

2018	1	<u>Yu-Han Chang</u> , Dmytro Dubyna, Wei-Chen Chien, Chien-Han Chen, Cen-Shawn Wu and Watson Kuo, "Cavity Quantum Electrodynamics with Dressed States of a Superconducting Artificial Atom", Okinawa School in Physics: Coherent Quantum Dynamics 2018, 2018/9/25-10/5, OIST, Japan, Poster
	2	<u>Watson Kuo</u> , "Cavity QED with dressed state of transmon artificial atoms" The 2013 Workshop on Quantum Science and Technology (QST), 2018/9/3-5, Ali Mts., Invited
	3	<u>Watson Kuo</u> , "High-performance tactile sensing based on nanoparticle thin films", Sri Lanka-Taiwan Bilateral Symposium, 2018/6/2-3, Huisun Forest, Invited
	4	I-Lin Ho, Ming-Chiang Chung, and <u>Watson Kuo</u> , "Conversion of environmental fluctuations to coherent fields by Cooper-pair box quantum meta-materials", The 2nd CEMS International Symposium on Dynamical Quantum Systems, 2018/1/15-17, Tokyo U, Japan, Poster
2018 TPS annual meeting	1	<u>Wei-Wun Jheng</u> , Yu-Hsun Su, Yu-Jhan Lin, I-Chih Ni, Jenn-Ming Song, Chin-Wei Chang, Shien-Der Tzeng and Watson Kuo, "Strain sensor base on gold nanoparticles", Poster, Poster award
	2	<u>Yu-Te Wu</u> , Yen-Yang Liu, Cen-Shawn Wu, Yen-Fu Lin , Jong-Ching Wu and Watson Kuo, "Charge transport excited by surface acoustic wave in mechanically exfoliated graphene", Poster
	3	<u>Y. L. Hsieh</u> , Y. Y. Chen, C. S. Wu, C. S. Chen and W. Kuo, "Innovated Structure in Two Dimension Superconducting System", Poster

	4	<u>Yu-Han Chang</u> , Vanna C. Silalahi and Watson Kuo, "Slow microwave propagation guided by one-dimensional left-handed metamaterials", Oral
2017		<u>Yu-Han Chang</u> , Vanna C. Silalahi and Watson Kuo, "Slow microwave propagation guided by one-dimensional left-handed metamaterials", International School and Symposium on Nanoscale Transport and photonics(ISNTT), 2017/11/13-17, Atsugi, Japan, Poster
	1	Chien W.-C., Hsieh Y.-L., Chen C.-H., Wu C.-S., <u>Kuo W</u> , "Autler-Townes splitting probed by two-photon absorption in superconducting artificial atoms" 28th International Conference on Low Temperature Physics (LT28), 2017/8/9-16, Gotenburg, Sweden, Poster
	2	Wei-Chen Chien , Kuan-Yu Lin , Saxon Liou , I-Lin Ho , and <u>Watson Kuo</u> , "Charge soliton enhanced environment impedance in one dimensional array of Josephson junctions" Quantum Transport and Coherence(QTC) 2017, 2017/8/5-8 Helsinki, Finland, Poster
	3	<u>Yu-Han Chang</u> , Wei-Chen Chien, Yu-Zhan Lin, Ye-Shun Lan, Cen-Shawn Wu and Watson Kuo, "Coupling strength between split ring resonator and it complementary counterpart"_2017 Symposium on Nano Device Technology(SNDT) 2017/4/28, NDL Hsin-chu, Poster
	4	<u>Vanna. C. Silalahi</u> , Y.H. Chang, and Watson Kuo, "Microwave propagation guided by one dimensional array of strongly coupled split ring resonators", 2017 Symposium on Nano Device Technology(SNDT) 2017/4/28, NDL Hsin-chu, Poster
	5	<u>Yu-Han Chang</u> , Wei-Chen Chien, Yu-Zhan Lin, Ye-Shun Lan, Cen-Shawn Wu and Watson Kuo, "Coupling strength between split ring resonator and it complementary counterpart"_Optics & Photonics

		International Congress 2017 (OPIC'17) & International Conference on Nano-photonics and Nano-optoelectronics 2017 (ICNN2017), Apr 18-21, 2017, Yokohama, Japan, Poster
	6	<u>Vanna. C. Silalahi</u> , Y.H. Chang, and Watson Kuo, "Microwave propagation guided by one dimensional array of strongly coupled split ring resonators" Optics & Photonics International Congress 2017 (OPIC'17) & International Conference on Nano-photonics and Nano-optoelectronics 2017 (ICNN2017), Apr 18-21, 2017, Yokohama, Japan, Poster
2017 PSROC annual meeting	1	<u>張譽瀚(Yu-Han Chang)</u> , 謝元翔, 劉日新 and 郭華丞(Watson Kuo), "Mechanical Vibration of Buckypaper Studied Using Microwave Resonator Sensors", Poster
	2	<u>Vanna.C.Silalahi</u> , Y.H.Chang, and Watson Kuo, "Microwave Propagation Guided by One Dimensional Array of Strongly Coupled Split Ring Resonators", Poster Poster award
	3	<u>D. S. Dubyna</u> , Y. H. Jhang, W. C. Chien, Y. L. Hsieh and W. Kuo, "Superconducting 3D Cavity with Tunable Qubit Energy for Realizing Quantum Electrodynamics", Oral
2016	1	<u>Watson Kuo</u> , "Photon-mediated correlated transport in Josephson junction arrays" Quantum simulations and many-body physics with light 2016, Jun 4- Jun 11, 2016 Chania, Greece, Poster
	2	<u>Watson Kuo</u> , "Charge transport in graphene excited by surface acoustic waves" SPICE Workshop on Quantum Acoustics, May 16-May 20, 2016 Mainz, Germany , poster
2016 PSROC	1	<u>D.S. Dubyna</u> , Y.H. Jhang, W.C. Chien, W. Kuo, "Frequency-Matched Antenna For Enhancing Coupling Between Transmon Qubit And 3D Microwave Cavity", oral

annual meeting	2	<u>Weichen Chien</u> , Dmytro Dubyna, Yuan Hsiang Hsieh, C.S.Wu, Watson Kuo, "Probing Resonances Of An Artificial Atom Coupled To A Coplanar Waveguide Resonator", oral
	3	<u>YunLien Hsieh</u> , IChi Ni, ChunHan Chen, ChihHao Chiu, ChienLin Chen, BoHao Jiang, JhenMing Song, ShienDer Tzeng, Watson Kuo, "Accurate Human Pulse Sensing Using Gold Nanoparticles Strain Devices", oral
2015	1	<u>Watson Kuo</u> , "Flexible nanoparticle devices for tactile sensing", EMN Hong Kong Meeting 2015/12/6-9 Hong Kong, (invited talk)
	2	<u>Weichen Chien</u> , C. Y. Hong , C. S. Wu , Watson Kuo, "The Characteristics of Current-gated Single Electron Transistors" Poster, PIERS2015 2015/7/6-9 Prague, poster
	3	<u>Yu-Zhan Lin</u> and Watson Kuo, "Coupling between Double Split Ring Resonators and Complementary Split Ring Resonators", PIERS2015 2015/7/6-9 Prague, poster
	4	Wei-Chen Chien, Cheng-An Jiang, Jia-Yu Hong, Yung-Fu Chen, Cen-Shawn Wu, Hiroshi Shimada, <u>Watson Kuo</u> , "Long Range Induction between Josephson Junction Arrays via Microwave Photon Emission and Absorption", PIERS2015 2015/7/6-9 Prague, oral
2015 PSROC	1	<u>Weichen Chien</u> , C.Y.Hong, C.S.Wu, Watson Kuo, "The characteristics of current-gated single electron transistors", Poster Poster Award
	2	<u>Ren-Hau Chang</u> , Wei-Chen Chien, Yun-Lien Hsieh, Watson Kuo, "The charge transport in graphene excited by surface acoustic waves", Poster

annual meeting	3	<u>Yu-Zhan Lin</u> , Wei-Cheng Jian, Sin-Kuan Wu, Watson Kuo, "Strongly coupled split ring resonators: the coupling strength and the application to meta-materials", Poster
	4	<u>Yuan-Hsiang Hsieh</u> and Watson Kuo, "Mechanical Vibration Measurement using Complementary Split-Ring Resonators", Poster
2014	1	Watson Kuo, "Quantum optics based on superconducting artificial atoms", Workshop on AdS/CFT, Entanglement, and Topological Aspects of Quantum Matter And Workshop on Topological Fluids , Artificial Gauge fields, and Spin-Orbit Coupling in Ultracold gases, 2014/12/1~12/4, at NTHU, Hsinchu (invited talk)
	2	Watson Kuo, "Long range coupling between 1D Josephson junction arrays through photon emission and absorption", 2014 NCTS Summer School/Workshop on Strongly Correlated and Mesoscopic Physics 2014/6/21~6/26, at NCTU Hsinchu(invited talk)
	3	Watson Kuo, "Quantum optics based on superconducting artificial atoms", 2014 AMO Summer School 2014/8/19~8/22, at NCHU Taichung (invited talk)
2014 PSROC annual meeting	1	Watson Kuo, "Electronic devices based on gold nanoparticles: device fabrication, charge conduction and applications", (invited) Oral
	2	<u>吳信寬</u> , 方盈智, 蔡宗存, 黃重浩, 簡維成, 郭華丞, "使用微波頻段的雙分裂環共振器來進行即時的粒子感測", poster
	3	<u>Chung-Hung Chen</u> , C.S Wu, Watson Kuo, "The Ionic Transparency of Supported Lipid Bilayers", poster

	4	<u>Cheng-Wei Jiang</u> , J. Y. Chen, I-Chi Ni, Shien-Der Tzeng, and Watson Kuo, "Observation of Surface Enhanced Raman Spectroscopy in Patterned Nanoparticle Disks", poster
2013	1	<u>W. C. Chien</u> , C. S. Wu, and Watson Kuo, "Probing resonances of an artificial molecule coupled to a transmission line", 2013 Low Dimensional Science Conference(LDS) Oral
	2	<u>Y. L. Hsieh</u> , C. W. Jiang, J. Y. Chen, J. C. Chen and W. Kuo, "Enhanced Raman Spectrum of Chemical Vapor Deposited Graphene on Sub-micrometer Membranes", 2013 Low Dimensional Science Conference(LDS) Oral
	3	Watson Kuo, "Josephson junction arrays as the tunable one-dimensional boson system" NCTS Condensed Matter Summer School 2013, NTHU (invited) Oral
	4	Watson Kuo, "Some problems regarding quantum interface between light and superconducting artificial atoms", The 2013 summer workshop on Quantum Science and Technology (QST), NSYSU (invited) Oral
	5	Watson Kuo, "Quantum optics based on superconducting devices: experimental fundamentals and prospects", NCTS workshop on Quantum condensation 2013(QC13), NCKU (invited) Oral
	6	<u>Y. L. Hsieh</u> , C. W. Jiang, J. Y. Chen, J. C. Chen and W. Kuo, "Enhanced Raman Spectrum of Chemical Vapor Deposited Graphene on Sub-micrometer Membranes", NIMS conference 2013, 2013/7/1-3, Tsukuba, Japan, Poster Best student poster award
2013	7	Wei-Chen Chien, Cen-Shawn Wu and <u>Watson Kuo</u> , "Photon dressed states of superconducting artificial molecules" APPC12 2013, 2013/7/14-19, Chiba, Japan, Poster
2013 PSROC annual meeting	1	<u>Cheng-Wei Jiang</u> , I-Chi Ni, Shien-Der Tzeng, and Watson Kuo, "Electronic conduction properties of gold nanoparticle films on flexible substrates: high sensitivity strain gauges and memory devices" poster

	2	<u>Yun-lian Hsieh</u> , Cheng-Wei Jiang, Yuan Liu, Nujiang Tang and Watson Kuo, "Electrical measurement of doped reduced graphene oxides and CVD growth graphene" poster
	3	<u>W. C. Chien</u> , C. S. Wu, and Watson Kuo, "Probing resonances of an artificial molecule coupled to a transmission line" poster
	4	徐家儀, 林銘洲, 劉少勳, 張佑誠, 呂德輝, 陳啟東, 郭華丞 "超導量子位元的設計:局域磁場的調變影響" poster
	5	<u>C. H. Huang</u> , B. Y. Wang, C. C. Wu, and Watson Kuo, " Surface acoustic wave radio frequency identification system- design for the tags" poster
	6	朱娟慧, 黃景帆, 郭華丞 "BMIM-BF ₄ 離子液體的Debye layer電容" poster
	7	方盈智, 簡維成, 郭華丞 "鎖相迴路系統結合微波共振器作即時高通量的粒子偵測" poster
2012	1	Cheng-Wei Jiang, I-Chi Ni, Shien-Der Tzeng, and <u>Watson Kuo</u> , "Electronic devices based on gold nanoparticles: device fabrication, charge conduction mechanism and applications", Nanometer-Scale Technology and Materials Symposium 2012, 2012/12/14, Dayeh University (invited) Oral
	2	Cheng-Wei Jiang, I-Chi Ni, Shien-Der Tzeng, and <u>Watson Kuo</u> , "Electronic devices based on gold nanoparticles: device fabrication, charge conduction mechanism and applications", International Congress on Natural Sciences 2012, 2012/10/23-25, Kaohsiung (invited) Oral
	3	<u>Yun-lian Hsieh</u> , Cheng-Wei Jiang, Yuan Liu, Nujiang Tang and Watson Kuo, "Electrical measurement of doped reduced graphene oxides and CVD growth graphene", International Congress on Natural Sciences 2012, 2012/10/23-25, Kaohsiung Oral
2012	4	Cheng-Wei Jiang, I-Chi Ni, Shien-Der Tzeng, and <u>Watson Kuo</u> , "Pressure and strain sensors based on transparent elastic films of gold nanoparticles" ICAUMS 2012, Nara Japan, Oral

2012 PSROC annual meeting	1	<u>Cheng-Wei Jiang</u> , I-Chi Ni, Shien-Der Tzeng, Watson Kuo, "Observation of single electron tunneling in spatially unconfined gold-nanoparticle assembly near the metal-insulator transition", Oral
	2	<u>Tzung-Tsuen Tsai</u> and Watson Kuo, "PARTICLE BLOCKADE SENSING IN A FLOW BY USING MICROWAVE RESONATORS", Poster
2011	1	<u>Cheng-Wei Jiang</u> , I-Chi Ni, Shien-Der Tzeng, Watson Kuo, "Observation of single electron tunneling in strongly coupled gold-nanoparticle assembly",LT 26 , Beijing China, Poster
	2	Wei-Cheng Chien, Saxon Liou, Kuan-Yu Lin, and <u>Watson Kuo</u> "Microwave scattering on single one-dimensional array of Josephson junctions as a point defect in standing wave regime", LT 26 , Beijing China, Poster
	3	<u>Cheng-Wei Jiang</u> , I-Chi Ni, Shien-Der Tzeng, Watson Kuo, "Observation of single electron tunneling in strongly coupled gold-nanoparticle assembly", OCPA7 , Kaohsiung, Best student poster award
2011 PSROC annual meeting	1	<u>W.C. Chien</u> , Saxon Liu, K.Y. Lin and Watson Kuo, 「 Architecture for Sensitive Electron Detectors Using Radio-Frequency Single-Electron Transistors and Coplanar Waveguide Resonators」, Poster
	2	<u>Cheng-Wei Jiang</u> , I-Chi Ni, Shien-Der Tzeng, and Watson Kuo,「Electrical conduction properties of assembly of gold nanoparticles modified by molecules of various lengths」, Poster
	3	<u>Wun-Fong Wang</u> , Tzung-Tsuen Tsai, Wei-Cheng Chien and Watson Kuo, 「Ion conduction through nanopores on silicon nitride membranes」 ,Poster
2010	1	<u>W.C. Chien</u> and Watson Kuo, "Architecture for High Speed Field-Effect Detectors Using Phase-Locked Loops and Coplanar Waveguide Resonators" 2010 Symposium on Nano Device Technology 2010/5/4-5, Hsin-chu Poster

	2	<u>Cheng-Wei Jiang</u> , Yi-Ren Chen, I-Chi Ni, Shien-Der Tzeng, Watson Kuo, "The impact of molecule separation and linkage on electrical conduction properties of gold nanoparticle assembly", 2010 Symposium on Nano Device Technology 2010/5/4-5, Hsin-chu Poster
	3	<u>Watson Kuo</u> , "Probing photon coupling strengths in one-dimensional arrays of Josephson junctions at microwave frequencies", Joint Symposium on Organized Nanomaterials and Nanostructures Related to Photoscience, 2010/3/21-24 Hua-lien(invited) Oral
	4	L. Y. Wang, Y. X. Hong, Nujiang Tang, C. S. Wu and <u>Watson Kuo</u> , "Observation of oscillatory current modulation by local electric field in carbon nanocoils", IEEE Nanotechnology Materials and Devices Conference, Monterey CA USA, 2010, Oct(invited) Oral
2010 PSROC annual meeting	1	Saxon Liou and <u>Watson Kuo</u> , 「Probing high-frequency charge screening in one-dimensional arrays of Josephson junctions」, Oral
	2	<u>Saxon Liou</u> and Watson Kuo, 「Charge sensitivity of a radio-frequency single electron transistor using phase-shift detection」, Oral
	3	<u>Cheng-Wei Jiang</u> , Yi-Ren Chen and Watson Kuo, 「藉由自組裝方式鋪排奈米金粒子製作奈米元件」, Poster
	4	<u>簡維成</u> , 林冠宇, 劉少勳, 郭華丞, 「以共振器搭配鎖相迴路為架構的場效應快速偵測器」 Poster
	5	<u>陳明玉</u> , 李依珊, 郭華丞, 「利用共平面波導晶片量測奈米材料的頻率響應」 Poster
2009	1	Saxon Liou and <u>Watson Kuo</u> , 「Probing high frequency charge screening in one dimensional arrays of Josephson junctions」, 6th International conference on advanced materials and devices 2009/12/9-11 Jeju, Korea, Poster

	2	<u>Saxon Liou</u> and Watson Kuo, 「Charge sensitivities of radio-frequency single electron transistors using phase-shift detection」, 6th International conference on advanced materials and devices 2009/12/9-11 Jeju, Korea, Poster
	3	Saxon Liou and <u>Watson Kuo</u> , 「Charge sensitivities of radio-frequency single electron transistors using phase-shift detection」, The 4th Workshop on Quantum Science and Technology (QST) 9-12 September, 2009 at TungHai University, Taichung.(invited) Oral
2009 PSROC annual meeting	1	<u>Saxon Liou</u> , Watson Kuo, Y. W. Suen, C. S. Wu, and C. D. Chen, 「Primary and Direct Radio-frequency Detection with One-dimensional Arrays of Superconductor/Insulator/Superconductor Junctions」, Poster Poster award
	2	<u>洪義軒</u> , 郭華丞, 「氧化鈇奈米線元件製作與特性量測」 Poster
	3	<u>陳顥仁</u> , 陳明玉, 郭華丞, 「Patterning of regularly assembled nanowires and nanoparticles via self-assembly」 Poster
2008	1	<u>Watson Kuo</u> , 「Improving electrical nanocontacts to helical carbon nanofibers by selective and focused laser annealing」 Workshop on Novel Phenomena at Nanoscale Interfaces, December 11-13, at NCTU, Hsinchu, Taiwan(invited) Oral
	2	<u>Watson Kuo</u> , 「Improving electrical nano-contacts to helical carbon-nanofibers by selective and focused laser annealing」 Joint Symposium on Organized Nanomaerials and Nanostructures Related to Photoscience 2008/11/5 Kyoto, Japan(invited) Oral
	3	Saxon Liou, <u>Watson Kuo</u> , Y. W. Suen and C. D. Chen, 「Microwave-power dependent Coulomb oscillation in a Bloch transistor」 The 25th International Conference on Low Temperature Physics, Amsterdam, The Netherlands, August 7-13 2008 Poster

	4	<u>Saxon Liou</u> and Watson Kuo, 「Radio-frequency single electron transistor: experimental setup and testing」 Taiwan International Conference on Superconductivity (TICS08) July 7, 2008 Huisun Forest, Nantou, Taiwan, Poster
	5	Y. S. Hsieh, S. D. Tseng, and <u>Watson Kuo</u> 「Observation of plasmonic photocurrent in gold colloidal nanoparticle assemblies in electric fields」 Emerging Information and Technology Conference(EITC) 2008/6/26 at NCKU, Tainan, Oral
	6	<u>Watson Kuo</u> , Saxon Liou, Y. W. Suen and C. D. Chen, 「One-dimensional Arrays of Ultra-small Josephson Junctions under Microwave Irradiation」, Progress in Electromagnetics Research Symposium (PIERS) on 24-28 March, 2008 in Hangzhou, CHINA, Oral
2008 PSROC annual meeting	1	<u>Saxon Liou</u> (劉少勳), Watson Kuo(郭華丞), Y. W. Suen(孫允武), W. H. Hsieh(謝文興), C. S. Wu(吳憲昌) and C. D. Chen(陳啟東), 「Josephson-junction Devices Driven by Radio-frequency Signals: Shapiro Steps and Supercurrent Blockade.」 Oral
	2	<u>Kun Hong Chen</u> (陳昆宏) and Watson Kuo(郭華丞) 「Electrical measurement on ion flows through solid-state nanopores」 Poster
2007	1	Saxon Liou, <u>Watson Kuo</u> , Y. W. Suen, W. H. Hsieh, C. S. Wu and C. D. Chen, 「Adiabatic Perturbing a Bloch Transistor by Microwave Irradiation: Inversion of Coulomb Oscillation.」 2007 American Physical Society March Meeting, March 5-9 2007, Denver, US, Oral
	2	<u>Watson Kuo</u> , C. S. Wu, J. H. Shyu and C. D. Chen, 「Superconducting charge boxes in strong dissipative environments.」 3rd Workshop on Quantum Information Science and Technology 2007/1/5~2007/1/8 Tainan, Taiwan (invited) Oral

2006	1	Saxon Liou, <u>Watson Kuo</u> , Y. W. Suen, W. H. Hsieh, C. S. Wu and C. D. Chen, 「Shapiro steps observed in superconducting single electron transistors.」 Taiwan International Conference on Superconductivity 2006(TICS06), July 31 to August 4, 2006 in Yi-Lan, Taiwan (invited) Oral
	2	<u>Watson Kuo</u> and C. D. Chen, 「Parity effect with superconducting island in a strong dissipative environment」 Mesoscopic Superconductivity and Spintronics(MS+S) February 27 to March 2, 2006, NTT Basic Research Laboratories, Atugi, Kanagawa, Japan, Post