

國立高雄大學應用物理學系 111 學年度第 1 學期
第 3 次系務會議紀錄

時間：民國 112 年 1 月 10 日(星期二)中午 12 時 10 分

地點：本系 523 會議室

主持人：胡裕民 系主任

記錄：陳俊凱

出席委員：謝振豪老師、韓岱君老師、廖英彥老師、邱昭文老師

缺席委員：黃建榮老師(出國請假)、孫士傑老師、馮世維老師、余進忠老師、
蔡進譯老師

列席人員：劉芯瑜、李宛真

主席報告：

1. 恭喜韓岱君老師獲選為本系 111 學年度教學優良教師。
2. 恭喜韓岱君老師獲選為本系 111 學年度優良導師。
3. 為慰勞各位老師這一年來對系上的支持與付出，農曆年後將擇日舉辦系上春迎聯歡餐會，屆時請各位老師共襄盛舉。
4. 若本系教師升等審查要點未及於本校訂定之時程內修訂通過，屆時若有教師提出升等，仍應以母法相關規定辦理升等相關事宜。

貳、 確認上次會議紀錄：確認。

參、 討論事項：

討論案

提案一 提案人：系主任

案由：討論系所評鑑實地訪評報告初稿之申復相關事宜，提請討論。

說明：如案由。

決議：

經與會委員討論過後，本次系所評鑑實地訪評報告初稿之申復內容文字修正後通過，如[附件 1](#)(p.3)。

提案二 提案人：系主任

案由：本系教師升等審查要點部分條文修正草案，提請討論。

說明：依人事室 111.12.9 便函辦理。

決議：

本案屬重大議案，出席委員未達三分之二(七人)，主席裁示本案緩議。

提案三 提案人：系主任

案由：重新修訂本系大學部專題實作課程改為必修課後之配套措施，提請討論。

說明：本案業經 108 學年度第 2 學期第 3 次系務會議討論通過：本系大學部「固

「固態材料專題實作(1)(2)」、「奈米光電專題實作(1)(2)」改為必修案之相關配套措施
如下：

	固態材料專題實作(1) 或 奈米光電專題實作(1)	固態材料專題實作(2) 或 奈米光電專題實作(2)
課程類別	必修	必修
學分數	1 學分	3 學分
開課年級	大三下學期	大四上學期
學期成績 配分方式	1. 專題指導教授成績佔 60% 2. 聽演講課出席率：20%(依該學期邀請演講次數，按比例計分) 3. 繳交專題期中進度報告(頁數不限)，需有指導老師簽名：20%	1. 指導老師成績：40% 2. 參加畢業專題展或五校聯展：20% 3. 繳交專題報告(頁數不限)，需有指導老師簽名：20% 4. 聽演講課出席率：20%(依該學期邀請演講次數，按比例計分)
可收專題生 人數	無限制	
專題耗材費	相關可支經費(非業務費)，酌量補助參加專題競賽或專題展學生之專題耗材費用	
施行年度	大學部自 109 學年度(含)後入學之學生適用	

決議：

本案屬重要提案，事關師生權益，應有更多委員參與討論為宜，主席裁示本案緩議。

肆、臨時動議：無

伍、散會：今日下午 1 時 5 分。

財團法人高等教育評鑑中心基金會
111 年度下半年大專校院委託辦理品質保證認可實地訪視報告初稿申復意見表

申復單位：國立高雄大學**應用物理學系**

品保項目	申復屬性	訪視過程或實地訪視報告 初稿內容	申復意見說明	檢附資料說明
二、教師與教學	<input type="checkbox"/> 違反程序 <input type="checkbox"/> 不符事實 <input checked="" type="checkbox"/> 要求修正事項	【共同部分】 該系教師授課時數偏重，雖在申請計畫方面已受到肯定，然論文指標因教學負擔過重，108 至 110 學年度國際學術期刊發表數為 17、5、2 篇，顯示教師研究表現較為薄弱，恐導致教師較少時間從事研究工作。(第 4 頁，待改善事項第 1 點)	本系教師當時資料蒐集時因事務繁忙，未如期提供相關資料，以致數據有誤，修正原自評報告如后： 1. 108 學年度國際學術期刊發表數：22 篇 2. 109 學年度國際學術期刊發表數：8 篇 3. 110 學年度國際學術期刊發表數：22 篇	附件 2-4-2-1 108-110 期刊論文清單總表。

【附錄 2-4-2-1】應用物理學系 108~110 學年度教師期刊論文資料(紅字為原有資料，黑字為本次修正)

序號	年度	著作名稱	作者	收錄
1	108 (2020.02)	On the Nitrogen Doping in Erbium and Nitrogen Codoped Magnesium Zinc Oxide Diode by Spray Pyrolysis	Chun-An Chen, Yu-Ting Hsu, Wen-How Lan, Kai-Feng Huang, Kuo-Jen Chang, Mu-Chun Wang and Chien-Jung Huang(黃建榮)	Crystals
2	108 (2020.04)	The Investigation for Coating Method of Titanium Dioxide Layer in Perovskite Solar Cells	Pao-Hsun Huang , Chien-Wu Huang, Chih-Chieh Kang, Chia-Hsun Hsu, Shui-Yang Lien, Na-Fu Wang and Chien-Jung Huang*(黃建榮)	Crystals
3	108 (2019.10)	Extraction of magnetic circular dichroism effects from blended mixture of magnetic linear dichroism signals in the cobalt/Scotch tape system	Chien-Hua Huang, Hua-Shu Hsu, Shih-Jye Sun(孫士傑), Yu-Ying Chang, Paweł Misiuna & Lech Tomasz Baczewski	Sci. Rep.
4	108 (2019.11)	Theoretical investigation of Hall sign change in SrRuO ₃	Shih-Jye Sun*(孫士傑), Hsiung Chou and Ssu-Ting Lin	J. Phys.: Condens. Matter
5	108 (2020.01)	Observing the three-dimensional terephthalic acid supramolecular growth mechanism on a stearic acid buffer layer by molecular simulation methods	Chia-Hao Su, Hui-Lung Chen, Shih-Jye Sun(孫士傑), Shin-Pon Ju*, Tsu-Hsun Houd and Che-Hsin Lin	Royal Society of Chemistry Advances
6	108 (2020.02)	Magnon profile on SrRuO ₃ films studied by inelastic neutron scattering	G. D. Dwivedi, C.-M. Wu, Bo-Yu Chen, S. T. Lin, W.-Z. Qiu, S. J. Sun*(孫士傑), Guangyong Xu, J. W. Lynn, J. W. Chiou, C.-H Lee, W.-H. Li, S. Yano, and H. Chou*	Physical Review B
7	108 (2020.03)	Theoretical model investigating the magnetic properties of cobalt-doped ZnO	Shih-Jye Sun*(孫士傑), L T Baczewski, P Wojnar, Da-Wei Xiao, Hsiung Chou, Hua-Shu Hsu and Yi-Ying Chin	J. Phys.: Condens. Matter

8	108 (2020.03)	Gate voltage impact on charge mobility in end-on stacked conjugated oligomers	Shih-Jye Sun(孫士傑), Miroslav Mensik, Petr Toman, Cheng-Han Chung, Chimed Ganzorig and Jiri Pfleger	Phys. Chem. Chem. Phys.
9	108 (2020.04)	Effects of Strontium incorporation to Mg-Zn-Ca biodegradable bulk metallic glass investigated by molecular dynamics simulation and density functional theory calculation	Shih-Jye Sun(孫士傑), Shin-Pon Ju, Cheng-Chia Yang, Kai-Chi Chang & I-Jui Lee	Scientific reports
10	108 (2020.06)	Intelligent Identification of MoS ₂ Nanostructures with Hyperspectral Imaging by 3D-CNN	Kai-Chun Li, Ming-Yen Lu, Hong Thai Nguyen, Shih-Wei Feng(馮世維), Sofya B. Artemkina, Vladimir E. Fedorov, and Hsiang-Chen Wang*	Nanomaterials
11	108 (2020.06)	Enhancing carrier transport and carrier capture with a good current spreading characteristic via graphene transparent conductive electrodes in InGaN/GaN multiple-quantum-well light emitting diodes	Shih-Wei Feng*(馮世維), Ying-Hsiang Wang, Chin-Yi Tsai, Tzu-Huan Cheng, and Hsiang-Chen Wang	Scientific Reports
12	108 (2020.07)	Co-dosing Ozone and Deionized Water as Oxidant Precursors of ZnO Thin Film Growth by Atomic Layer Deposition	Yung-Chen Cheng*, Hsiang-Chen Wang, Shih-Wei Feng(馮世維), Tsai-Pei Li, Siu-Keung Fung, Kai-Yun Yuan, and Miin-Jang Chen	Nanoscale Research Letters
13	108 (2019.08)	Carrier heating and its effects on the current-voltage relations of conventional and hot-carrier solar cells: A physical model incorporating energy transfer between carriers, photons, and phonons	Chin-Yi Tsai(蔡進譯)	Solar Energy
14	108 (2020.01)	See-through, light-through, and color modules for large-area tandem amorphous/microcrystalline silicon thin-film solar modules: Technology development and practical considerations for building-integrated photovoltaic applications	Chin-Yi Tsai*(蔡進譯) and Chin-Yao Tsai	Renewable Energy
15	108 (2020.03)	Interband and intraband absorption coefficients of silicon: Theoretical frameworks and formulations	Chin-Yi Tsai(蔡進譯)	IEEE Journal of Selected Topics in

				Quantum Electronics
16	108 (2019.08)	Stabilization of the β -phase $\text{Bi}_2\text{O}_3(201)$ thin film by an ultrathin $\text{Bi}(001)$ seeding layer	Chin-Chung Yu(余進忠), Ho Chang, An-Cheng Sun, Jau-Wern Chiou	Vacuum
17	108 (2019.12)	Manipulations of the coercivity and the Kerr signal of the NiFe films by a ZnO underlayer	Chin-Chung Yu (余進忠), Hsin-Hua Ko, Zheng-Wei Lin, Jun-Yang Lai	AIP Advances
18	108 (2020.01)	Enhanced magnetic and magnetodielectric properties of Al-doped gallium ferrite nanoparticles	T. C. Han*(韓岱君), Z. Y. Tu and Y. T. Huang	AIP Advances
19	108 (2019.10)	Evolution of superconductivity in $\text{K}_{2-x}\text{Fe}_{4+y}\text{Se}_5$: Spectroscopic studies of X-ray absorption and emission	H. T. Wang, A. Ghosh, C. H. Wang, S. H. Hsieh, Y. C. Shao, J. W. Chiou(邱昭文), C. L. Chen, C. W. Pao, J. F. Lee, Y. S. Liu, Y. D. Chuang, J. H. Guo, M. K. Wu and W. F. Pong	PNAS
20	108 (2019.12)	The effect of orbital-lattice coupling on the electrical resistivity of YBaCuFeO_5 investigated by X-ray absorption	M. K. Srivastava, X.-S. Qiu, Y. Y. Chin, S. H. Hsieh, Y. C. Shao, Y.-H. Liang, C.-H. Lai, C. H. Du, H. T. Wang, J. W. Chiou(邱昭文), Y. C. Lai, H. M. Tsai, C. W. Pao, H. J. Lin, J. F. Lee, K. Asokan and W. F . Pong	Sci. Rep
21	108 (2020.02)	Magnon profile on SrRuO_3 films studied by inelastic neutron scattering	G. D. Dwivedi, C.-M. Wu, Bo-Yu Chen, S. T. Lin, W.-Z. Qiu, S. J. Sun, Guangyong Xu, J. W. Lynn, J. W. Chiou(邱昭文), C.-H Lee, W.-H. Li, S. Yano and H. Chou	Phys. Rev. B
22	108 (2020.07)	Correlation among photoluminescence and the electronic and atomic structures of $\text{Sr}_2\text{SiO}_4:\text{xEu}^{3+}$ phosphors: X-ray absorption and emission studies	S. Y. Zheng, J. W. Chiou*(邱昭文), Y. H. Li, C. F. Yang, S. C. Ray*, K. H. Chen, C. Y. Chang, A. R. Shelke, H. T. Wang, P. H. Yeh, C. Y. Lai, S. H. Hsieh, C. W. Pao, J. L. Chen, J. F. Lee, H. M. Tsai, H. W. Fu, C. Y. Hua, H. J. Lin, C. T. Chen and W. F. Pong*	Sci. Rep.
23	109	Effect of Adding Facile Base Solution on Electrochemical	Pao-Hsun Huang, Po-Yen Lin, Po-Chen	Sensors and Materials

	(2021.01)	Synthesis of Gold Nanoparticles	Lin, Shui-Yang Lien, Po-Wen Sze, Chih-Chieh Kang, Na-Fu Wang, and Chien-Jung Huang*(黃建榮)	
24	109 (2021.04)	Effect of annealing on innovative CsPbI ₃ -QDs doped perovskite thin films	Pao-Hsun Huang, Yu-Hao Chen, Shui-Yang Lien, Kuan-Wei Lee, Na-Fu Wang, and Chien-Jung Huang*(黃建榮)	Crystals
25	109 (2021.06)	High Hydrogen Ions Concentration Caused Blue Shift of Gold Nanoparticles	Po-Yen Lin, Po-Chen Lin, and Chien-Jung Huang*(黃建榮)	Crystals
26	109 (2021.05)	Simulation of anomalous temperature-dependent ferromagnetism in p-type ZnO	Shih-Jye Sun*(孫士傑), Guan-Huei Wu, Hua-Shu Hsu, Hsiung Chou	J. Mag. Mag. Mat.
27	109 (2021.05)	Enhanced Photodegradation in Metal Oxide Nanowires with Co-Doped Surfaces under a Low Magnetic Field	Jun-Xiao Lin, Jutathip Thaomonpun, Voranuch Thongpool, Wei-Jhong Chen, Chien-Hua Huang, Shih-Jye Sun(孫士傑), Zdenek Remes, Yaw-Teng Tseng, Yen-Fa Liao, and Hua-Shu Hsu*	ACS Appl. Mater. Interfaces
28	109 (2021.04)	Characteristics of P-Type and N-Type Photoelectrochemical Biosensors: A Case Study for Esophageal Cancer Detection	Joseph-Hang Leung, Hong-Thai Nguyen, Shih-Wei Feng(馮世維), Sofya B. Artemkina, Vladimir E. Fedorov, Shang-Chin Hsieh, and Hsiang-Chen Wang*	Nanomaterials
29	109 (2022.12)	Parasitic photon process versus productive photon process: A theoretical study of free-carrier absorption in conventional and hot-carrier solar cells	Chin-Yi Tsai(蔡進譯)	Journal of Physics D: Applied Physics
30	109 (2020.08)	A contrast in the electronic structures of B ion implanted ZnO thin films grown on glass and silicon substrates by using x-ray absorption Spectroscopy	K. Kumar, S. C. Wu, Y. C. Yu, D. H. Wei, and J. W. Chiou(邱昭文)	J. Appl. Phys.
31	110 (2021.09)	Chemical Reaction and Ion Bombardment Effects of Plasma Radicals on Optoelectrical Properties of SnO ₂ Thin Films via	Pao-Hsun Huang, Zhi-Xuan Zhang, Chia-Hsun Hsu, Wan-Yu Wu, Chien-Jung	Materials

		Atomic Layer Deposition	Huang*(黃建榮), and Shui-Yang Lien	
32	110 (2021.10)	Investigation of the Stability of Methylammonium Lead Iodide (MAPbI ₃) Film Doped with Lead Cesium Triiodide (CsPbI ₃) Quantum Dots under an Oxygen Plasma Atmosphere	Pao-Hsun Huang, Chi-Wei Wang, Shui-Yang Lien, Kuan-Wei Lee, Na-Fu Wang, and Chien-Jung Huang*(黃建榮)	Molecules
33	110 (2021.10)	Effect of Growth Temperature on the Characteristics of CsPbI ₃ -Quantum Dots Doped Perovskite Film	Shui-Yang Lien, Yu-Hao Chen, Wen-Ray Chen, Chuan-Hsi Liu, and Chien-Jung Huang*(黃建榮)	Molecules
34	110 (2021.11)	The Influence of Oxygen Plasma on Methylammonium Lead Iodide (MAPbI ₃) Film Doped with Lead Cesium Triiodide (CsPbI ₃)	Shui-Yang Lien, Chi-Wei Wang, Wen-Ray Chen, Chuan-Hsi Liu, Chih-Chieh Kang and Chien-Jung Huang *(黃建榮)	Molecules
35	110 (2022.02)	The Annealing Effect at Different Temperatures for Organic-Inorganic Perovskite Quantum Dots	Shui-Yang Lien, Pin-Jia Lai, Wen-Ray Chen, Chuan-Hsi Liu, Po-Wen Sze and Chien-Jung Huang*(黃建榮)	Crystals
36	110 (2022.03)	Effect of power density on compositional and structural evolution of ITO thin film by HiPIMS method	Ming-Jie Zhao, Jin-Fa Zhang, Jie Huang, Qi-Hui Huang, Wan-Yu Wu, Ming-Chun Tseng, Chien-Jung Huang(黃建榮), Hao-Chung Kuo, Shui-Yang Lien*, Wen-Zhang Zhu	Vacuum
37	110 (2022.06)	Transparent Patch Antenna Fabricated with Poly(3,4-ethylene dioxythiophene) Polystyrene Sulfonate (PEDOT:PSS) in 2.45 GHz	Shui-Yang Lien, Chia-Chun Kuo, Wen-Ray Chen, Chuan-Hsi Liu, Wen-How Lan, and Chien-Jung Huang*(黃建榮)	Sensors and Materials
38	110 (2022.06)	Improving optoelectrical properties of PEDOT: PSS by organic solvent and acid treatment	Shui-Yang Lien, Po-Chen Lin, Wen-Ray Chen*, Chuan-Hsi Liu, Po-Wen Sze, Na-Fu Wang, and Chien-Jung Huang*(黃建榮)	Crystals
39	110 (2022.07)	The Influence of Argon Plasma on Organic Perovskite MAPbI ₃ Film Doped with Inorganic Perovskite CsPbI ₃ Quantum Dots (QDs)	Shui-Yang Lien, Shao-Yu Liu, Wen-Ray Chen, Chuan-Hsi Liu, Po-Wen Sze, Na-Fu Wang and Chien-Jung Huang*(黃建榮)	Crystals
40	110	Role of Ambient Hydrogen in HiPIMS-ITO Film during Annealing	Ming-Jie Zhao, Jin-Fa Zhang, Jie Huang,	nanomaterials

	(2022.07)	Process in a Large Temperature Range	Zuo-Zhu Chen, An Xie, Wan-Yu Wu, Chien-Jung Huang(黃建榮), Dong-Sing Wuu, Shui-Yang Lien and Wen-Zhang Zhu	
41	110 (2021.08)	Model simulation of ferromagnetic magnetization in n-type ZnO	Shih-Jye Sun*(孫士傑), Guan-Long Chen, Chang-Feng Yu, Hsiung Chou	Results in Physics
42	110 (2022.01)	investigation of ferromagnetism increasing with the temperature in n-type ZnO	Guan-Long Chen, Shih-Jye Sun*(孫士傑)	Physica B
43	110 (2022.02)	Field-Free Magnetoplasmon-Induced Ultraviolet Circular Dichroism Switching in Premagnetized Magnetic Nanowires	Jun-Xiao Lin, Yu-Ren Chen, Shih-Jye Sun(孫士傑), Chun-Kai Hu, Bo-Jun Chen, and Hua-Shu Hsu*	ACS Applied Materials & Interfaces
44	110 (2022.06)	Possible half-metallicity and suppressed double-exchange interaction in spinel Mn _{2.4} Ni _{0.6} O ₄ : A Ni-substitution effect	S.M. Kumawat, GD. Dwivedi*, T.W. Yen, D. Chandrasekhar Kakarla, A. Tiwari, S.M. Huang, S.J. Sun(孫士傑), H.D. Yang, H. Chou*	Journal of Alloys and Compounds
45	110 (2022.06)	Model investigation of high-temperature superconductor/colossal manganite interfaces	Shih-Jye Sun*(孫士傑) and Hsiung Chou	Results in Physics
46	110 (2022.04)	Optical and Material Characteristics of MoS ₂ /Cu ₂ O Sensor for Detection of Lung Cancer Cell Types in Hydroplegia	Arvind Mukundan, Shih-Wei Feng(馮世維), Yu-Hsin Weng, Yu-Ming Tsao, Sofya B. Artemkina, Vladimir E. Fedorov, Yen-Sheng Lin, Yu-Cheng Huang*, and Hsiang-Chen Wang*	International Journal of Molecular Sciences
47	110 (2022.03)	(Invited Paper) Energy transfer between photons, carriers, and phonons in hot-carrier solar cells: a theoretical investigation	Chin-Yi Tsai(蔡進譯)	Physics, Simulation, and Photonic Engineering of Photovoltaic Devices XI, Proceedings of SPIE Vol. 11996
48	110 (2022.06)	Information Security in Wireless Water Flow and Leakage Alarm System	Chih-Chun Chang, Yao-Yu Lee, Ting-Yu Hou, and Chin-Chung Yu(余進忠)	Sensors and Materials

49	110 (2022.02)	Systematic Treatment and Evaluation of Nitride Phosphor with Hybrid Layer Modification Against Moisture Degradation.	W.-T. Huang, Y. Meesala, H.-P. Hsueh, M.-H. Fang, Z. Bao, J. W. Chiou(邱昭文), and R.-S. Liu.	Chemical Engineering Journal
50	110 (2021.08)	Role of Interfacial Defects in Photoelectrochemical Properties of BiVO ₄ Coated on ZnO Nanodendrites: X-ray Spectroscopic and Microscopic Investigation	H. T. Wang, J. W. Chiou(邱昭文), K. H. Chen, A. R. Shelke, C. L. Dong, C. H. Lai, P. H. Yeh, C. H. Du, C. Y. Lai, K. Asokan, S. H. Hsieh, H. W. Shiu, C. W. Pao, H. M. Tsai, J. S. Yang, J. J. Wu, T. Ohigashi, and W. F. Pong	ACS Appl. Mater. Interfaces
51	110 (2021.11)	Bandgap Shrinkage and Charge Transfer in Two-Dimensional Layered SnS ₂ Doped with V for Photocatalytic Efficiency Improvement	A. R. Shelke, H. T. Wang, J. W. Chiou(邱昭文), I. Shown, A. Sabbah, K. H. Chen, S. A. Teng, I. A. Lin, C. C. Lee, H. C. Hsueh, Y. H. Liang, C. H. Du, P. L. Yadav, S. C. Ray, S. H. Hsieh, C. W. Pao, H. M. Tsai, C. H. Chen, K. H. Chen, L. C. Chen, and W. F. Pong	Small
52	110 (2022.06)	End-to-end entanglement in a polar-molecule array under intrinsic decoherence	Y. Y. Liao(廖英彥)	Physical Review A