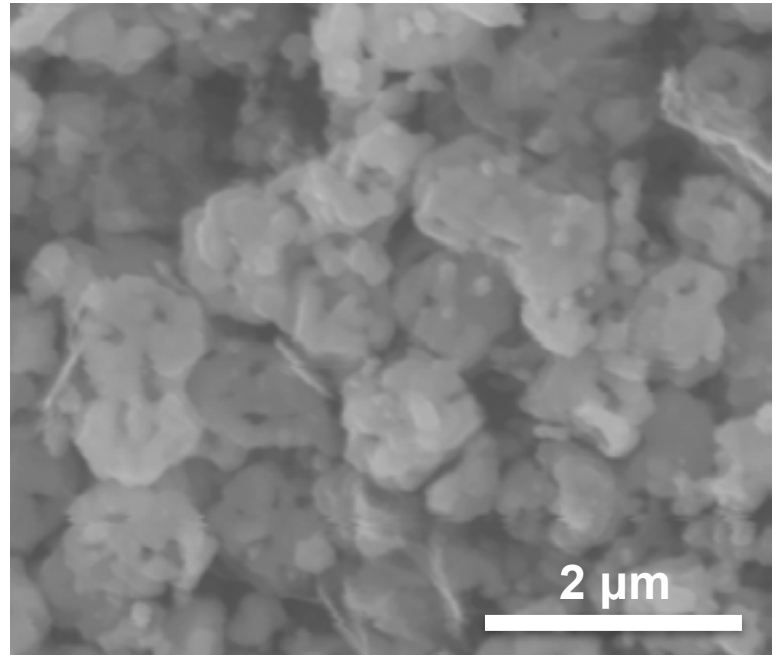
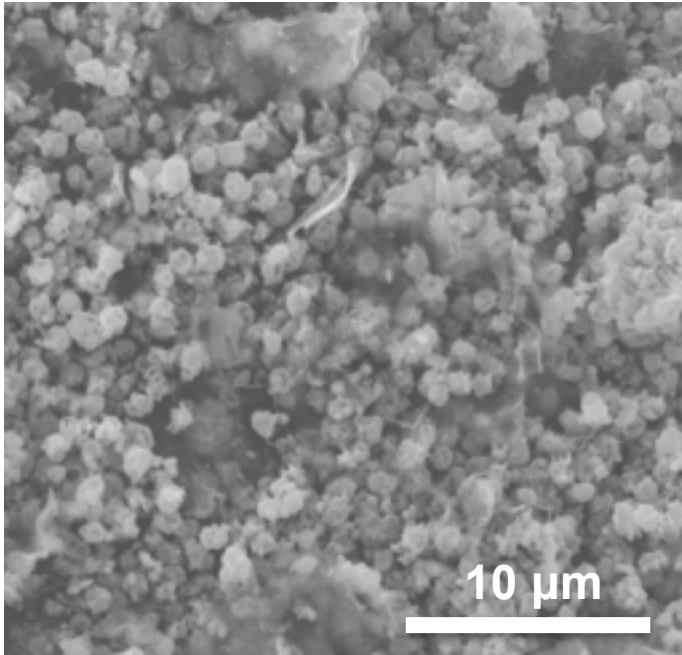
This is an exciting period in our growth and I could not be more proud of all the great work of our small and agile team. On that note, I would like to thank all of our investors, vendors, partners, and supporters that enable our continued success. I look forward to sharing the highlights of our activity that is coming in 2023.

My best wishes to everyone for a safe happy holiday season!

Sincerely,

David Grant





Our Unique Materials!

Nanostructured Anode & Cathode

We have partnered with CBMM, the leader in production and commercialization of Niobium products. By including Niobium into our battery material, we are able to produce the fast charging and low thermal results that set Battery Streak apart from other battery technologies.

Battery Streak in the News

Undecided with Matt Ferrell

Matt Ferrell featured us on his youtube channel, "Undecided", generating over 693,000 views where we explained our fast charging technology, and how it works.

We were also featured on Matt Ferrell's second channel, "Still TBD", where the conversation is continued, and the full interview with Dan Alpern is available.

[watch here](#)

"In 2017, UC Los Angeles licensed its technology to a California startup called Battery Streak. Last month, the company reported it has made palm-size "pouch" cells capable of charging to 80% of capacity in just 10 minutes." - Science.org (right)

Science Magazine

We have been discussed in Science Magazine and on science.org! They explain California's phase out of gas-powered vehicles, the push for improved battery technology, and how our unique use of Niobium may be the answer. [read more](#)

Science

AAAS

CHEMISTRY

California EV rules jolt battery science

Move to phase out gas-powered cars will force progress toward faster charging batteries

By Robert F. Service

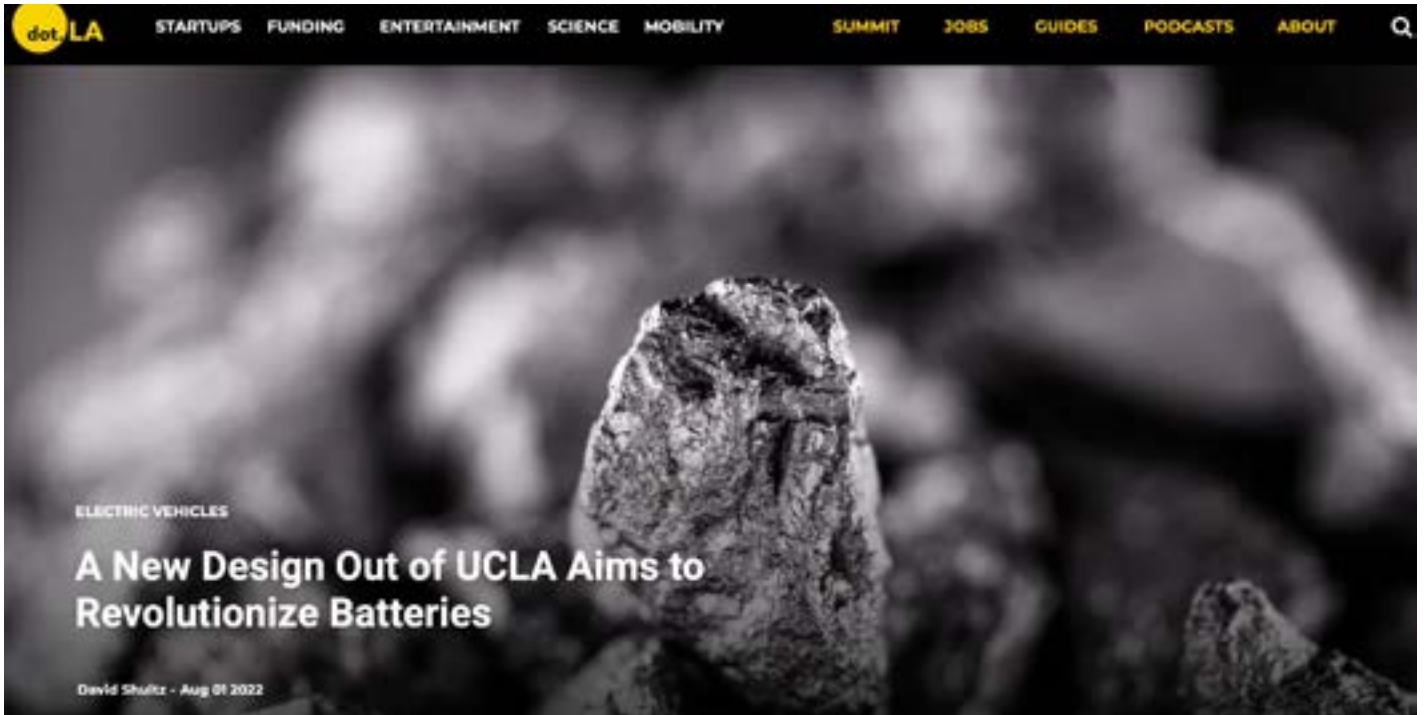
California, known for leading the United States in climate regulations, dropped a bombshell last month: By 2035, the state will ban sales of new gasoline-powered cars and light trucks. Most new car sales are expected to shift to battery-powered electric vehicles (EVs). But along with high prices and modest range, current EVs have another big drawback: They are slow to recharge.

Most EVs today use lithium-ion batteries in which one of the two electrodes, the anode, is made of graphite. Graphite has dominated the market because it's cheap, abundant, and able to store enough lithium ions to give cars a range of about 400 kilometers. During charging, the applied voltage pushes positive electrons into the graphite, allowing lithium ions from the other electrode, the cathode. As the car drives, the

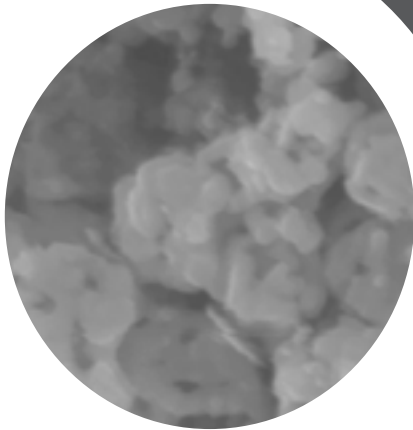
charge-carrying ions, to and others have already come up with promising candidates. Most EVs today use lithium-ion batteries in which one of the two electrodes, the anode, is made of graphite. Graphite has dominated the market because it's cheap, abundant, and able to store enough lithium ions to give cars a range of about 400 kilometers. During charging, the applied voltage pushes positive electrons into the graphite, allowing lithium ions from the other electrode, the cathode. As the car drives, the

to pile up into metal needles called dendrites that can short out the battery once it is nearly full. Even if that doesn't happen, high-voltage charging can cause irreversible structural changes in the graphite that shorten the battery's lifetime. A partial solution may come from gly changing the rates at which you recharging batteries are. On December 22, 2022, Nature paper Cal a colleague reported that doubling its charge rate for the first 3 minutes a h is to use essentially twice as much energy as 100 Wh batteries, which can run lithium-ion battery's lifetime by 20% make it stand up better to fast charge. Another emerging option is to study anode material alternatives. If those you Cal and others showed similar small silicon into because low-tech electrolyte can store and stable faster than. Each silicon atom is able to hold four lithium ions, compared with only one for the carbon atoms in graphite. But good silicon lithium atoms into a silicon must cause the anode material to swell up a times its size. And repeatedly charging and discharging the battery typically push the silicon, killing the battery. More research, Cal and others have a research modifications to the structure





Getting Involved in Local News



Dot.LA

We worked with author David Shultz, who writes about the UCLA technology that Battery Streak has brought to market.

[read more](#)

PCBT

The Pacific Coast Business Times wrote an article and spoke on local news television highlighting how Battery Streak will improve the battery industry.

[read more](#)

Camarillo's Battery Streak charges ahead with tech to improve batteries

By Jorge Mercado / Thursday, June 9th, 2022 / Latest news, Regions, Top Stories, Top Story, Ventura County / Comments Off



Better batteries are the key to unlocking countless technological and environmental improvements, from longer life cycles on smartphones to hybrid cars that can recharge in minutes instead of hours to a greener electrical grid. Battery Streak, a startup based in Camarillo, is one of the companies leading the charge in that space. It has begun [Read More](#)

→

LATEST



Battery Scientist, Matt Lai, PhD explains our unique production process.

Facility Tours & Ribbon Ceremony



Professor Sarah Tolbert and the Battery Streak team cut the ribbon for our open house celebration.

City leaders, industry partners, friends and family cheer on the opening of our new facility in Camarillo, California.



Battery Streak on the Road

In 2022, Battery Streak traveled all over the United States to participate in conferences and display our fast charging technology!

Battery Streak attended NAATBatt International in Litchfield, Arizona. We traveled to Novi, Michigan to participate in The Battery Show. The Battery Streak team split up to simultaneously attend both the International Battery Seminar in Orlando, Florida as well as MODEX in Atlanta, Georgia. Then we participated in the ANTX-CT22, a military exercise at Fathomwerx hosted by NSWC PHD in Port Hueneme, California.



International Battery SEMINAR & EXHIBIT **March 28-31 Orlando, FL**

MODEX²⁰²⁴
 GEORGIA WORLD CONGRESS CENTER
 ATLANTA | MARCH 11-14
MODEXSHOW.COM
 powered by MHI

THE BATTERY SHOW
 NORTH AMERICA

NAATBatt
 INTERNATIONAL

ADVANCED BATTERY WEEKLY
 A Weekly Publication of NAATBatt International



"Mr. Jimmy Smith (pictured left) who is the director of the department of the Navy's office of Small Business Programs... I can attest his dedication, rigor, and commitment to the programs and people that he works with" - FATHOMWERX Summit 2022

Looking Ahead... 2023

Come see us at....

- NAATBatt: February 20-23 in Litchfield, AZ
- International Battery Seminar: March 20-23 in Orlando, FL
- Navy Gold Coast: July 26-28 in San Diego, CA
- The Battery Show: September 12-14 in Novi, MI
- ANTX-CT23: September 27 in Port Hueneme, CA
- More TBA!

Say Hello!

<https://batterystreak.com>

email: dalpern@batterystreak.com

Battery Streak Team

President **David Grant** || Battery Scientist **Chun-Han "Matt" Lai, PhD** ||

Vice President Business Development **Randy Lowe** ||

Vice President Marketing & Communications **Dan Alpern** ||

Process Engineer **Geoff Hanson** || Marketing Intern **Rayna Grant**