ประวัติหัวหน้าคณะผู้วิจัย

ประวัติส่วนตัว

ชื่อ-สกุล นายฐิตินัย แก้วแดง

ตำแหน่งปัจจุบัน รองศาสตราจารย์ ระดับ 9

ประวัติการศึกษา

ปีที่จบการศึกษา	ระดับปริญญา	อักษรย่อปริญญา	สาขาวิชา	ชื่อสถาบันการศึกษา
2526	ปริญญาตรี	วท.บ.	ฟิสิกส์	จุฬาลงกรณ์มหาวิทยาลัย กรุงเทพฯ
2530	ปริญญาโท	วท.ม.	ฟิสิกส์	จุฬาลงกรณ์มหาวิทยาลัย กรุงเทพฯ
2536	ปริญญาเอก	Ph.D.	วัสดุศาสตร์	Bordeaux University I, France

สาขาวิจัยที่มีความชำนาญพิเศษ (แตกต่างจากวุฒิการศึกษา)

ฟิสิกส์ของแข็ง ฟิสิกส์ของสิ่งประดิษฐ์สารกึ่งตัวนำ

ผลงานวิจัย/งานสร้างสรรค์ที่ตีพิมพ์เผยแพร่ (ระดับชาติและนานาชาติ)

1. T. Gaewdang, Ng. Wongcharoen and T. Wongcharoen “Effect of Annealing Temperature on the Optical Parameters of CdS Thin Films Prepared by Thermal Evaporation Method” Advanced Materials Research, Vol. 747, 2013, pp. 329-332.
2. Ng. Wongcharoen, T. Gaewdang and T. Wongcharoen “Structural and Thermoelectric Properties of Zn-Doped Cuprous Aluminate Delafossite” Advanced Materials Research, Vol. 747, 2013, pp. 333-336.
3. Ng. Wongcharoen, T. Gaewdang and T. Wongcharoen “Determination of Gap State Density in n-CdS/p-$CuAlO_2$ Heterojunction” Asian Conference on Civil, Material and Environmental Sciences (ACCMES) 2013, March 15-17, 2013, Tokyo, Japan, Proceedings, pp. 2078-2088.

4. T. Gaewdang, Ng. Wongcharoen and T. Wongcharoen “Preparation and Characterization of CdS_xTe_{1-x} ($0 \le x \le 1$) Thin Films” Asian Conference on Civil, Material and Environmental Sciences (ACCMES) 2013, March 15-17, 2013, Tokyo, Japan Proceedings, pp. 2070-2077.
5. T. Gaewdang, Ng. Wongcharoen and T. Wongcharoen “Characterization of CdS/CdTe Heterojunction Solar Cell by Current- Voltage Measurements at Various Temperatures under Illumination”, Energy Procedia, vol. 15, 2012, pp. 299-304.
6. Ng. Wongcharoen, T. Gaewdang and T. Wongcharoen “Electrical Properties of Al-Doped CdO films Prepared by Thermal Evaporation in Vacuum” Energy Procedia, vol. 15, 2012, pp. 361-370.
7. T. Gaewdang, Ng. Wongcharoen, A. Nopparuchikun, T. Wongcharoen and C. Poo-Rakkiat “Fabrication and Characterization of Heterojunction of CdS Thin Films and $CuAlO_2$ Ceramic Pill Substrate” Journal of Metals, Materials and Minerals, vol. 22(2), 2012, pp. 125-129.
8. Ng. Wongcharoen and T. Gaewdang, “Thermoelectric Properties of Ni-Doped $CuAlO_2$” Physics Procedia, vol.2, 2009, pp.101-106.
9. Wongcharoen, T. Gaewdang, P. Siripuddhaiwon and N. Promros “Influence of Substrate Temperature on Some Properties of Close-Spacing Thermal Evaporated CdTe Thin Films” Advanced Materials Research, Vol. 55-57, 2008, pp.881-884.
10. T. Gaewdang and Ng. Wongcharoen “Optical and Electrical Properties of Chemical Bath Co-Deposited CdS-ZnS Thin Films” ISES Solar World Congress 2007, September 18- 21, 2007, Beijing, China, Proceedings, pp.1299-1302.
11. Ng. Wongcharoen and T. Gaewdang “Co-existence of F and Sb Dopant in Transparent Conducting SnO_2 Thin Films Prepared by Ultrasonic Spray Pyrolysis Method” ISES Solar World Congress 2007, September 18- 21, 2007. Beijing, China, Proceedings, pp.1269-1274.
12. T. Gaewdang and Ng. Wongcharoen “Growth and Characterization of Co-Doped Fluorine and Antimony in Tin Oxide Thin Films Obtained by Ultrasonic Spray Pyrolysis” Journal of Solid Mechanics and Material Engineering, Vol. 1, No. 4, 2007, pp.592-601. (ผู้วิจัยหลัก)
13. T. Gaewdang “Investigations on Chemically Deposited $Cd_{1-x}Zn_xS$ Thin Films With Low Zn Content” Materials Letters, Vol.59, 2005 pp. 3577- 3584.

14. Ng. Wongcharoen and T. Gaewdang "Comparative Studies of Thermally Evaporated $Cd_{1-x}Zn_xS$ Thin Films Prepared by Using Different Precursors" Technical Digest of the International PVSEC-15, 10-15 October 2005, Shanghai, RPC. pp.694- 695.
15. T. Gaewdang and Ng. Wongcharoen "Optical and Electrical Properties of B-Doped $Cd_{0.6}Zn_{0.4}S$ Thin Films Prepared by Chemical Bath Deposition Method" Technical Digest of the International PVSEC-15, 10-15 October 2005, Shanghai, RPC. pp.696- 697.
16. Ng. Gaewdang and T. Gaewdang "Thickness Dependence of Structural, Optical and Electrical Properties of CdS and CdS:In Films Prepared by Thermal Evaporation" Technical Digest of the International PVSEC-14, Bangkok, Thailand. 2004, pp.581-582.
17. Ng. Gaewdang, T. Gaewdang and W. Lipar "Some Characterization of Chemical Bath Co-Deposited CdS- ZnS Thin Films" Technical Digest of the International PVSEC-14, Bangkok, Thailand. 2004, pp.583-584.
18. J.P. Chaminade, A. Garcia, T. Gaewdang, M. Pouchard, J. Grannec and B. Jacquier, "Reversible Photoionization Process in Luminescent Ce^{3+}-Doped Elpasolite-Type Fluoroindates", Radiation Effects and Defects in Solids, Vol. 135, 1995, pp. 137-146.
19. A. Garcia, T. Gaewdang, J.P. Chaminade, C. Fouassier, B. Varrel, B. Jacquier, M. Messous, B. Chambon and D. Drain, "Luminescence and Scintillation Properties of $In_2Si_2O_7$ ", Radiation Effects and Defects in Solids, Vol. 135, 1995, pp. 397-399.
20. Y. Messous, B. Chambon, M.De Jesus, D. Drain, C. Pastor, A. Garcia, J.P. Chambon, T. Gaewdang, C. Fouassier, B. Jacquier and B. Varrel, "Indium Disillicate, a New Fast Scintillator", Nuclear Instruments and Methods in Physics Research A. Vol. 354, 1995, pp. 527-529.
21. T. Gaewdang, "Coexistence of the Ce^{3+} and In^{+} luminescent Centres in Rb_2KInF_6 : Ce^{3+} Single Crystals", Thai Journal of Physics, Vol. 1, No.1, 1995, pp. 5-12.
22. T. Gaewdang, J.P. Chaminade, A. Garcia, M. Pouchard, P. Hagenmuller and B. Jacquier, "Luminescence of Ce^{3+} in the $In_xSc_{1-x}BO_3$ ($0 \leq x \leq 1$) Solid Solution", J. Phys. Chem. Solids, Vol. 55, No. 6, 1994, pp. 501-504.