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Morphological Control and Kinetics in Three Dimensions for Hierarchical Nanostructures Growth by Screw Dislocations

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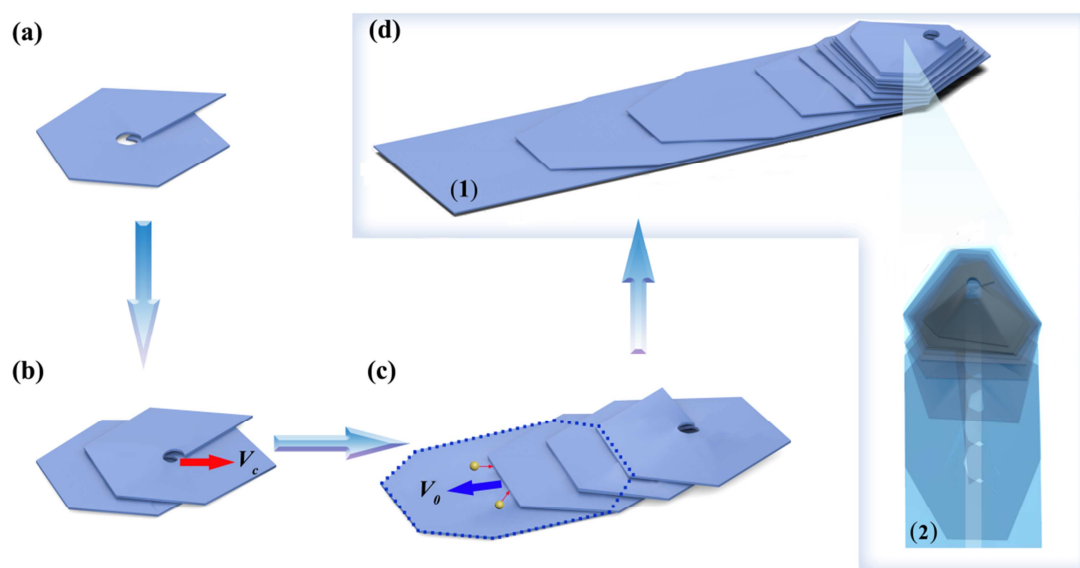
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Graphical Abstract



By programming synthesis conditions, we achieve a controllable 3D screw dislocation growth of previously unreported hierarchical hollow nanobelts via a facile CVD approach. More importantly, we propose a new 3D screw dislocation growth model with considering of transition in growth velocities and directions to interpret the formation of the nanobelts.

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