







第354回GMSI公開セミナー/第177回CIAiSセミナー/第99回WINGSセミナー

CVD growth of 1D and 2D transition metal chalcogenides

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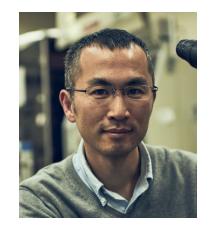
Department of Physics, Tokyo Metropolitan University

Date: Thursday, 17th June, 2021 14:00-15:00

Venue: Online (zoom)

Abstract:

Recently, transition metal chalcogenides have attracted much attention because of their structure variety and unique physical properties. To explore their properties and potential applications, it is important to develop large-scale and controlled growth processes of these materials. In this talk, I will show our recent studies on chemical vapor deposition (CVD) growth of 1D and 2D transition metal chalcogenides (TMCs) including atomically-thin wires [1], nanotubes, ribbons, and sheets [2]. I will also present that these TMC crystals can be used as a building block to create macroscopic stacking structures with desired properties through van der Waals interaction.



[1] H.E. Lim et al., Nano Lett., 21 (2021) 243.

[2] K. Kobayashi et al., ACS Nano, 13 (2019) 7527.

主催: 東京大学大学院工学系研究科専攻間横断型教育プログラム 機械システム・イノベーション (GMSI)

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