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學術著作目錄 (研討會)

1.	<u>Chang C.Y.</u> [†] , C.T.Wu., Y.Y. Li, Y.H. Hsieh (2017) A Study on Brine Resource Utilization in Desalination Plants. 2017 2 nd International Conference on Environmental Science and Engineering (ESE 2017), Xiamen, China.
2.	Liu J.X., C.H. Yen, C.H. Chen, H.C. Huang, Y.Y. Li, Y.H. Hsieh, <u>C.Y. Chang</u> [†] (2016) Multi-oxidants produced by deep sea water brine are used for postharvest storage of custard apples (<i>Annona squamosa</i> L.). 2 nd International Conference on Energy, Environment and Materials Science (EEMS 2016), Singapore.
3.	Tsai Y.T., Y.H. Hsieh, C.T. Wu, Y.Y. Li, K.Y. Cheng, T.L. Sung, <u>C.Y. Chang</u> [†] (2016) A Study on Dyeing Wastewater Treatment by Applying Pulsed Non-Thermal Plasma. 2016

	International Conference on Water Resource and Environment (WRE2016), Shanghai, China.
4.	Cheng K.Y., Y.H. Hsieh, Y. T., Y. T. Tsai, <u>C.Y. Chang</u> [†] , C.Y. Chang, K.J. Ding, Y.C. Chang and C.C. Wang (2015) Ultrasonic Effect on the Photodegradation of 2,4-Dichlorophenol Wastewater. 3 rd International Scientific Conference on Applied Sciences and Engineering (3 rd ISCASE, 2015), 45-3 rd ISCASE-15, Bangkok, Thailand.
5.	Liu J.X., Y.Y. Li, C.T. Wu, Y.H. Hsieh, <u>C.Y. Chang</u> [†] , N.T. Chen, H.C. Huang, C.H. Yen, C.H. Chen, W.W. Liao, J.W. Yang, S.M. Chang (2015) Effect of multiple oxidant chlorine dioxide manufactured by deep sea water treatment on postharvest storage quality of custard apples (<i>Annona squamosa</i> L.). International Conference on Material Technology and Environmental Engineering (MTEE 2015), Shanghai, China.
6.	Liu J.X., Y.Y. Li, C.T. Wu, Y.H. Hsieh, <u>C.Y. Chang</u> [†] , N.T. Chen, H.C. Huang, C.H. Yen, C.H. Chen, W.W. Liao, J.W. Yang, S.M. Chang (2015) Atemoya treated with multiple oxidants containing chlorine oxide by using electrolytic deep sea water. International Conference on Material Technology and Environmental Engineering (MTEE 2015), Shanghai, China.
7.	Cheng K.Y., Y.H. Hsieh, Y.T. Tsai, C.Y. Chang and <u>C.Y. Chang</u> [†] (2014) Decomposition of wastewater containing methyl tert-butyl ether using the gamma-ray/hydrogen peroxide process. 2014 International Conference on the "Challenges in Environmental Science and Engineering" (CESE-2014), WATI-39, Johor Bahru, Malaysia.
8.	Lin C.M., Y.H. Hsieh, T.W. Liao, Y.T. Tsai and <u>C.Y. Chang</u> [†] (2014) Photocatalytic bactericidal effect of hospital fluorescent light irradiated TiO ₂ /V thin film on nosocomial infections control. 2014 International Conference on the "Challenges in Environmental Science and Engineering" (CESE-2014), ADVI-08, Johor Bahru, Malaysia.
9.	Hsieh Y.H., <u>C.Y. Chang</u> [†] , M.W. Chen, M.K. Shen (2014) Degradation of azo dye wastewater by UV/TiO ₂ combined with an ultrasonic procedure. 2014 International Conference on Advanced Nano-Technology and Biomedical Material (ANTBM2014), A074, Guangzhou, China.
10.	<u>Chang, C.Y.</u> [†] , Y.Y. LI, C.T. Wu, H.J. Huang, J.J. Yan and W.X. Sun (2014) Preservation and Bacterial Inhibition of Electrolytic Deep Sea Water on <i>Allium fistulosum</i> . 2014 Global Conference on Environmental Engineering, G067, Hong Kong
11.	Lin C.H., Y.H. Hsieh and <u>C.Y. Chang</u> [†] (2013) Catalytic Destruction and Removal of Dichloromethane in the Microwave/Fe ₄ O ₃ System. 2013 3 rd International Conference on Advanced Design and Manufacturing Engineering, LN1249, Anshan, China.
12.	<u>Chang, C.Y.</u> [†] , Y. H., Hsieh and T.W. Liao (2012) Photocatalytic bactericidal effect of Ag/TiO ₂ nano-thin film on nosocomial infections control. The 2012 International

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13.	Yao, K.S., J.J. Hsu and C.Y. Chang† (2011) Study on the photocatalytic degradation of wastewater under the optimal preparation of the activated carbon supported TiO ₂ thin film. International Conference on Energy, Environment and Sustainable Development, 313-317, Shanghai, China.
14.	Hsieh, Y.H and C.Y. Chang† (2010) Study on the ultrasonic-photodegradation of 2,4-dichlorophenol wastewater. 2010 International Advanced Oxidation Processes (AOPs) Conference, p.48, Taichung, Taiwan.
15.	Cheng, K.Y., K.S. Yao, H.H. Lo, C.Y. Chang† and P.H. Chen (2010) Photoelectrocatalytic degradation of isopropyl alcohol by TiO ₂ /Ti thin-film electrode. The 3rd International Conference on Multi-functional Materials and Structures, 165-168, Jeonju, Korea.
16.	Chang, C.Y. †, Y.C. Lee, C.H. Lin, J.W. Lee, Y.J. Chang and J.H. Chen (2010) Degradation of volatile acetone by a photocatalytic reactor with TiO ₂ coated sieve. The 3rd International Conference on Multi-functional Materials and Structures, 919-922, Jeonju, Korea.
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19.	Lin, C.H., C.Y. Chang, Y.J. Chang, Y.C. Lee, M.Y. Hwa and Y.S. Chang (2010) Photosensitization of Dye/TiO ₂ Thin Films by Using Natural Dye of TCPP. The 3rd International Conference on Multi-functional Materials and Structures, 923-926, Jeonju, Korea.
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21.	Chang, M.Y., Y.H. Hsieh, K.Y. Cheng, K.S. Yao, C.Y. Chang†, C.T. Ho (2009) Degradation of azo dye wastewater by UV/TiO ₂ combined with ultrasonic procedure. 3rd IWA-ASPIRE Conference and Exhibition, p.83-84, Taipei, Taiwan.
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23.	Cheng, T.C., K.S. Yao, Y.H. Hsieh, M.Y. Chang, C.Y. Chang† and G. H. Wang (2009) Visible light activated photocatalytic degradation effect of V-TiO ₂ on azo dye wastewater.

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37.	Cheng, T.C., C.Y. Chang, C.I. Chang, C.C. Hwang, H.H. Shu, D.Y. Wang and K.S. Yao (2008) Photocatalytic Bactericidal Effect of TiO ₂ Thin Film on Fish Pathogens. 35th International Conference on Metallurgical Coatings and Thin Films, San Diego, California, USA.(poster)
38.	Yao, K.S., T.C. Cheng, S.J. Li, L.Y. Yang, K.C. Tzeng, Y. Ko, C.Y. Chang† (2008) Comparison of Photocatalytic Activities of Various Dye-Sensitized TiO ₂ Thin Films Under Visible Light. 35th International Conference on Metallurgical Coatings and Thin Films, San Diego, California, USA.(poster)
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1.	<u>張禎祐</u> 等. (2009). 化學,新文京開發出版股份有限公司, 台北市. (ISBN 978-986-150-998-3)
2.	<u>張禎祐</u> 等. (2008). 醫護化學,新文京開發出版股份有限公司, 台北市. (ISBN 978-986-150-956-3)
3.	<u>張禎祐</u> 等. (2007). 化學, 新文京開發出版股份有限公司, 台北市. (ISBN 957-512-191-0)
4.	<u>張禎祐</u> 等,. (2007). 生命科學概論, 新文京開發出版股份有限公司, 台北市. (ISBN : 978-986-150-649-4)
5.	<u>張禎祐</u> 等,. (2007). 科學文獻選讀,新文京開發出版股份有限公司, 台北市.(ISBN : 978-986-150-682-1)
6.	<u>張禎祐</u> 等,. (2007). 生物化學, 新文京開發出版股份有限公司, 台北市. (ISBN : 978-986-150-746-0)
7.	<u>張禎祐</u> 等,. (2007). 生命關懷暨實務, 新文京開發出版股份有限公司, 台北市.

8.	張禎祐等. (2004). 生命關懷, 新文京開發出版股份有限公司, 台北市. (ISBN 986-150-074-X)
9.	張禎祐. (2000). 以二氧化氯為替代消毒劑之副產物生成與控制研究. 博士論文, 國立中興大學, 台中.
10.	徐惠麗,劉東明,方偉平,魏銘琪,張禎祐.(1999). 化學. 文京圖書公司, 台北市. (ISBN 957-512-190-0)
11.	徐惠麗,劉東明,方偉平,魏銘琪,張禎祐.(1999). 化學(精華版). 文京圖書公司, 台北市. (ISBN 978-957-512-191-4)

專利

1.	張禎祐、劉炯錫(2017). 以深層海水製備之花卉蔬果保鮮劑結構(新型第 M537402 號)。
2.	張禎祐、劉炯錫(2017). 以深層海水製備之乾洗手劑的包裝結構(新型第 M537573 號)。
3.	姚國山、張禎祐、許浩展、鄭達智(2014). 具磁性之二氧化鈦光觸媒粉末複合材料及其合成方法(發明第 I434732 號)。
4.	張禎祐 (2014).多重氧化劑製造設備(新型, M479932)。
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6.	林景行,張禎祐, 張育傑, 曾韋銘, 莊雅婷 (2010). 一種生產生質柴油的微波觸媒反應器(新型, M391419)。
7.	張禎祐,謝永旭,姚國山,,楊月琴 (2007). 高效能二氧化氯電解法製造機(新型第 M 322947 號)。
8.	楊月琴,張禎祐, (2007). 多功能電解產生機(新型第 M 318019 號)。
9.	張禎祐,王文山 (2007). 揮發性有機物處理裝置(新型第 M 309457 號)。
10.	姚國山,張禎祐 (2007). 光觸媒貼片(新型第 M 316079 號)。

專案計畫

1.	教育部 107.01~111.12 107-111 年教育部「高等教育深耕計畫」
2.	教育部 2018.01~2018.12 107 年教育部補助大專院校安全衛生教育訓練計畫「花東地區校園安全衛生管理人員研習營」(臺教資(六)字第 1070053885C 號核准)
3.	國立臺東專科學校 2017.09~ 2018.09 106 年國立臺東專科學校產學合作計畫「生質能工業爐之效能開發及提升應用產值計畫」(計畫代號: 106B2006)
4.	經濟部 2016.05~2016.10 105 年度學界協助中小企業科技關懷計畫「超導共振加熱系統應用於污泥乾燥系統之效能及提升工業與環境產值計畫」(計畫代號: PC105140160)
5.	教育部 2016.01~2016.12 105 年教育部補助大專院校安全衛生教育訓練計畫 (臺教資(六)字第 1050052546I 號)

	核准)
6.	教育部 2016.04~2016.11 105 年環境教育推廣活動輔導計畫 (臺教資(六)字第 1050043385C 號函核准)
7.	科技部 2015.08~2017.07 以輻射技術應用於含有機磷及氨基甲酸鹽農藥廢水之可行性研究 (計畫編號: MOST 104-2221-E-602 -001 -MY2)
8.	經濟部 2015.05~2015.10 104 年度學界協助中小企業科技關懷計畫「LED 光能應用於養殖業之效能及產值提升計畫」(計畫代號: PC104140090)
9.	教育部 2015.01~2015.12 104 年教育部補助大專院校安全衛生教育訓練計畫 (台教資(六)字第 1040035561I 號函核准)
10.	教育部 2015.01~2015.12 104 年教育部補助大專院校安全衛生通識課程計畫 (台教資(六)字第 1040035449E 號函核准)
11.	經濟部 2014.05~2014.10 103 年度學界協助中小企業科技關懷計畫「提昇養殖業環境用藥效能與產值計畫」(計畫代號: PC103140243)
12.	經濟部 2013.11~2016.10 經濟部 102 年度學界科專計畫「深層海水在觀光休閒保健服務之應用研究 3 年計劃---子計畫-海洋深層水於蔬果、肉品及漁獲保鮮品質之探討」(計畫代號: 102A023-04)
13.	教育部 2013.08~2012.07 102 年度「補助大專校院安全衛生通識課程及教育訓練計畫」(臺教資(六)字第 1020044212X 號函核准)
14.	教育部 2013.03~2013.12 102 年度「補助大專校院安全衛生通識課程及教育訓練計畫」(臺教資(六)字第 1020044212E 號函核准)
15.	科技部 2013.11~2014.10 海水淡化廠鹵水資源化利用之研究---以馬祖南竿 3 期海水淡化廠為研究對象 (計畫編號: NSC 102-2622-E-602 -001 -CC2)
16.	科技部 2012.08~2015.07 水中脈衝放電之能量對於提昇高級氧化程序效率之研究 (計畫編號: NSC 101-2221-E-602 -001 -MY3)
17.	經濟部 2012.05~2012.10 經濟部工業局 101 年度中小企業即時技術輔導計畫「提昇養殖業環境用藥效能與產值計畫---以養雞場為輔導對象」(計畫代號: 10110445)
18.	經濟部 2012.05~2012.10 101 年度學界協助中小企業科技關懷計畫「提昇環境用藥二氧化氯電解產生機效能與產值計畫」(計畫代號: PC101140292)
19.	經濟部 2012.05~2012.10 101 年度學界協助中小企業科技關懷計畫「提昇二氧化氯環境用藥效能與產值計畫」(計畫代號: PC101140291)

20.	教育部 2012.04~2012.11 101 年環境教育推廣活動輔導計畫（台環字第 1010048897-Y 號書函核准）
21.	教育部 2012.08~2013.01 101 年度「教育部補助大專院校安全衛生通識課程」計畫（台環字第 1010037622A 號書函核准）
22.	教育部 2012.02~2012.11 101 年度「教育部補助大專院校安全衛生教育訓練」計畫（台環字第 1010037743B 號書函核准）
23.	科技部 2011.08~2012.07 以輻射技術應用於半導體廢水處理可行性之研究 (計畫編號：NSC 100-2221-E-602 -002 -)
24.	科技部 2010.08~2011.07 以混合性二氧化氯做為養殖池水及其實廠應用之研究 (計畫編號：NSC 99-2221-E-005 -040 -)
25.	國科會 2009.10~2011.10 以二氧化氯做為自來水替代消毒劑及應用之實廠研究---以烈嶼(小金門)淨水場為例(計畫編號：99-2622-E-451-002-CC2)
26.	國科會 2010.08~2011.07 以混合性二氧化氯做為養殖池水及其實廠應用之研究（計畫編號：NSC 99-2221-E-005 -040）
27.	國科會 2009.08~2010.07 以微波結合光觸媒程序應用於含異丙醇廢水之除汙研究（計畫編號：NSC 98-2221-E-451 -004）
28.	環保署 2009.06~2009.10 98 年「大專院校環保初體驗執行計畫」（環署綜字第 0980038650D 號函核准）
29.	教育部 2009.03~2009.08 97 學年度「教育部補助大專院校安全衛生通識課程」計畫（台環字第 0980042203 號書函核准）
30.	國科會 2007.08~2009.07 高級氧化程序(AOPs)中氫氧自由基的生成與反應動力之研究(II-III)(計畫編號：NSC 96-2221-E-451 -001 -MY2)
31.	國科會 2008.07~2009.02 大專學生參與專題研究計畫--計畫名稱：二氧化氯應用於農業組培之殺菌控制研究 (計畫編號：97-2815-C-451 -003 -B)
32.	國科會 2007.05~2008.04 提升產業技術及人才培育研究計畫－處理揮發性有機物之微波磁化裝置實廠規模機組之研究開發（計畫編號：NSC 96-2622-E-451-002-CC3）
33.	教育部 2007.09~2008.01

	96 學年度「教育部補助大專院校安全衛生通識課程」計畫（台環字第 0960039026A 號函核准）
34.	工業技術研究院 2007.06~2008.05 能環所 96 年度產學研合作計畫-「綠色氧化與殺菌技術(電解產生二氧化氯)」研究計畫
35.	勞委會 2007.04~2008.03 全國職場 233 減災計畫--「特定化學物質之危害與預防教案」
36.	國科會 2006.08~2007.07 高級氧化程序(AOPs)中氫氧自由基的生成與反應動力之研究。（計畫編號：NSC 95-2221-E-451-010）。
37.	國科會 2006.05~2007.04 以二氧化氯應用於冷卻系統除垢、殺菌之研究（計畫編號：NSC 95-2622-E-166-002-CC3）。
38.	國科會 2006.08~2007.07 輻射技術於降解事業廢水之研究-以 TCE、PCE 為例(計畫編號：NSC 95-2113-M-166-004-)
39.	國科會 2006.10~2006.12 工業技術研究院 「以隔膜電解技術結合觸媒反應產生二氧化氯多重氧化劑之生成機開發」研究計畫先期性可行性評估。（計畫編號：5355F21000）
40.	國科會 2005.08~2006.07 光-費頓程序中氫氧自由基的生成與反應之探討（計畫編號：NSC 94-2211-E-166-004）。
41.	國科會 2003.08~2004.07 水環境中氫氧自由基的生成與控制研究之探討（II）（計畫編號：NSC 92-2211-E-166-001）。
42.	經濟部 2003.05~2004.07 高效能二氧化氯染整廢水處理應用技術（專案編號：IZ920032）
43.	國科會 2002.08~2003.07 水環境中氫氧自由基的生成與控制研究之探討（I）（計畫編號：NSC 91-2211-E-166-001）。
44.	經濟部 2002.05~2002.10 高效能二氧化氯染整廢水處理技術（專案編號：IZ900263）