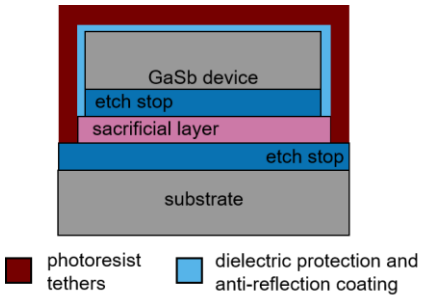


Fig. 1. Cross-sectional schematic of GaSb devices grown by MBE on top of lattice matched sacrificial layers and etch-stop layers. The membranes are protected with a dielectric protetion/antireflection coating (blue) and photoresist (red).

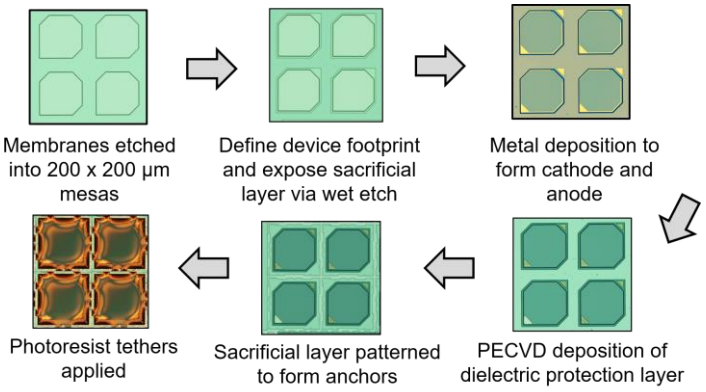


Fig. 2. Processing flow for GaSb photovoltaic microcells of 200 µm side lengths, prior to immersion in the selective etch solution.

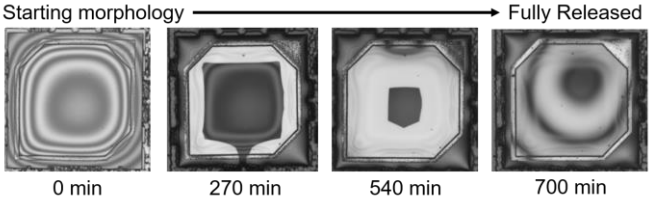


Fig. 3. IR microscopy images of AlGaAsSb membranes during selective release. The InAsSb sacrifical layer (dark region) recedes until an interference pattern indicates the chiplet has been fully released. Adapted from [2].

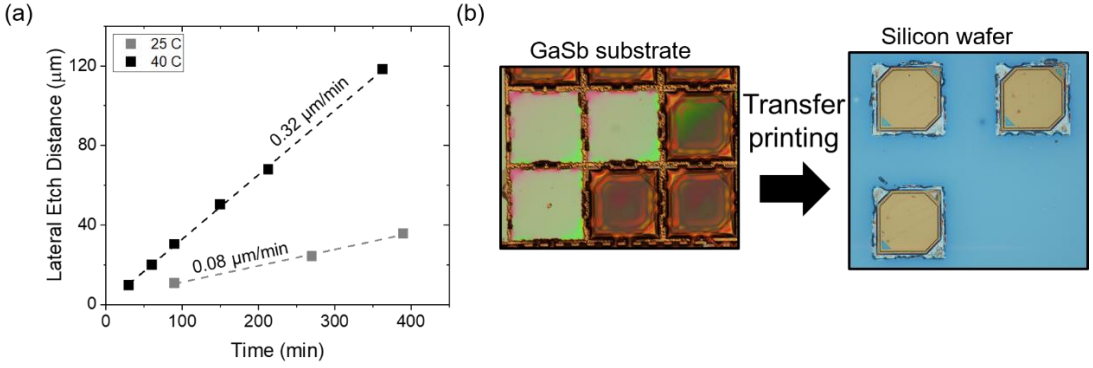


Fig. 4. (a) Lateral etch distance as a function of time in etch solution for 1:4 $C_6H_8O_7$:$H_2O_2$ at 25 and 40 °C. The lateral etch rates for each temperature are noted. (b) Sample after micro-transfer printing, showing the empty spaces left on the native substrate (left) and the AlGaAsSb membranes transferred to a silicon handle (right). Adapted from [2]

[2] M. Stevens "Antimonide Photonic Power Converters Assembled Through Micro-Transfer Printing" NRL Memorandum Reports. DTIC AD1211213 (2023)