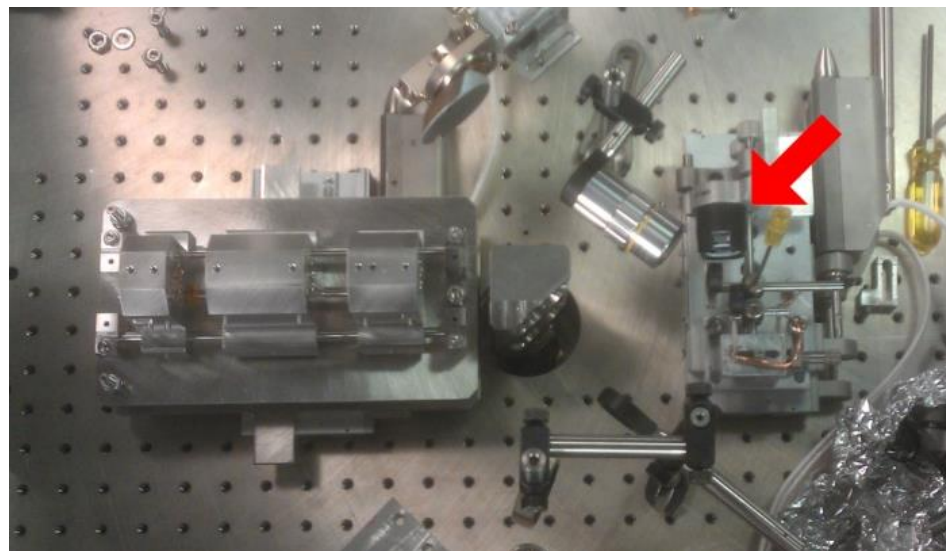
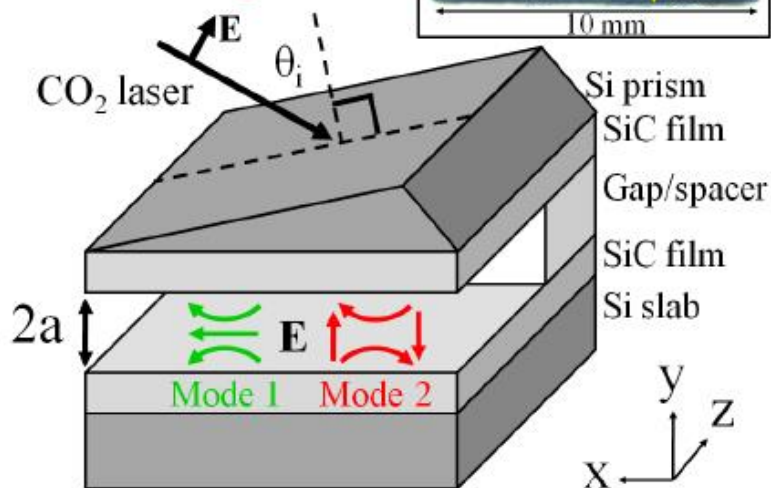
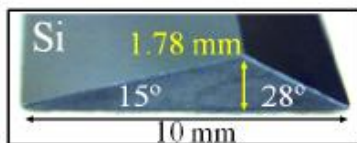
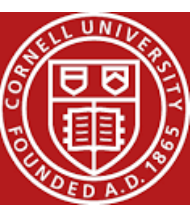


# Beam-driven Surface Wave Accelerator Based on Silicon Carbide

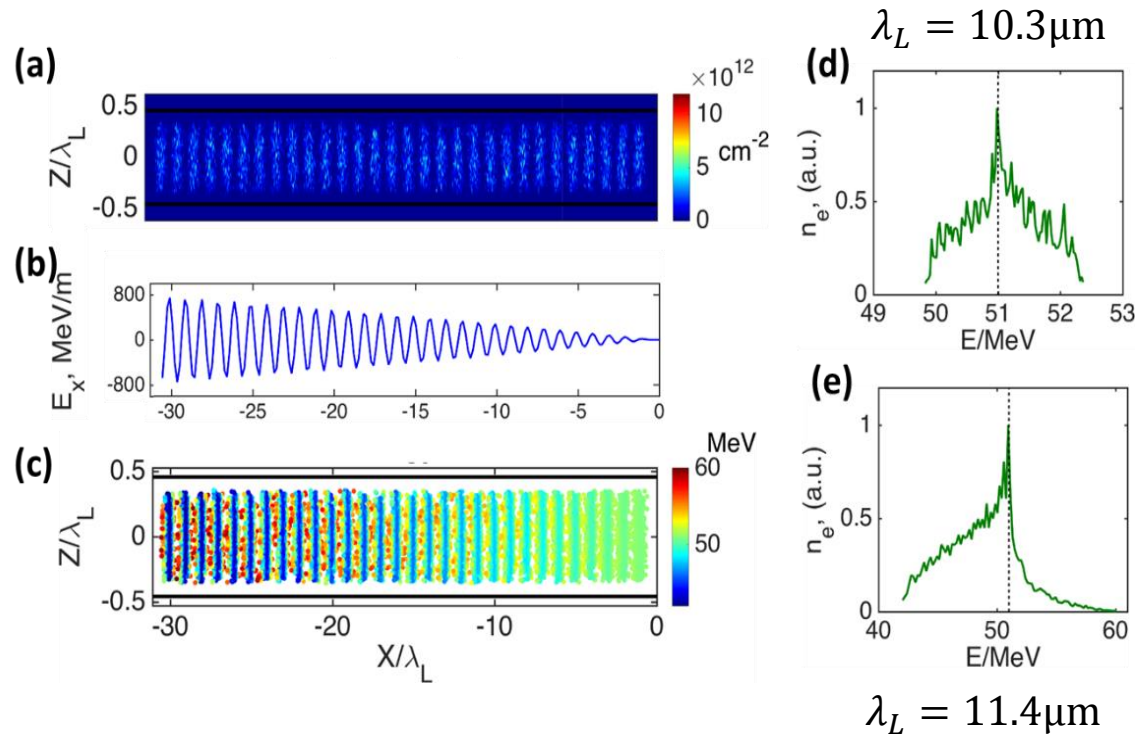
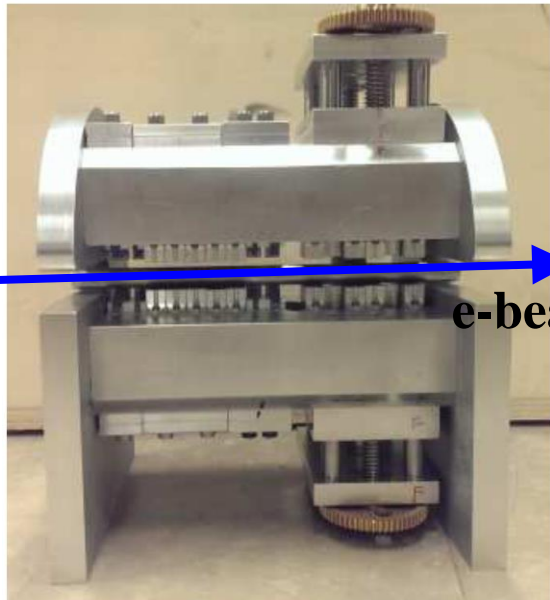
Gennady Shvets, Cornell University

Accelerating mode 1 and  
non-accelerating mode 2





# Laser bunching of the driver beam



- Strong preference: to operate between  $\lambda = 10.7 \mu\text{m}$  and  $\lambda = 11.4 \mu\text{m}$
- Presently the CO<sub>2</sub> laser runs at  $\lambda = 10.3 \mu\text{m} \rightarrow$  no luminous surface waves
- Need to have the capability to use a different isotope mixture