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SCI Papers

1. Y.C. Shih, Y.B. Lan, C.S. Li, H.C. Hsieh, L. Wang, J.K. Wang, C.I. Wu, **K.F. Lin***, (2017, April) "Amino Acid-Induced Preferential Orientation of Perovskite Crystals for Enhancing the Interfacial Charge Transfer and Photovoltaic Performance", *Small*, appear in the web. 本人為通訊作者.
2. Y.C. Shih, H.L. Lin, **K.F. Lin***, (2017, April). "Electropolymerized Polyaniline/Graphene Nanoplatelet/Multi-walled Carbon Nanotube Composites as Counter Electrodes for High Performance Dye-Sensitized Solar Cells", *Journal of. Electroanalytical Chemistry*, 794期, 112-119頁. 本人為通訊作者.
3. J.S. Ni, H.C. Hsieh, C.A. Chen, Y.S. Wen, W.T. Wu, Y.C. Shih, **K.F. Lin***, L. Wang*, J.T. Lin* (2016, Nov). Near-Infrared Absorbing and Dopant-Free Heterocyclic Quinoid-Based Hole Transporting Materials for Efficient Perovskite Solar Cells. *ChemSusChem*, 9, 3139-3144.
4. Shih-Ru Huang, **King-Fu Lin**, Trong-Ming Don, Chai-Fen Lee, Man-Sheng Wang, Wen-Yen Chiu* (2016, Apr). Thermoresponsive Conductive Polymer Composite Thin Film and Fiber Mat: Crosslinked PEDOT:PSS and P(NIPAAm-co-NMA) Composite. *JOURNAL OF POLYMER SCIENCE, PART A: POLYMER CHEMISTRY*, 54期, 1078-1087頁.
5. Y.H. Chang, **K.F. Lin*** (2016, Apr). Rheological properties of epoxy/MWCNT suspensions associated with surface modification of MWCNT by physisorption of aromatic ionic salts. *Materials Chemistry and Physics*, 173期 第 446-451頁.本人為通訊作者.
6. Yen-Chen Shih, Chia-Wen Yeh, **King-Fu Lin*** (2016, Feb). Photovoltaic performance enhancement of dye-sensitized solar cells by incorporating poly(sodium-4-styrenesulfonate)-physisorbed MWCNTs into photoelectrode. *Materials Chemistry and Physics*, 171期352-358頁. 本人為通訊作者.
7. S. R. Huang, **K.F. Lin**, T.M. Tom, W.Y. Chiu*, M. F. Lin (2015, May). Fabrication and Characterization of UV-crosslinkable Thermo-Responsive Composite Fibers with Magnetic Properties. *J. Polym. Sci. Part A: Polym.Chem.*, 53, 2152-2162.
8. C.Y. Tsai, J.H. Hsu*, **K. F. Lin** (2015, Apr). Perpendicular exchange bias behaviors of CoPt/IrMn and CoPt/FeMn bilayers: A comparative study. *Journal of Applied Physics* , 117, 17D153, Page 1~4.
9. 施彥辰，王立義，謝孝基，**林金福*** (2015, Mar). Enhancing photocurrent of perovskite solar cells via modification of TiO₂/CH₃NH₃PbI₃ heterojunction interface with amino acid. *Journal of Materials Chemistry A*, 3, 9133-9136. 本人為通訊作者.

10. K.J. Lin; S.C. Lee; **K.F. Lin*** (2014, Nov). One-pot fabrication of poly(vinyl alcohol)/graphene oxide nanocomposite films and their relative humidity dependence of mechanical properties. *Journal of Polymer Research*, 21: 611-617. 本人為通訊作者.
11. K.Y. Liu, K.C. Ho, **K.F. Lin*** (2014, Nov). Enhanced Photovoltaic Performance of Cross-linked Ruthenium Dye with Functional Cross-linker for Dye-Sensitized Solar Cell. *Progress in Photovoltaics: Research and Applications*, 22:1109-1117.(SCI). NSC 96-2120-M-002-016. 本人為通訊作者.
12. Yu-Hsun Chang , Ming-Sung Wu , **King-Fu Lin*** (2014, Jun). Grafting polyimide to MWCNT for enhancing dispersion and properties of MWCNT/polyetherimide nanocomposites. *Journal of Polymer Research*,21:419-425. 本人為通訊作者.
13. C.-Y.Tsai, P.Saravanan, Jen-Hwa Hsu*, C.-Y.Kuo, **K.-F. Lin** (2014, Mar). A comparative study on the PMA behavior of 5-nm thick Co49Pt51 films grown at room temperature and at high temperature on glass substrates. *Journal of Magnetism and Magnetic Materials*, 361, 7-11.
14. C.Y. Tsai. J.H. Hsu*, P. Saravanan, **K. F. Lin** (2014, Mar). Study on the Occurrence of Spintaneously Established Perpendicular Exchange Bias in Co49Pt51/IrMn Bilayers. *Journal of Applied Physics*, 115, 17D726-1~3.
15. Shih-Ru Huang, **King-Fu Lin**, Chia-Fen Lee, Wen-Yen Chiu* (2014, Mar).Synthesis and Properties of Thermo-Responsive Magnetic Polymer Composites and their Electrospun Nanofibers. *JOURNAL OF POLYMER SCIENCE, PART A: POLYMER CHEMISTRY*, 52期 848-856頁.
16. Yu-Hsun Chang, **King-Fu Lin*** (2014, Jan). Physisorption of ionic salts to carbon nanotubes for enhancing dispersion and thermomechanical properties of carbon nanotube-filled epoxy resins. *Composites Science and Technology*, 90, 174-179.NSC 101-2221-E-002-049-MY3. 本人為通訊作者.
17. **King-Fu Lin,*** Jen-Shyang Ni, Chun-Hua Tseng, Chun-Yi Hung, Ken-Yen Liu (2013, Oct). Photovoltaic Performance of Dye Sensitized Solar Cells Associated with Number and Position of Carboxyl Groups on Bipyridine Ligands of Ruthenium Complex Dye. *Materials Chemistry and Physics*, 142卷第1期第420-427頁. NSC 98-2221-E-002-208-MY3. 本人為第一作者、通訊作者.
18. F.T. Yuan, C.Y. Tsai, Jen-Hwa Hsu*, **K.F. Lin**, J.K. Mei (2013, Jun).Ta/NiFe/FeMn thin films with enhanced exchange bias prepared at room temperature by rotational deposition. *Thin Solid Films*, 第536期 起迄頁數244-248.
19. J.S. Ni, K.C. Ho, **K.F. Lin*** (2013, Feb). Ruthenium Complex Dye with Designed Ligand Capable of Chelating Triiodide for Dye-Sensitized Solar Cells.*Journal of Materials Chemistry A*, 第1期第10卷起迄頁數3463-3470. 本人為通訊作者.

20. J.S. Ni, C.Y. Hung, K.Y. Liu, Y.H. Chang, K.C. Ho, **K.F. Lin*** (2012, Nov). Effects of Tethering Alkyl chains for Amphiphilic Ruthenium Complex Dyes on their Adsorption to Titanium Oxide and Photovoltaic Properties. *Journal of Colloid and Interface Scienc*, 386期, P.359-P.365. (SCI). NSC 98-2221-E-002-008-MY3. 本人為通訊作者.
21. Y.H. Chang, P.Y. Lin, S.R. Huang, K.Y. Liu, **K.F. Lin*** (2012, Aug). Enhancing photovoltaic performance of all-solid-state dye-sensitized solar cells by incorporating ionic liquid-physisorbed MWCNT. *Journal of Materials Chemistry*, 22 (31)期, P.15592 – P.15598.. (SCI). NSC 98-2221-E-002-008-MY3. 本人為通訊作者.
22. K.Y. Liu, C.L. Hsu, J.S. Ni, K.C. Ho, **K.F. Lin*** (2012, Apr). Photovoltaic properties of dye-sensitized solar cells associated with amphiphilic structure of ruthenium complex dyes. *Journal of Colloid and Interface Science*, 372期, P.73-P.79. (SCI). NSC 98-2221-E-002-208-MY3. 本人為通訊作者.
23. Y.H. Chang, P.Y. Lin, M.S. Wu, **K.F. Lin*** (2012, Apr). Extraordinary aspects of bromo-functionalized MWCNT as initiator for polymerization of ionic liquid monomers. *Polymer*, 53期, P.2008-P.2014. (SCI). NSC 96-2221-E-002-144-MY3. 本人為通訊作者.
24. K.J. Lin, C.H. Hsueh, **K.F. Lin*** (2012, Feb). Novel Method to Measure Shear Strength of Exfoliated Montmorillonite/Polymer Nanocomposite Films. *Polymer International*, 61期, P.174-P.179. (SCI). NSC 96-2221-E-002-144-MY3. 本人為通訊作者.

International Conference Papers

1. Y.C. Shih, L.Y. Wang, **K.F. Lin**, 2016, “Interfacial engineering of perovskite photovoltaics: enhancing crystalline orientation and charge transfer efficiency”, International Symposium on Next Generation Solar Cells and Solar Energy Conversion (NGSC2016), Hsinchu, Taiwan, Nov. 21-24, PP05.
2. **K.F. Lin**, 2016, “Fabrication and Applications of Exfoliated Montmorillonites”, 2016 International Conference on Materials Engineering and Nanotechnology (ICMEN2016), Taipei, Taiwan, May 22, Keynote Speech II. (2016/5/23)
3. Y.C. Shih, L.Y. Wang, **K.F. Lin**, 2016, “Promising Interface Modification of Nanostructured TiO₂/CH₃NH₃PbI₃ Heterojunction to Enhance Solar Cell Performance”, 2016 MRS Spring Meeting and Exhibit, Phoenix Arozona, USA, March 29, EP3.15. (2016/3/29)
4. Y.C. Shih, L.Y. Wang, **K.F. Lin**, 2015, “Improved Performance of Organometal halide Perovskite Solar Cells by Interface Engineering”, 2015 Global Research Efforts on Energy and Nanomaterials, Asia Pacific Society for Materials Research, Sun Moon Lake, Taiwan, December 21. (2015/12/21)

5. Y.C. Shih, L.Y. Wang, **K.F. Lin**, 2015, "Enhancing Photovoltaic Performance of Perovskite Solar Cells via Modification of Nanostructured TiO₂/CH₃NH₃PbI₃ Heterojunction", MRS 57TH Electronic Materials Conference, Ohio State University, Ohio, USA, June 25, R8. (2015/6/25)
6. H.C. Hsieh, J.Y. Wang, **K.F. Lin**, Y.F. Chen, L.Y. Wang, 2015, "High- Performance Perovskite Solar Cells Based on Highly Dense TiO_x", MRS 57TH Electronic Materials Conference, Ohio State University, Ohio, USA, June 25, R9. (2015/6/25)
7. Y.C. Cheng, C.H. Lee, C.K. Tsai, **K.F. Lin**, 2014, "Exfoliated Clay Nanoplatelets as Gelator and Reduction Agent for Ionic Liquid Electrolyte to Enhance Photovoltaic Performance of Dye-Sensitized Solar Cells", 2014 MRS Spring Meeting and Exhibit, San Francisco, CA, USA, April 23, B9.07.(2014/4/23)
8. Y.C. Shih, H.L. Lin, **K.F. Lin**, 2014, "Polyaniline/Graphene/Multi-Walled Carbon Nanotube Composites as Counter Electrode for Dye-Sensitized Solar Cells", 2014 MRS Spring Meeting and Exhibit, San Francisco, CA, USA, April 22, B2.03.(2014/4/22)
9. Y.H. Chang, **K.F. Lin**, "Surface Treatments of MWCNT by Ionic Salt to Enhance Dispersion and Gelation of Epoxy/MWCNT Suspensions", The 13th Pacific Polymer Conference, Kaohsiung, Oral-S3-08 (2013/11/19).
10. K.Y. Liu, J.S. Ni, Y.C. Shih, **K.F. Lin**, "Ruthenium complex dyes with functional ligands designed for enhancing photovoltaic performance of dye-sensitized solar cells", 11th International Conference on Materials Chemistry (MC11), University of Warwick, UK (2013/7/9).
11. **K.F. Lin**, "Crosslinkable Ruthenium Dyes Designed for Dye-Sensitized Solar Cells", Vth International Conference on Molecular Materials, Barcelona, Spain, July 4th, OC-021 (2012/7/5).
12. K.G. Wen, C.Y. Lo, Y.W. Cheng, **K.F. Lin**, "Photovoltaic performance of dye-sensitized solar cells based on cross-linkable sensitizers and binary ionic liquid electrolyte system", IUMRS-ICA 2011, A-2 Section, Taipei.(2011/9/21) (invited talk)
13. **林金福**, "Fabrication and Applications of Exfoliated Clay/Polymer Nanocomposites through Soap-free Emulsion Polymerization", 2011 年台灣大學-北京大學高分子科學討論會，北京大會，北京市，中國 (2011/5/6)。(invited talk)
14. K.C. Huang, Y.H. Chang, C.Y. Liu, **K.F. Lin**, K.C. Ho, "Enhanced performance of ionic liquid-based dye-sensitized solar cells using 15-crown-5-functionalized MWCNTs in the electrolytes", 241th ACS National Meeting & Exposition, Anaheim, CA, U.S.A (2011/3/27-31)
15. Y.H. Chang, P.Y. Lin, S.R. Huang, K.Y. Liu, M.S. Wu, **K.F. Lin**, "Preparation and Incorporation of MWCNT/Poly(ionic liquid) Hybrids to All-Solid state Electrolytes for Enhancing

Photovoltaic Performance of Dye-Sensitized Solar Cell”, 241th ACS National Meeting & Exposition, Anaheim, CA, U.S.A (2011/3/27-31).

Domestic Conference Papers

1. H. H. Huang, W. F. Lo, **K. F. Lin**, 2017, “Interface Engineering of Cross-linkable Ruthenium Complex Dye to Chelate Cations for Enhancing the Performance of Solid-State Dye Sensitized Solar Cells”, 第四十屆高分子研討會，國立中興大學，台中市，PI-99.
2. **林金福**，2016，“高校率軟質固態染料敏化太陽能電池之研製(II)”，第三十九屆高分子研討會，國立成功大學，台南市，PT-C060。
3. 楊明豪、林宏澤、謝孝基、戴子安、**林金福**、王立義，2016，“以 PBDTDTTPD 作為高效能電洞傳導材料之鈣鈦礦太陽能電池”，第三十九屆高分子研討會，國立成功大學，台南市，PI-A034-C。
4. 143. P.H. Su, T.C. Wang, Y.C. Shih, **K.F. Lin**, 2016, “Preparation and properties of polyaniline/GODs nanocomposites and their applications on supercapacitor electrodes”, 第三十九屆高分子研討會，國立成功大學，台南市，PI-C058.
5. 施彥辰，林筱莉，藍鈺荃，**林金福**，2015，“Preparation and Characterization of Polyaniline/Graphene/Multi-Walled Carbon Nanotube Composites as Counter Electrode for Dye-Sensitized Solar Cells”，第三十八屆高分子研討會，OCE-II-011.
6. 劉耕硯，葉珈玟，林筱莉，**林金福**，2015，“高分子科技在染料敏化太陽能電池之應用”，第三十八屆高分子研討會，DCE-I-02. (Invited Talk).
7. C.W. Yeh, Y.C. Lan, Y.H. Chang, **K.F. Lin**, “Enhancing photovoltaic performance of dye-sensitized solar cells by incorporating poly(sodiumstyrene- sulfonate)-physisorbed MWCNT to Photo-electrode”，第三十六屆高分子研討會，OS1-015 (2013).
8. Y.H. Chang, **K.F. Lin**, “Cation- π effect on physisorption of ionic liquids to MWCNT and rheological behavior of MWCNT-filled epoxy resin”，第三十六屆高分子研討會，PF-066 (2013).
9. K.G. Wen, C.Y. Lo, Y.W. Cheng, **K.F. Lin**, “Application of Cross- linkable Ruthenium Sensitizers on Dye sensitized Solar Cells Based on Binary Ionic Liquid Electrolyte”，第三十五屆高分子研討會，OS3-012 (2012)
10. Y.H. Chang, M.S. Wu, **K.F. Lin**, “Comparison of thermo-mechanical and electric properties for acid-treated and polyimide-grafted MWCNT/ polyetherimide nanocomposites”，第三十五屆高分子研討會，PG2-46 (2012).
11. K.J. Lin, S.C. Lee, Y.H. Chang, C.W. Yeh, **K.F. Lin**, “Fabrication and Properties of Exfoliated

Graphene Oxide/Poly(vinyl alcohol) Nanocomposite Films”, 第三十五屆高分子研討會, PG2-48 (2012).

12. 林金福, “Fabrication and Applications of Exfoliated Clay/Polymer Nanocomposites through Soap-free Emulsion Polymerization”, 兩岸前瞻高分子科學與應用研討會論文摘要集, p.27 (2011). (invited talk)
13. K.Y. Liu, C.Y. Ko, K.G. Wen, K.C. Ho, **K.F. Lin**, “Crosslinkable Ruthenium Dye with Ion Coordinating Property for Dye-Sensitized Solar Cells”, 第三十四屆高分子研討會, DP-009 (2011).
14. Y.H. Chang, P.Y. Lin, S.R. Huang, K.Y. Liu, M.S. Wu, **K.F. Lin**, “Preparation and Incorporation of MWCNT/Poly(ionic liquid) Hybrids to All-Solid State Electrolytes for enhancing photovoltaic performance of Dye-Sensitized Solar Cells”, 第三十四屆高分子研討會, FP-30 (2011).
15. 李佳欣, 劉耕硯, 林耿任, 文克剛, **林金福**, “脫層奈米片狀蒙脫石在功能性高分子材料及元件上的應用”, 第三十四屆高分子研討會, FON-05 (2011). (invited talk)

Books

專書章節					
作者	書名	章節標題	出版社	出版年月	ISBN
K.F. Lin* , K. J. Lin,	Polymer Nanocomposites by Emulsion and Suspension Polymerization	PMMA-based Montmorillonite Nanocomposites by soap-free emulsion polymerization	RSC Publishing	2011	978-84755-225-9

Patents

專利名稱	國別	專利號碼	發明人	專利權人	專利期間
具有已脫層型黏土防曬美容用品及其製備方法	中華民國	I 398265	林金福 , 王儷勳, 張育勳	國立臺灣大學	2013/06至2031/12
脫層型黏土奈米片之用途及使用脫層型黏土奈米片包覆陽離子之方法	美國	US 8,513,519 B2	林金福 , 李佳欣, 林耿任, 劉耕硯	國立臺灣大學	2013/08至2031/07
形成脫層型黏土-高分子奈米複合材料乳液的方法及其應用	中華民國	發明第I 284654號	林金福 , 林上強, 簡安廷, 謝棋君, 顏銘翬	國立臺灣大學	2007/08至2026/03

形成黏土/高分子奈米複合材料乳液的方法及其在阻氣材料與半導體材料之應用	中華民國	I 349015	林金福,簡安廷,顏銘翬,李佳欣,翁頂翔,周顯正	國立臺灣大學	2011/09至2027/05
超分子結構及其形成方法	中華民國	發明第 I296633 號	林金福,謝棋君	國立臺灣大學	2008/05至2025/04
自合成導電薄膜之合成方法及其應用	中華民國	I240847	謝國煌,梁文傑,林金福,邱文英,陳文章,王立義,廖文彬,戴子安,王宏仁,郭昭輝,李其欣,林唯芳,張宏	謝國煌	2005/10至2023/11
發光高分子及其改質方法	中華民國	I322173	林金福,周宣良,王鼎章,韓于凱	謝國煌	2010/03至2024/11
Non-Destructive Method for Determining the Extent of Cure of a Polymerizing Material ..	美國	5598005	Francis W. Wang, Robert E. Lowry, King-Fu Lin	美國國家標準技術局	1997/01至2015/06
Epoxy Resins Incorporated with Imidazole/Cr(acac) ₃ and Composites Thereof	美國	5672431	林金福	國科會	1997/09至2016/02
可硬化的環氧樹脂配方及其複合材料配方	中華民國	090879	林金福	國科會	1997/11至2016/01