

November 16, 2022

**VIA EDGAR**

U.S. Securities and Exchange Commission  
Division of Corporation Finance  
Office of Manufacturing  
100 F Street, N.E.  
Washington, DC 20549-3720

Attn: Erin Donahue  
Erin Purnell

**Re: Amprius Technologies, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed October 25, 2022  
File No. 333-267691**

Ladies and Gentlemen:

On behalf of our client, Amprius Technologies, Inc. (“**Amprius**” or the “**Company**”), we submit this letter in response to the oral comments from the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) as verbally communicated on November 7, 2022, relating to the above referenced Amendment No. 1 to Registration Statement on Form S-1 submitted to the Commission on October 25, 2022 (the “**Registration Statement**”). We are concurrently filing via EDGAR Amendment No. 2 to the Registration Statement (“**Amendment No. 2**”).

In this letter, we have recited the comments from the Staff in italicized, bold type and have followed each comment with the Company’s response. Except for page references appearing in the headings and Staff comments below (which are references to the Registration Statement submitted on October 25, 2022), all page references herein correspond to the pages of Amendment No. 2.

**Form S-1 filed on October 25, 2022**

**General**

- 1. We note your registration statement on Form S-1 (File No. 333-267683) is currently under review and that we issued comments on November 7, 2022. To the extent applicable, please make the changes we have requested in our other comment letter to this registration statement as well.***

The Company acknowledges the Staff’s comment and respectfully advises the Staff that, to the extent applicable, it has made the changes requested in the other comment letter to the Registration Statement.

AUSTIN BEIJING BOSTON BOULDER BRUSSELS HONG KONG LONDON LOS ANGELES NEW YORK PALO ALTO  
SALT LAKE CITY SAN DIEGO SAN FRANCISCO SEATTLE SHANGHAI WASHINGTON, DC WILMINGTON, DE

Securities and Exchange Commission  
November 16, 2022  
Page 2

If you have any questions or comments regarding this letter and the responses set forth above, please direct the questions to me or Austin D. March at mbaudler@wsgr.com or 650-320-4597 and amarch@wsgr.com or 512-338-5410, respectively.

Respectfully Submitted,

/s/ Mark B. Baudler

Mark B. Baudler

Wilson Sonsini Goodrich & Rosati, P.C.

cc: Dr. Kang Sun, Amprius Technologies, Inc.  
Sandra Wallach, Amprius Technologies, Inc.  
Michael Danaher, Wilson Sonsini Goodrich & Rosati, P.C.