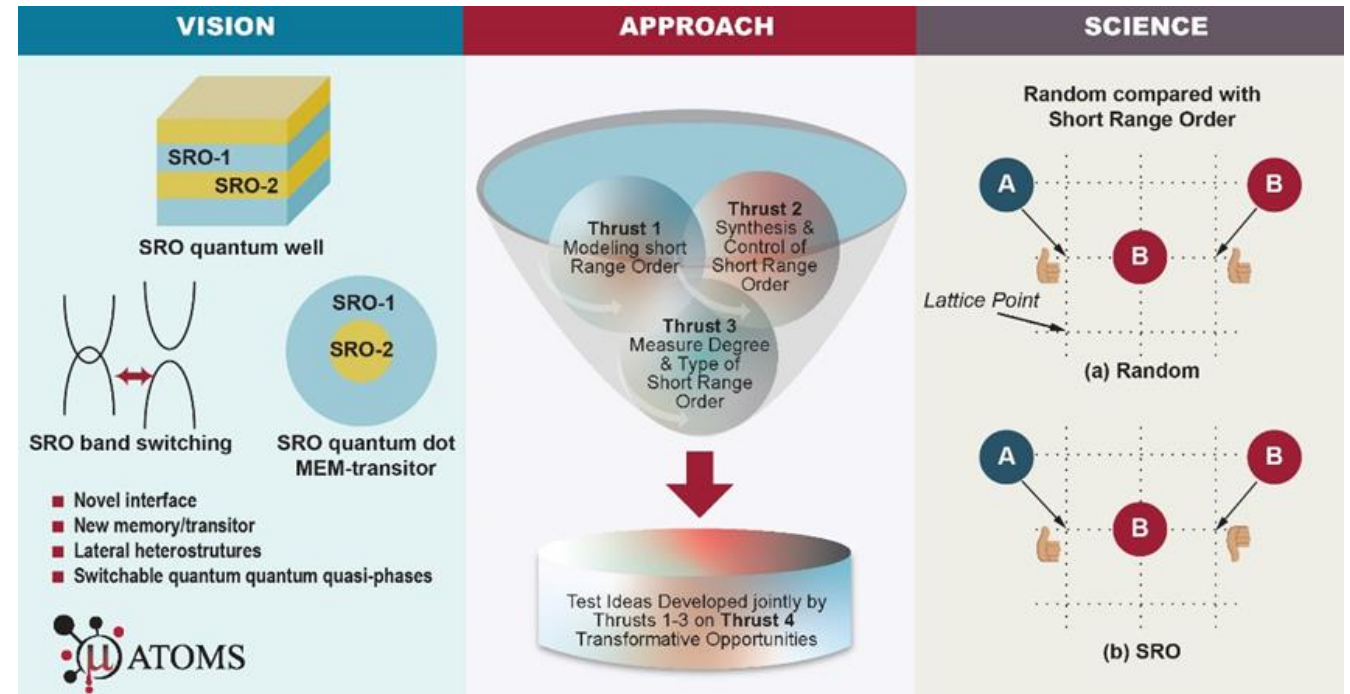


# Manipulation of Atomic Ordering for Manufacturing Semiconductors ( $\mu$ -ATOMS)

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**MISSION:** To discover the underlying science principles determining the ordering of atoms in semiconductor alloys.

**RESEARCH PLAN:**  $\mu$ -ATOMS models both material and structure to guide fabrication, develops and demonstrates new synthesis tools and techniques, uses a suite of new characterization tools to develop the measurement ability, and controls atomic order in semiconductor alloys for transformative opportunities enabled by the new optical, electrical, quantum, and structure transition properties.



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