fabricating better nanopores

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Nanopores are incredibly versatile but  hard to fabricate with high precision using today's techniques

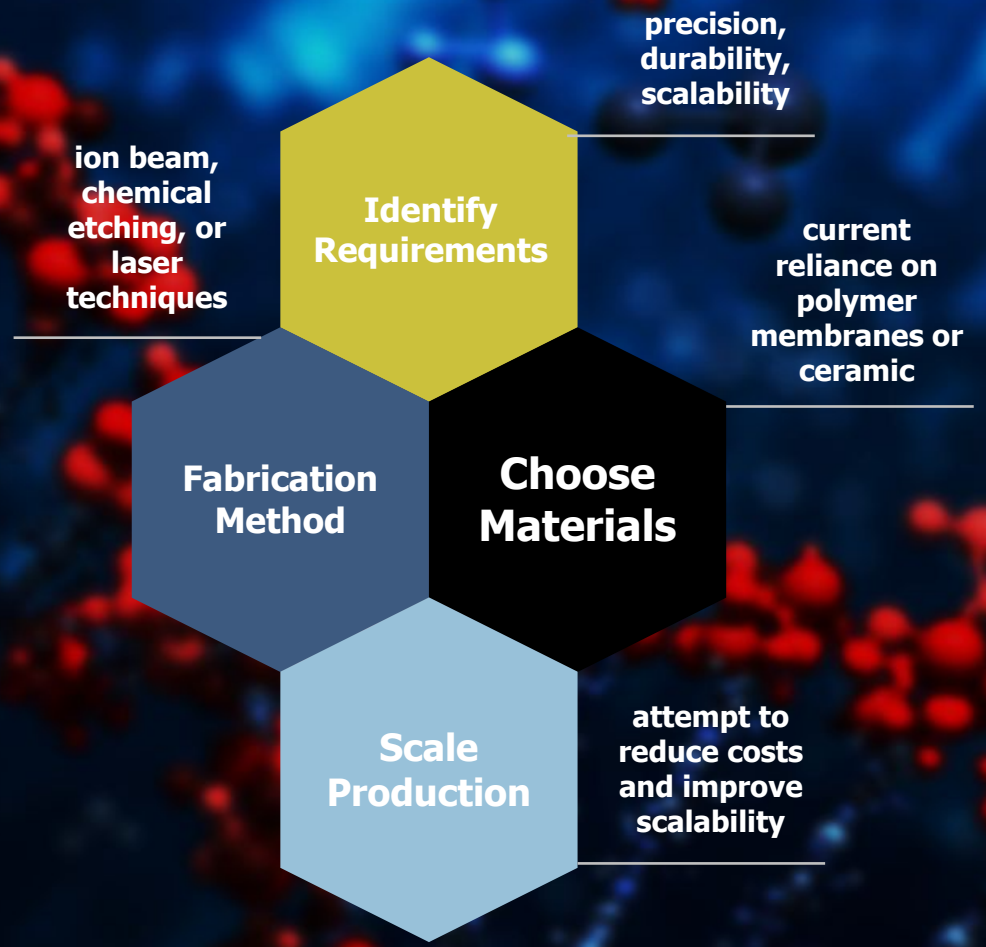
Source: From Presentation for Deep Tech Commercialization Strategies

>80% of current nanopore fabrication methods fail to meet precision, durability, or scalability requirements

difficult task: current fabrication techniques struggle to achieve consistent control over pore size and shape

high cost: advanced methods like ion beam sculpting are prohibitively expensive for mass production

low success rate: existing technologies are limited to small-scale, high-cost applications, unsuitable for broader market adoption



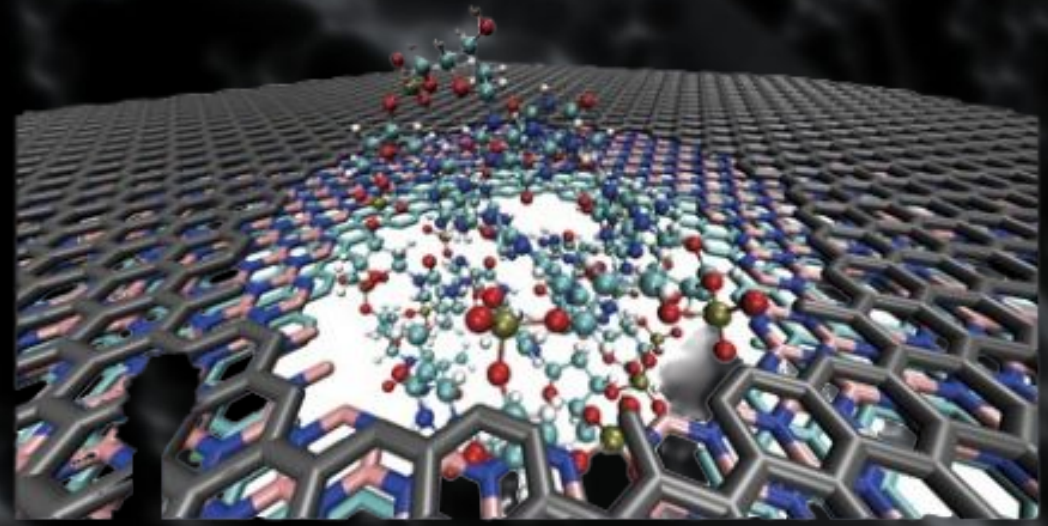
Source: From Presentation for Deep Tech Commercialization Strategies

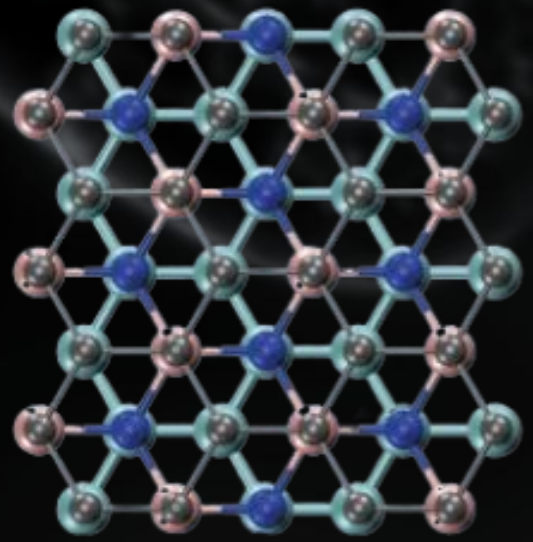
A cutting-edge platform that revolutionizes molecular analysis by enabling precise and efficient sampling for DNA sequencing, molecular separation, and advanced materials science

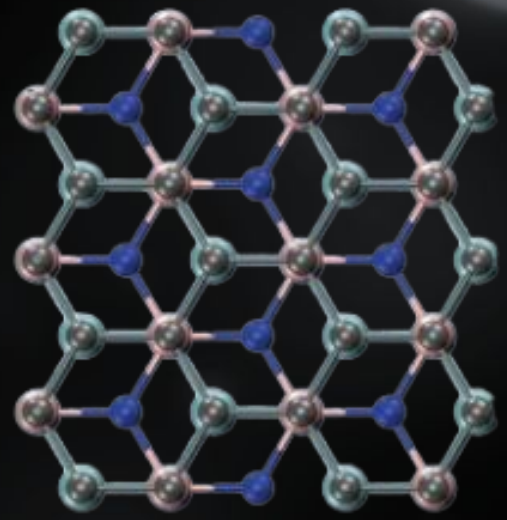
REAL-TIME PRECISION
Control pore size and shape with electron or ion beams for sub-nanometer accuracy

EXCEPTIONAL DURABILITY
Hexagonal Boron Nitride (h-BN) offers unparalleled chemical and thermal stability, ensuring long-lasting performance.

HIGH REPRODUCIBILITY
Consistent results across fabrication processes, meeting rigorous application standards.





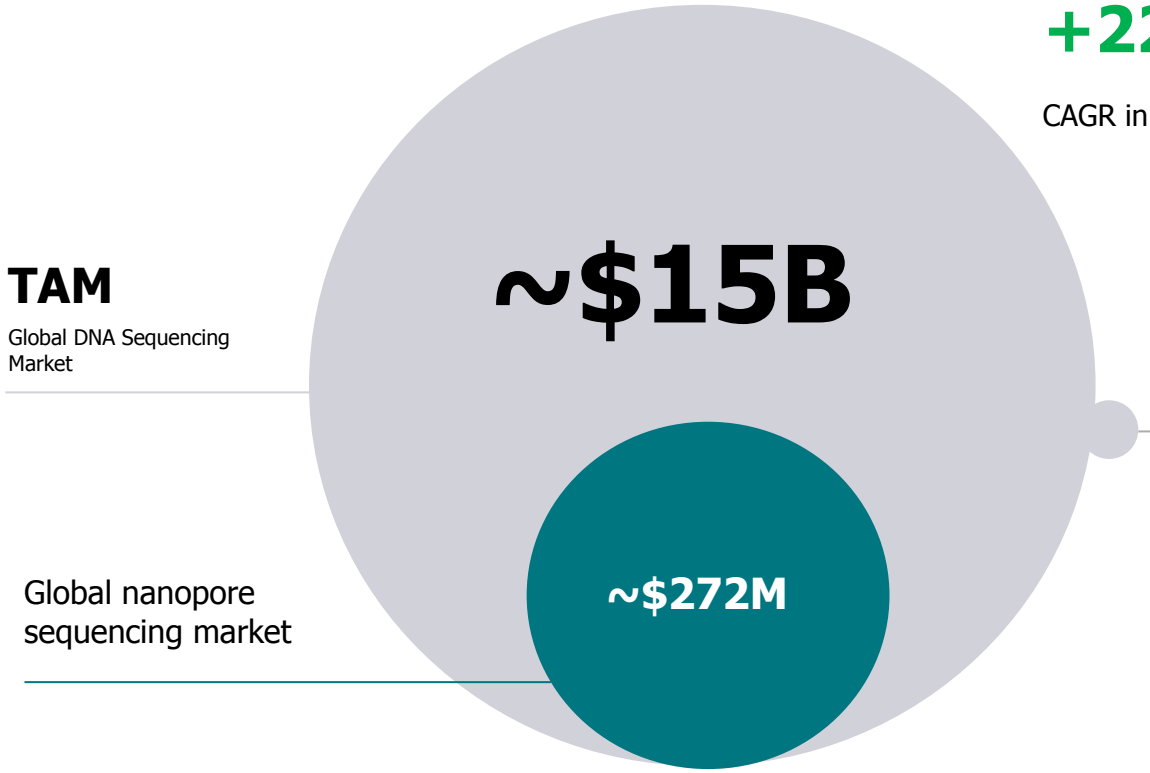


Source: From Presentation for Deep Tech Commercialization Strategies

The global DNA sequencing market is evolving rapidly, offering diverse opportunities for value creation among key players

+22%

CAGR in DNA sequencing market



Key drivers of DNA sequencing and nanopore growth

- **technological advancements:** faster, more accurate, and cost-effective
- **personalized medicine demand:** Genetic-based tailored treatments
- **increased R&D investments:** pharma and government support for sequencing tech

Note: The global nanopore sequencing market, valued at $272M in 2023, is projected to grow at an 11.2% CAGR, reaching $706M by 2032

US companies, particularly Illumina (90% market share of clinical genomics testing) and Thermo Fisher Scientific, are considered market leaders in the DNA sequencing industry

Source: Expert Market Research. (2024). Nanopore sequencing market report. Retrieved from https://www.expertmarketresearch.com/reports/nanopore-sequencing-market
Straits Research. (2024, November 11). DNA sequencing market size to hit USD 74.89 billion by 2033. GlobeNewswire.

Accelerating nanopore innovation and adoption

Transformative licensing partnerships

Collaborating with industry leaders like Illumina and PacBio to integrate our nanopore technology into their established platforms, ensuring rapid scalability and market access.

illumina PacBio

Empowering startups for niche applications

Partnering with agile startups to explore high-value, low-volume markets such as advanced DNA sequencing and molecular analysis. Startups will de-risk and refine the technology.

STARTUP

Source: From Presentation for Deep Tech Commercialization Strategies