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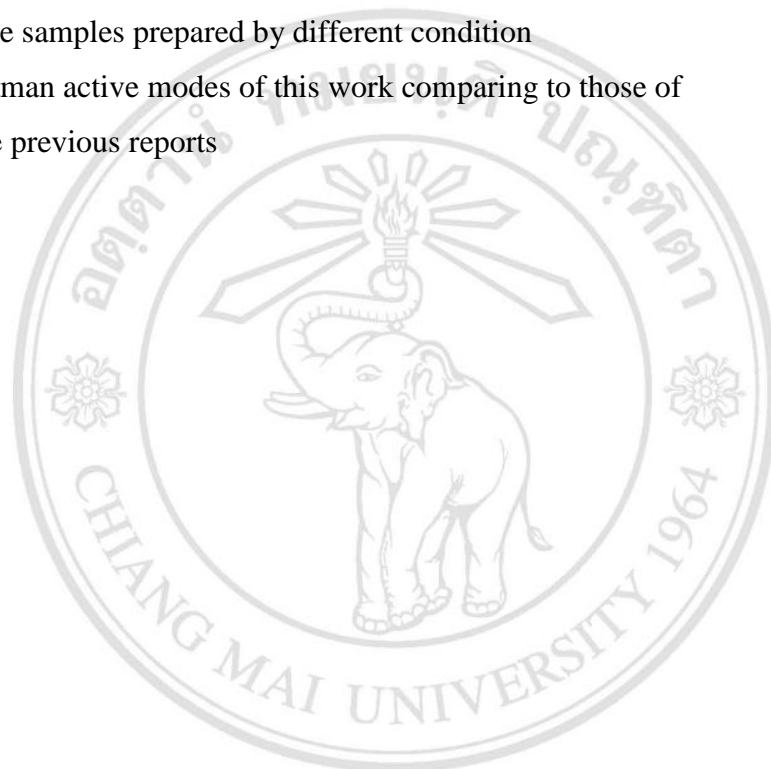
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LIST OF ABBREVIATIONS AND SYMBOLS

°C	=	Degree Celsius
eV	=	Electron Volt
g	=	Gram
h	=	Hour
mL	=	Milliliter
nm	=	Nanometer
µm	=	Micrometer
S1	=	Sample1
SAED	=	Selected Area Electron Diffraction
JCPDS	=	The Joint Committee for Powder Diffraction Standards
MW	=	Molecular Weight
FT-IR	=	Fourier-Transform Infrared Spectrometer
PL	=	Photoluminescence Spectrometer
SEM	=	Scanning Electron Microscope
TEM	=	Transmission Electron Microscope
XRD	=	X-ray Diffraction Spectrometer
EDX	=	Energy Dispersive X-Ray Spectroscopy
HRTEM	=	High Resolution Transmission Electron Microscope
SAED	=	Selected Area Electron Diffraction
θ	=	Theta (degree)

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ข้อความแห่งการริเริ่ม

1. ในงานวิจัยนี้ได้สังเคราะห์สารประกอบร่วมโครงสร้างนาโนของซิงก์ออกไซด์ซึ่งมีรูปร่างแบบอนุภาคนาโนและแท่งนาโนและไทเทเนียมไดออกไซด์ในขั้นตอนเดียวโดยวิธีไฮโดรเทอร์มอลได้สำเร็จ
2. สามารถนำสารประกอบร่วมนาโนของซิงก์ออกไซด์และไทเทเนียมไดออกไซด์ที่เตรียมได้นำไปสังเคราะห์สารประกอบซิงก์ไททาเนตบริสุทธิ์สูงและใช้คุณสมบัติและเวลาในการสังเคราะห์ที่น้อยที่มีโครงสร้างนาโนได้สำเร็จ
3. ได้ออกแบบแบบพิมพ์การสังเคราะห์ที่จำเพาะต่อโครงสร้างแท่งนาโนและได้นำไปประยุกต์ใช้กับการสังเคราะห์ซิงก์ไททาเนตโครงสร้างแท่งนาโนโดยไม่ต้องใช้ตัวช่วยในการสังเคราะห์ได้สำเร็จ

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STATEMENTS OF ORIGINALITY

1. In this research, zinc oxide in both of nanoparticles and nanorods and titanium dioxide were successfully synthesized by a hydrothermal method in single step.
2. The as-synthesized zinc oxide and titanium dioxide nanocomposites were successfully used as the precursors of zinc titanates nanostructures with high purities, low temperatures and short times.
3. New template method was successfully applied for synthesis of zinc titanate nanorods without using supporting materials.



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