

Project						
Category	Year	Project Title	Participant	Job Title	Period	Unit
Research Projects	2016	Taiwan Ministry of Science & Technology: Excellent Young Investigator Programs (2016-2018)	Tien-Kan (TK) Chung	Principal Investigator	2016.08 ~ 2018.07	Ministry of Science & Technology, Taiwan
Research Projects	2015	Electromagnetic magnetic field to nano constructed of interlocking mechanism actuated Chennai \ microelectromechanical systems	Tien-Kan (TK) Chung	PI	2015.08 ~ 2016.07	Ministry of Education
Research Projects	2015	Applications hunting can drive the wisdom of wireless sensing systems for machinery for processing	Tien-Kan (TK) Chung	Principal Investigator	2015.03 ~ 2015.12	Ministry of Education
Research Projects	2014	Intelligent Wireless Sensing System for Civil-Construction Monitoring (3-years Project). 3rd year: Utilizing the Smart Materials and MEMS technology for Energy Harvester and Low-Power Sensor of the Wireless Sensing System	Tien-Kan (TK) Chung	Co-Principal Investigator	2014.08 ~ 2015.07	National Science Council, Taiwan
Research Projects	2014	Nano magnetic field works in conjunction magnetic coupling mechanism constructed of electromagnetic Chennai / micro-electromechanical systems	Tien-Kan (TK) Chung	Principal Investigator	2014.08 ~ 2015.07	National Science Council
Research Projects	2014	103 towards the top universities in the annual	Tien-Kan (TK) Chung	Principal Investigator	2014.03 ~ 2014.12	Ministry of Education / R & D at NCTU

Research Projects	2014	Development of positioning systems for distal locking of intramedullary nails (III)	Tien-Kan (TK) Chung	Co-PI	2014.01 ~ 2014.12	National Taiwan Hospital- Hsinchu Branch, Taiwan
Research Projects	2013	Nano/Micro-Scale Electromagnetic Actuating Utilizing Magnetic Interactions Through Configured Magnetic-Domain Arrays	Tien-Kan (TK) Chung	Principal Investigator	2013.08 ~ 2014.07	National Science Council, Taiwan
Research Projects	2013	Intelligent Wireless Sensing System for Civil-Construction Monitoring (3-years Project). 1st year: Utilizing the Smart Materials and MEMS technology for Energy Harvester and Low-Power Sensor of the Wireless Sensing System	Tien-Kan (TK) Chung	Co-Principal Investigator	2013.08 ~ 2014.07	National Science Council, Taiwan
Research Projects	2013	"Toward Outstanding University Project": Enhancing Research Capability For New Faculty	Tien-Kan (TK) Chung	Principal Investigator	2013.06 ~ 2013.12	Ministry of Economic Affairs, R.O.C. and National Chiao Tung University
Research Projects	2013	Development of positioning systems for distal locking of intramedullary nails (II)	Tien-Kan (TK) Chung	Co-Principal Investigator	2013.01 ~ 2013.12	National Taiwan Hospital- Hsinchu Branch, Taiwan
Research Projects	2012	Magnetic-Domain-Constructed Coil-less Electromagnetic NEMS/MEMS	Tien-Kan (TK) Chung	Principle investigator	2012.08 ~ 2013.07	National Science Council, Taiwan
Research Projects	2012	Intelligent Wireless Sensing System for Civil-Construction Monitoring (3-years Project). 1st year: Utilizing the Smart Materials and MEMS technology	Tien-Kan (TK) Chung	Principle investigator	2012.08 ~ 2013.07	National Science Council, Taiwan

[for Energy Harvester and Low-Power Sensor of the
Wireless Sensing System](#)

Research Projects	2012	Mechanical-Energy Harvesting for Powering Intelligent Wireless Sensing System	Tien-Kan (TK) Chung	Principal Investigator	2012.03 ~ 2012.12	Precision Machinery Research & Development Center, Taiwan
Research Projects	2012	Magnetic-Domain-Engineered Electromagnetic Actuating in Patterned Nanostructures	Tien-Kan (TK) Chung	Principal Investigator	2012.01 ~ 2012.11	National Science Council, Taiwan
Research Projects	2012	Development of Positioning Systems for Distal Locking of Intramedullary Nails	Tien-Kan (TK) Chung	Co-Principal Investigator	2012.01 ~ 2012.12	National Taiwan University Hospital Hsin-Chu Branch, Taiwan
Research Projects	2018	科技部優秀年輕學者研究計畫 (2018-2021) [第二 次榮獲此類計畫]		計畫主持人	2018.08 ~ 2021.07	科技部
Research Projects	2018	以獵能器供電之無線感測技術(II)	鍾添淦	計畫主持人	2018.03 ~ 2019.02	新創公司
Research Projects	2018	機器手臂健康診斷無線感測模組	鍾添淦	計畫主持人	2018.03 ~ 2018.06	財團法人資訊工程 策進會

Research Projects	2017	以獵能器供電之無線感測技術(I)	鍾添淦	計畫主持人	2017.03 ~ 2018.02
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2018 [Paper List of Tien-Kan \(TK\) Chung Prof. on MOST website](#)

2018 [Chih-Cheng Cheng, Tien-Kan Chung*, Chin-Chung Chen, and Wang Hsin Min, A Rotational-Actuator Using a Thermomagnetic-Induced Magnetic Force Interaction , IEEE Transaction on Magnetics \(RF: 169/262=64.5%, Engineering, Electrical & Electronic, IF: 1.243\), 54, 1, pp8200108-, \(SCI\)](#)

2017 [Chiao-Fang Hung, Chin-Chung Chen, Po-Chen Yeh, Po-Wen Chen, Tien-Kan Chung*, A magnetic-piezoelectric smart material-structure sensing three axis DC and AC magnetic-fields, Applied Physics A, Material Science & Processing \(RF: 94/148=63.5%, Physics,Applied, IF: 1.455\), 123, 12, pp739-, \(SCI\)](#)

2017 [Tze-Hong Wong, Meng-Shiue Lee, Sung-Yueh Wu, Wensyang Hsu*, Tien-Kan Chung, Chia-Pei Wu, Pei-Jung Hsu, and Yuh-Shyong Yang, Novel Passive Two-Stage Magnetic Targeting Devices for Distal Locking of Interlocking Nails, Journal of Healthcare Engineering\(RF: 80/90=88.89%, Health Care Sciences & Services, IF: 0.965\), 2017, 2017, pp3619403-, \(SCI\)](#)

2017 [Chin-Chung Chen, Tien-Kan Chung*, Chu-Yi Lin, A Novel Thermomagnetic-Actuated Gripper with a Piezoelectric-Pyroelectric Sensing-Readout of Gripping States and Forces, IEEE Transaction on Magnetics \(RF: 169/262=64.5%, Engineering, Electrical & Electronic, IF: 1.243\), 53, 10, pp9100416-, \(SCI\)](#)

2017 [Chiao-Fang Hung, Chung-Chiang Chen, Shin-Hung Lin, and Tien-Kan Chung*, Finger and Palm Dynamic Pressure Monitoring for Basketball Shooting, Journal of Sensors \(RF: 26/58 =44.8%, Instruments & Instrumentation, IF: 1.704\), 2017, 2017, pp9352410-, \(SCI\)](#)

2017 [Chiao-Fang Hung, Po-Chen Yeh, Tien-Kan Chung*, A Miniature Magnetic-Force-Based Three-Axis AC Magnetic Sensor with Piezoelectric/Vibrational Energy-Harvesting Functions, Sensors \(RF: 10/58=17.2 %, Instruments & Instrumentation, IF: 2.677\), 17, 2, pp308-, \(SCI\)](#)

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2016	Tien-Kan Chung*, Hsin-Min Wang#, Yu-Jen Chen#, Shin-Hung Lin#, Hou-Jen Chu, Po-Jung Lin, Chiao-Fang Hung(#Equal Contribution), Magnetic-Field-assisted Electric-Field-Controlled Magnetic Stripe Domains Rotation in a Magnetoelectric Ni Microbar/[Pb(Mg_{1/3}Nb_{2/3})O₃]_{0.68}-[PbTiO₃]_{0.32} Heterostructure, Applied Physics Express (RF: 41/148=27.7%, Physics, Applied, IF: 2.667), 9, 4, pp043003-, (SCI)
2016	Tien-Kan Chung*, Po-Chen Yeh, Hao Lee, Cheng-Mao Lin, Chia-Yung Tseng, Wen-Tuan Lo, Chieh-Min Wang, Wen-Chin Wang, Chi-Jen Tu, Pei-Yuan Tasi, Jui-Wen Chang, An Attachable Electromagnetic Energy Harvester Driven Wireless Sensing System Demonstrating Milling-Processes and Cutter-Wear/Breakage-Condition Monitoring, Sensors (RF: 10/58=17.2%, Instruments & Instrumentation, Impact Factor: 2.677), 16, 3, pp263-, (SCI)
2016	Po-Chen Yeh, Tien-Kan Chung*, Chen-Hung Lai, and Chieh-Min Wang, A Magnetic-Piezoelectric Smart Material-Structure Utilizing Magnetic-Force-Interaction to Optimize the Sensitivity of Current Sensing, Applied Physics A: Materials Science & Processing (RF: 94/148=63.5%, Physics Applied, IF: 1.455), 122, 1, pp29-, (SCI)
2015	Chiao-Fang Hung, Tien-Kan Chung*, Po-Chen Yeh, Chin-Chung Chen, Chieh-Min Wang, Shin-Hung Lin, A miniature mechanical-piezoelectric-configured three-axis vibrational energy harvester, IEEE Sensors Journal (RF: 12/58=20.7%, Instruments & Instrumentation, IF: 2.512), 15, 10, pp5601-5615, (SCI)
2015	Chin-Chung Chen, Tien-Kan Chung*, Chia-Yuan Tseng, Chiao-Fang Hung, Po-Chen Yeh, Chih-Cheng Cheng, A Miniature Magnetic-piezoelectric Thermal Energy Harvester, IEEE Transactions on Magnetics (RF: 169/262=64.5%, Engineering, Electrical & Electronic, IF: 1.243), 51, 7, pp9100309-, (SCI)
2014	Tze-Hong Wong, Tien-Kan Chung*, Tzu-Wei Liu, Hou-Jen Chu, Wensyang Hsu, Po-Chen Yeh, Chin-Chung Chen, Meng-Shiue Lee, Electromagnetic/Magnetic-Coupled Targeting System for Screw-Hole Locating in Intramedullary Interlocking-Nail Surgery, IEEE Sensors Journal (RF: 12/58=20.7%, Instruments & Instrumentation, IF: 2.512), 14, 12, pp4402-4410, (SCI)
2014	Tien-Kan Chung*, Chieh-Min Wang, Po-Chen Yeh, Tzu-Wei Liu, Chia-Yuan Tseng, Chin-Chung Chen, A Three-Axial Frequency-Tunable Piezoelectric Energy Harvester Using a Magnetic-Force Configuration, IEEE Sensors Journal (RF: 12/58=20.7%, Instruments &

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- [Instrumentation, IF: 2.512\), 14, 9, pp3152-3163, \(SCI\)](#)
- 2014 [Nai-Feng Hsu*, Tien-Kan Chung, A rapid synthesis/growth process producing massive ZnO nanowires for humidity and gas sensing, Applied Physics A: Materials Science & Processing\(RF: 94/148=63.5%, Physics, Applied, IF: 1.455\), 116, 3, pp1261-1269, \(SCI\)](#)
- 2013 [Tien-Kan Chung, Nano materials in the construction of intelligent electricity - magnetically coupled actuation profile of the technology \(Invited\), Monthly Newsletter, 210, pp72-81, \(Others\)](#)
- 2011 [Emil B. Song,Bob Lian, Sung Min Kim, Sejoon Lee, Tien-Kan Chung, Minsheng Wang, Caifu Zeng, Guangyu Xu, Kin Wong, Yi Zhou, Haider I. Rasool, David H. Seo, Hyun-Jong Chung, Jinseong Heo, Sunae Seo, and Kang L. Wang, Robust Bi-Stable Memory Operation in Single-Layer Graphene Ferroelectric Memory, Applied Physics Letters \(RF: 29/148=19.6%, Physics, Applied, IF: 3.411\), 99, 4, pp042109-, \(SCI\)](#)
- 2011 [Feng Zhang, Ya-Chuan Perng, Ju H. Choi, Tao Wu, Tien-Kan Chung, Gregory P. Carman, Christopher Locke, Sylvia Thomas, Stephen E. Saddow, and Jane P. Chang*, Atomic layer deposition of Pb\(Zr,Ti\)Ox on 4H-SiC for metal-ferroelectric-insulator-semiconductor diodes , Journal of Applied Physics \(RF: 59/148=39.9%, Physics, Applied, IF: 2.068\), 109, 12, pp124109-, \(SCI\)](#)
- 2011 [Alexandre Bur, Tao Wu, Joshua Hockel, Chin-Jui Hsu, Hyungsuk K. D. Kim, Tien-Kan Chung, Kin Wong, Kang L. Wang, and Gregory P. Carman, Strain-Induced Magnetization Change in Patterned Ferromagnetic Nickel Nanostructures, Journal of Applied Physics \(RF: 59/148=39.9%, Physics, Applied, IF: 2.068\)., 109, 12, pp123903-, \(SCI\)](#)
- 2011 [Tao Wu*, Alexandre Bur, Joshua L. Hockel, Kin Wong, Tien-Kan Chung, and Gregory P. Carman , Electrical and Mechanical Manipulation of Ferromagnetic Properties in Polycrystalline Nickel Thin Film, IEEE Magnetics Letters \(RF: 134/262=51.1%, Engineering, Electrical & Electronic, IF: 1.644\), 2, pp 6000104-, \(SCI\)](#)
- 2010 [Tao Wu, Michael Emmons, Tien-Kan Chung, Jian Sorge, and Gregory P. Carman, Influence of Mechanical Load Bias on Converse Magnetolectric Laminate Composites, Journal of Applied Physics \(RF: 59/148=39.9%, Physics, Applied, IF: 2.068\), 107, 9, pp09D912-, \(SCI\)](#)
- 2009 [Tien-Kan Chung, Kin Wong, Scott Keller, Kang L. Wang, and Gregory P. Carman , Electrical Control of Magnetic Remanent States in a](#)

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[Magnetoelectric Layered Nanostructure, Journal of Applied Physics \(RF: 59/148=39.9%, Physics, Applied, IF: 2.068\), 106, 10, pp103914-, \(SCI\)](#)

2009 [Tao Wu, Chia-Ming Chang, Tien-Kan Chung, and Greg Carman, Comparison of Effective Direct and Converse Magnetoelectric Effects in Laminate Composites, IEEE Transactions on Magnetics \(RF: 169/262=64.5%, Engineering, Electrical & Electronic, IF: 1.243\), 45, 10, pp4333-4336, \(SCI\)](#)

2009 [Tao Wu, Tien-Kan Chung, Chia-Ming Chang, Scott Keller, and Gregory P. Carman, Influence of Electric Voltage Bias on Converse Magnetoelectric Coefficient in Piezofiber/Metglas Bilayer Laminate Composites, Journal of Applied Physics \(RF: 59/148=39.9%, Physics, Applied, IF: 2.068\), 106, 5, pp054114-, \(SCI\)](#)

2009 [Tien-Kan Chung, Scott Keller, and Gregory P. Carman, Electric-Field-Induced Reversible Magnetic Single-Domain Evolution in a Magnetoelectric Thin Film, Applied Physics Letters \(RF: 29/148=19.6%, Physics, Applied, IF: 3.411\), 94, 13, pp132501-, \(SCI\)](#)

2008 [Tien-Kan Chung, Gregory P. Carman, and Kotekar P. Mohanchandra, Reversible Magnetic Domain-Wall Motion under an Electric Field in a Magnetoelectric Thin Film, Applied Physics Letters \(RF: 29/148=19.6%, Physics, Applied, IF: 3.411\), 92, 11, pp112509-, \(SCI\)](#)

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2018 [Chin-Chung Chen, Chin-Kai Lin, Yun-Chien Cheng, Tien-Kan Chung*, Chen-Wei Chang, Sung-Lin Tsai, Jia-An Chen, Xin-Yu Lin, Novel Electromagnetic Targeting System for Navigating Surgery in Endobronchoscopy, 2018 IEEE Magnetics Conference, Singapore, 口頭報告 \(EI\), 2018-08-29-2018-08-30](#)

2018 [Chih-Cheng Cheng, Shin-Hung Lin1 \(co-first author\), Yu-Jen Chen, Hsin-Min Wang, Hou-Jen Chu, Chiao-Fang Hung, Po-Jung Lin, Tien-Kan Chung*, A NOVEL NANOELECTROMAGNETIC SYSTEM USING MULTIFERROIC/MAGNETOELECTRIC NI-NANO-CHEVRON/PMN-PT HETEROSTRUCTURE TO DEMONSTRATE AN ELECTRIC-FIELD-CONTROLLED PERMANENT MAGNETIC SINGLE-DOMAIN TRANSFORMATION, Proceedings of the 2018 ASME Information Storage & Processing Systems, San Francisco, USA, 會議論文, 口頭報告 \(EI\), 2018-08-29-2018-08-30](#)

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2018	Ya-Wen Cheng, Po-Wen Chen, Tze-Hong Wang, Chin-Chung Chen, Wensyang Hsu, Tien-Kan Chung*, Finite Element Modeling of Electromagnetic-Coils Targeting System for Locating Distal Screw-Hole in Intramedullary Interlocking-Nail Surgery, Proceedings of the 2018 ASME Information Storage & Processing Systems, San Francisco, USA, 會議論文, 口頭報告, 2018-08-29-2018-08-30
2018	Tien-Kan Chung, Self-Powered Industrial Internet of Things (IIoT) with Multiple Sensing Functions for Smart Mechanical Manufacturing (Invited Talk), 2018 International Workshop on Industry 4.0, 受邀演講(Others), 2018-07-29-2018-07-30
2018	Tien-Kan Chung*, Lin-Huei Fang, Tzu-Wei Liu, Hou-Jen Chu, Jaganmohan Reddy Ranabotu, Chin-Chung Chen, Self-Magnetization-Switchable Micro-Magnetic-Track Based Magnetic-Bead Manipulation, IEEE International Conference on Nano/Micro Engineered and Molecular Systems, Singapore, 會議論文, 壁報論文(EI), 2018-04-22-2018-04-26
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2018	Chin-Chung Chen, I-Lun Chen, Hao Duan and Tien-Kan Chung*, A Novel MEMS DC Magnetic Sensor Using Thermomagnetic-Piezoelectric Materials with a Coil-Less Reset Approach , IEEE-NEMS 2018, Grand Hyatt, Singapore, 會議論文, 口頭報告(EI)
2018	Chin-Chung Chen, Chin-Kai Lin, Yun-Chien Cheng, Tien-Kan Chung*, Chen-Wei Chang, Sung-Lin Tsai, Jia-An Chen, Xin-Yu Lin, Novel Electromagnetic Targeting System for Navigating Surgery in Endobronchoscopy(Accepted), IEEE International Magnetic Conference 2018, Marina Bay Sands Convention Center, Singapore, 會議論文, 口頭報告(EI)
2017	Ye Bai-Chen, Duan Hao, Tien-Kan (TK) Chung *, Research on Sensing Function of Three-axis Magnetic / Magnetic Torque Magnetic Sensors in AC and DC Magnetic Fields, The Republic of China Mechanics Society forty-first session of the National Mechanics Conference, Tainan, Taiwan, 口頭報告, 2017-11-24-2017-11-25

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2017	Po-Chen Yeh, Tien-Kan Chung* , Optimization of A Piezoelectric Current Sensor Utilizing Numerical Analysis, Power MEMS, Kanazawa, Japan, 海報展示(EI), 2017-11-14-2017-11-17
2017	Po-Chen Yeh, Hao Duan, and Tien-Kan Chung* , Three-axis MEMS DC magnetic sensor using magnetic force interaction with the piezoelectric effect, Power MEMS, Kanazawa, Japan, 海報展示(EI), 2017-11-14-2017-11-17
2017	Po-Chen Yeh, Hao Duan, Tien-Kan Chung*, A Novel Self-Powered Piezoelectric Three-axis MEMS Magnetic Sensor, The 19th International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers 2017) , Kaohsiung, Taiwan, 海報展示(EI), 2017-06-18-2017-06-22
2017	Tien-Kan Chung*, Chia-Yuan Tseng, Chin-Chung Chen, A Room-Temperature Resettable Thermomagnetic-Piezoelectric MEMS Magnetic Sensor, IEEE International Magnetic Conference , Dublin , Ireland, 口頭報告(EI), 2017-04-24-2017-04-28
2016	Hong Qiao-Fang, Wang Jie-Min, Lin Shi-Bong, Ye Bai-Chen, Tien-Kan (TK) Chung, Research on Hunting Energy Function of Triaxial Piezoelectric Vibration Hunting Gear under Specific Environmental Vibration, The 40th National Mechanics Conference of the Republic of China Mechanics Society, Hsinchu City, Taiwan, 海報展示, 2016-11-25-2016-11-26
2016	Ye Bai-Chen, Lin Cheng-Mao, Tien-Kan (TK) Chung, Instantaneous Monitoring Research on Different Levels of Machining Process of Wireless Vibration Sensing System Driven by Electromagnetic Huntsman, The 40th National Mechanics Conference of the Republic of China Mechanics Society, Hsinchu City, Taiwan, 海報展示, 2016-11-25-2016-11-26
2016	Cheng Chih-cheng, Chen Jinzhong, Wang Xinmin, Tien-Kan (TK) Chung, Research on Making the Thermal Magnetic Rotating Actuator Realize Three Hundred and Sixty Degree Rotation with the Minimized Structure Design, The 40th National Mechanics Conference of the Republic of China Mechanics Society, Hsinchu City, Taiwan, 海報展示, 2016-11-25-2016-11-26
2016	Chen Jin-Zhong, Zeng Jia-Yuan, Zheng Zhi-Cheng, Tien-Kan (TK) Chung, Comparative Study on Hunting Energy Performances of Thermal Magneto-piezoelectric Selector Under Different Driving Architecture, The 40th National Mechanics Conference of the Republic of China Mechanics Society, Hsinchu City, Taiwan, 海報展示, 2016-11-25-2016-11-26

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2016	Ye Bai-Chen, Tien-Kan (TK) Chung, Wang Jie-Min, Magnetic-actuated piezoelectric micro-electromagnetic sensor, 20th Nanotechnology and Microsystems Technology Symposium, Hsinchu City, Taiwan, , 2016-08-25-2016-08-26
2016	Yu-Jen Chen, Tien-Kan Chung*, Po-Jung Lin, Chiao-Fang Hung, Hou-Jen Chu, Shin-Hung Lin, Chih-Cheng Cheng, Electrical control of magnetic multi-domain transformation in a specific geometric-patterned Ni nanostructure on a piezoelectric [Pb(Mg_{1/3}Nb_{2/3})O₃]_{0.68} - [PbTiO₃]_{0.32} substrate., 25th ASME Annual Conference on Information Storage and Processing Systems, San Jose, USA., 口頭報告(EI), 2016-06-20-2016-06-21
2016	Tien-Kan Chung*, Magnetic Sensors for IoT Application (Invited Talk), 2016 ASME Internet of Things Intelligent Hardware Conference, Santa Clara, California, USA, 受邀演講(EI), 2016-06-20-2016-06-21
2015	Meng-Shiue Lee, Pei-Jung Hsu, Asher Sun, Tze-Hong Wong, Wensyang Hsu*, Tien-Kan Chung, A Removable Mechanism for Positioning Magnet for Distal Locking in Intramedullary Nailing Surgery, , 2015-10-25-2015-10-30
2015	Chih-Cheng Cheng, Tien-Kan Chung*, Chin-Chung Chen, Hsin-Min Wang , A Novel Thermomagnetic Rotational-Actuator, ASME 2015 Conference on Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS2015), Colorado Springs, Colorado, USA., 口頭報告(EI), 2015-09-21-2015-09-23
2015	Hsin-Min Wang, Tien-Kan Chung*, Chin-Chung Chen, Chih-Cheng Cheng, Chu-Yi Lin, A Novel Mechanical-Mechanism Enhanced Thermomagnetic Tweezer Demonstrating Gripping of Ferromagnetic and Non-Ferromagnetic Objects, ASME 2015 Conference on Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS2015), Colorado Springs, Colorado, USA, 口頭報告(EI), 2015-09-21-2015-09-23
2015	Chin-Chung Chen, Tien-Kan Chung* , A novel thermomagnetic gripper, IEEE International Magnetic Conference 2015, Beijing, China, 口頭報告(EI), 2015-05-11-2015-05-15
2015	Chen-Hung Lai, Po-Chen Yeh, and Tien-Kan Chung*, Investigation of Magnetic Interference to Enhance the System sensitivity of the Self-Powered Piezoelectric Current Sensors Network, IEEE International Magnetic Conference 2015, Beijing, China, , 2015-05-11-2015-05-15

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2015	Yu-Jen Chen, Po-Chen Yeh, and Tien-Kan Chung*, A Novel AMR Magnetic Sensor Utilizing Nanoscale Magnetic-Domain Transformation, IEEE International Magnetic Conference 2015, Beijing, China, 口頭報告(EI), 2015-05-11-2015-05-15
2014	Chin-Chung Chen, Tien-Kan Chung, Chih-Cheng Cheng, Chia-Yuan Tseng, A novel miniature thermomagnetic energy harvester, Active and Passive Smart Structures and Integrated Systems 2014, San Diego, California, USA, 口頭報告(EI), 2014-03-10-2014-03-13
2014	Po-Chen Yeh, Tien-Kan Chung, and Chen-Huang Lai, An ultrahigh sensitive self-powered current sensor utilizing a piezoelectric connected-in-series approach, Smart Sensor Phenomena, Technology, Networks, and Systems Integration 2014, San Diego, California, USA, 口頭報告(EI), 2014-03-10-2014-03-11
2013	Chiao-Fang Hung, Chieh-Min Wang, Shin-Hung Ling, Tien-Kan Chung*, A Miniature Three-Axis Piezoelectric Energy Harvester, 2013 ASME Conference on Smart Materials, Adaptive Structures, and Intelligent Systems (SMASIS 2013), USA, 會議論文, 口頭報告(EI), 2013-09-16-2013-09-18
2013	Po-Chen Yeh, Chieh-Min Wang, Tien-Kan Chung*, A Magnetic/Mechanical Approach for Optimizing A Miniature Self-Powered Current Sensor, 2013 ASME Conference on Smart Materials, Adaptive Structures, and Intelligent Systems (SMASIS 2013), USA, 會議論文, 口頭報告(EI), 2013-09-16-2013-09-18
2013	Tien-Kan Chung*, Ujjwal Shukla, Chia-Yuan Tseng, Chin-Chung Chen, and Chieh-Min Wang, A Magnetic/Piezoelectric-Based Thermal Energy Harvester, 2013 SPIE Conference on Smart Structures and Materials + Nondestructive Evaluation and Health Monitoring (Smart Structures/NDE), San Diego, USA, 口頭報告(EI), 2013-03-10-2013-03-14
2013	Tien-Kan Chung*, Hou-Jen Chu, Tze-Hing Wong, Ya-Wen Cheng, Wensyang Hsu, Meng-Shiue Lee, Electromagnetic Coil/Inductance-Based Nondestructive Methods for Locating Distal Screw-Holes of an Intramedullary Interlocking-Nail, 2013 SPIE Conference on Smart Structures and Materials + Nondestructive Evaluation and Health Monitoring (Smart Structures/NDE), San Diego, USA, 口頭報告(EI), 2013-03-10-2013-03-14
2013	Tien-Kan Chung*, Hao Lee, Chia-Yung Tseng, Wen-Tuan Lo, Chieh-Min Wang, Wen-Chin Wang, Chi-Jen Tu, Pri-Yuan Tasi, and Jui-Wen

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- [Chang, Self-Powered Wireless Vibration-Sensing System for Machining Monitoring, 2013 SPIE Conference on Smart Structures and Materials + Nondestructive Evaluation and Health Monitoring \(Smart Structures/NDE\), San Diego, USA, 口頭報告\(EI\), 2013-03-10-2013-03-14](#)
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- 2012 [Tien-Kan Chung*, Hou-Jen Chu, Tze-Hong Wong, Wensyang Hsu, Meng-Shiue Lee, Wen-Tuan Lo, & Chia-Yuan Tseng , An Electromagnetic-Induction Approach for Screw-Hole Targeting in Interlocking-Nail Surgery, 2012 IEEE Sensors Conference, Taipei, Taiwan, 會議論文, 壁報論文\(EI\), 2012-12-01-2012-12-01](#)
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- 2012 [Meng-Shiue Lee, Sung-Yueh Wu, Tze-Hong Wong, Wensyang Hsu*, Tien-Kan Chung, A Novel Guiding Device for Distal Locking of Intramedullary Nails, Taipei, Taiwan, 會議論文, 壁報論文\(EI\), 2012-10-28-2012-10-31](#)
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- 2012 [Tien-Kan Chung*, Chieh-Min Wang, Chia-Yuan Tseng, Tzu-Wei Liu, Po-Chen Yeh, A Micro Kinetic Energy Harvester Demonstrating Energy Harvesting from 3-D Mechanical Motion and Power Increasing through Magnetic-Based Frequency Rectification, USA, 會議論文, 口頭報告\(EI\), 2012-09-01-2012-09-01](#)
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- 2012 [Tien-Kan Chung*, Chia-Yuan Tseng, Chin-Chung Chen, and Chieh-Min Wang, Design, Fabrication, and Testing of a Thermal/Mechanical/Magnetic Hybrid Energy Micro-Harvester, ASME 2012 Conference on Smart Materials, Adaptive Structures, and Intelligent Systems \(SMASIS2012\), USA, 會議論文, 口頭報告\(EI\), 2012-09-01-2012-09-01](#)
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- 2012 [Nai-Feng Hsu*, Ming Chang, Tien-Kan Chung, Hong-Jun Chen, A Novel Synthesis of Piezoelectric ZnO-Nanostructures toward Micro Power-Generators, International Union of Materials Research Society – International Conference in Asia \(IUMRS-ICA 2012\), Korea, 壁報論文, 海報展示, 2012-08-01-2012-08-01](#)
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- 2011 [T. Wu, A. Bur, P. Zhao, T. K. Chung, & G. P. Carman, "Electrical Control of Permanent and Reversible 90° Magnetization Reorientation in Layered Magnetolectric Laminate," IEEE International Magnetics Conference \(Intermag 2011\), , Taipei, , 2011-04-01-2011-04-01](#)
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- 2011 [C. M. Liu, Bruce C.S. Chou, Robert Chin-Fu Tsai, Nick Y.M. Shen, Benior S.F. Chen, Emerson C.W. Cheng, H. C. Tuan; A. Kalnitsky, Sean Cheng, C.-H. Lin, T. K. Chung, K. S. Liu, & Y. S. Liu, "MEMS Technology Development and Manufacturing in a CMOS Foundry", 16th](#)

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- [International Solid-State Sensors, Actuators, and Microsystems Conference \(Transducers'11\),](#)
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- 2010 [A. Bur, T. Wu, H. Kim, C.-J. Hsu, T. K. Chung, K. Wong, K. L. Wang, & G. P. Carman, "Strain-Induced Magnetization Change of Patterned Ni Ferromagnetic Nanostructures," , 55th Annual Conference on Magnetism & Magnetic Materials,, Atlanta, GA, , 2010-11-01-2010-11-01](#)
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