



DEVELOPMENT OF p - $\text{Mn}_{1-x}\text{Ag}_x\text{Si}_{1.75-y}\text{Bi}_y$ and
 n - $\text{Mg}_{2-x}\text{Ag}_x\text{Si}_{1-y}\text{Bi}_y$ THERMOELECTRIC DEVICES

DISSERTATION

By

KUNCHIT SINGSOOG

A Thesis Submitted in Partial Fulfillment of the Requirements for
Degree of Doctor of Philosophy in Physics Program
At Sakon Nakhon Rajabhat University

December 2018

All Rights Reserved by Sakon Nakhon Rajabhat University

DEVELOPMENT OF p - $\text{Mn}_{1-x}\text{Ag}_x\text{Si}_{1.75-y}\text{Bi}_y$ and
 n - $\text{Mg}_{2-x}\text{Ag}_x\text{Si}_{1-y}\text{Bi}_y$ THERMOELECTRIC DEVICES

DISSERTATION

By

KUNCHIT SINGSOOG

A Thesis Submitted in Partial Fulfillment of the Requirements for

Degree of Doctor of Philosophy in Physics Program

At Sakon Nakhon Rajabhat University

December 2018

All Rights Reserved by Sakon Nakhon Rajabhat University