

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. 333-267683**

Ladies and Gentlemen:

On behalf of our client, Amprius Technologies, Inc. (“**Amprius**” or the “**Company**”), we submit this letter in response to comments from the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) contained in its letter dated 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 page of Amendment No. 2.

Form S-1 filed on October 25, 2022

Business, page 79

- 1. We note your response to prior comment 2. In light of the inclusion of the Public and Private Warrant exercise price, please expand your discussion of capital resources to address any changes in the company’s liquidity position since the business combination.***

The Company has revised the disclosure on page 79 in response to the Staff’s comment.

- 2. We note your response to prior comment 3. Please revise your disclosure to state that this offering involves the potential sale of a substantial portion of shares for resale.***

The Company has revised the disclosure on page 79 in response to the Staff’s comment.

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General

- 3. We note your response to prior comment 10. Please also add risk factor disclosure that states that UBS Securities is disclaiming any responsibility for the Form S-4 registration statement.**

The Company has revised the disclosure on pages 27 to 28 in response to the Staff's comment.

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.