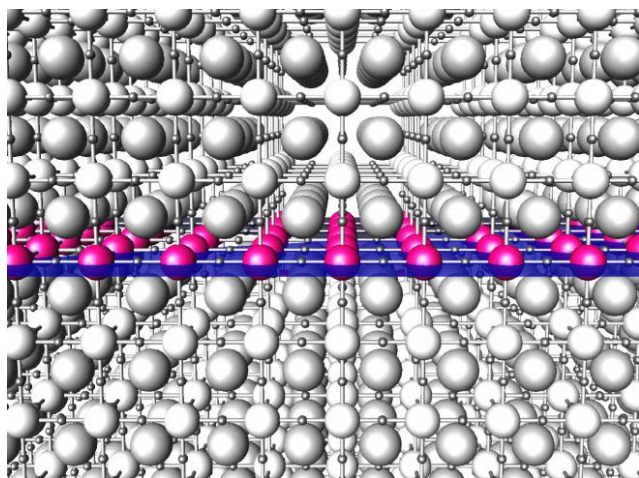


# 二次元電子系の熱電出力因子の倍化

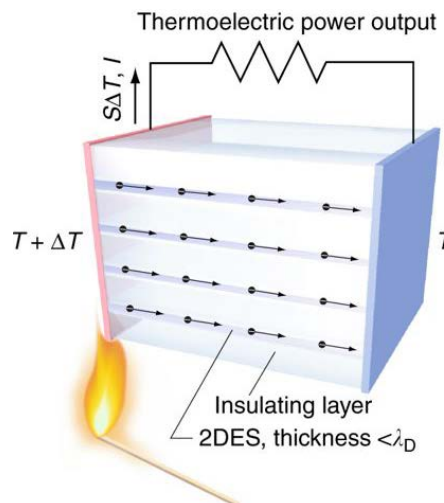
(北大情報) 張 雨橋, (東大総研) フウビン, (京大) 林 博之,  
(台湾・国立交通大学) Cheng-Ping Chang, Yu-Miin Sheu, (京大) 田中 功, (東大) 幾原雄一,  
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## Double thermoelectric power factor of a 2D electron system

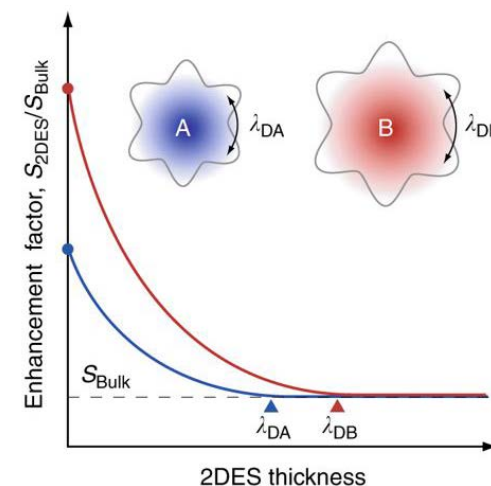
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Electron sandwich doubles thermoelectric performance



2D electron system (left) shows an enhanced thermopower ( $S$ ). The enhancement factor strongly depends on the de Broglie wavelength (right).



狭い空間に電子を閉じ込めることで、熱を電気に変換する熱電材料の性能が従来比2倍に増強できることを、初めて実証しました。

We experimentally clarify that an enhanced two-dimensionality is efficient to enhance thermoelectric power factor.