

## References

- [1] Hino, Y., Kajii, H. & Ohmori, Y. 2006. Transient characteristics of polyfluorene-based polymer light-emitting diodes and their application for color tunable devices. *Thin Solid Films*, 499, pp.359-363.
- [2] A. J. Breeze, Z. Schlesinger, and S. A. Carte *PHYSICAL REVIEW B*, VOLUME 64, (125205) Physics Department, University of California, Santa Cruz, California 9506.
- [3] Hoke, E. T. Vandewal, K., Bartelt, J. A., Mateker, W. R., Douglas, J. D., Noriega, R., Graham, K. R., Fréchet, J. M., Salleo, A. & McGehee, M. D. Recombination in Polymer:Fullerene Solar Cells with Open-Circuit Voltages Approaching and Exceeding 1.0 V. *Adv. Energy Mater.* 3,220–230 (2013).
- [4] Jasprit Singh, McGraw Hill, (1994). "semiconductor Devices-an Introduction.
- [5] Christoph Brabec, Vladimir Dyakonov, Jürgen Parisi and Niyazi Serdar Sariciftci (eds.), Springer Verlag (2003), *Organic Photovoltaics*.
- [6] Hermann, W. & Simon, A. J. 2007. Global Climate and Energy Project. [Online]. [Accessed 9th of June 2009]. Available from World Wide Web: [http://gcep.stanford.edu/pdfs/GCEP\\_Exergy\\_Poster\\_web.pdf](http://gcep.stanford.edu/pdfs/GCEP_Exergy_Poster_web.pdf).
- [7] Hino, Y., Kajii, H. & Ohmori, Y. 2006. Transient characteristics of polyfluorene-based polymer light-emitting diodes and their application for color tunable devices. *Thin Solid Films*.
- [8] T. Oku, R. Motoyoshi, K. Fujimoto, T. Akiyama, B. Jeyadevan, J. Cuya, Structures and photovoltaic properties of copper oxides/fullerene solar cells, *J. Phys. Chem. Solids* 72 1206-1211 (2011).

- [9] C. J., Cravino, A., Meissner, D., Sariciftci, N. S., Fromherz, T., Rispiens, M. T., Sanchez, L. & Hummelen, J. C. (2001). Origin of the open circuit voltage of plastic solar cells. *Advanced Functional Materials*, Vol. 11, No.5, (October 2001).
- [10] N., Michaud, A., & Leclerc, M. (2007). A low-band gap poly (2, 7-carbazole) derivative for use in high-performance solar cells. *Advanced Materials*, Vol.19, No.17, (September 2007).
- [11] Widmer, J., Tietze, M., Leo, K. & Riede, M. Open-Circuit Voltage and Effective Gap of Organic Solar Cells. *Adv. Funct. Mater.* doi:10.1002/adfm.201301048, (2013).
- [12] Abdelsakhi .S.M - Using Gum Arabic in Making Solar Cells by Thin Films Instead Of Polymers - *IOSR Journal of Applied Physics (IOSR-JAP) ISSN: 2278-4861. Volume 8, Issue 1 Ver. III (Jan. - Feb. 2016), PP 27-32 .*
- [13] Liu Xiao-Dong(刘晓东), Performance improvement of MEH-PPV:PCBM solar cells using bathocuproine and bathophenanthroline as the buffer layers - *Chin. Phys. B* Vol. 20, No. 6 (2011) 068801 .
- [14] J.H. Parka - Non-linear  $I-V$  characteristics of MEH-PPV patterned on sub-micrometer electrodes - *Thin Solid Films* 393 Ž2001. 129–131 .
- [15] G. Yu, J. Gao, J.C. Hummelen, F. Wudl, A.J. Heeger, *Science* 270 Ž1995. 1789.
- [16] F. Hide, M.A. D'iaz-Garc'ia, B.J. Schwartz, M.R. Andersson, Q. Pei, A.J. Heeger, *Science* 273 Ž1996. 1833.
- [17] H. Sirringhaus, N. Tessler, R.H. Friend, *Science* 280 Ž1998. 1741.
- [18] M. Granström, *Synth. Met.* 102 Ž1999. 1042.
- [19] J.A. DeAro, R. Gupta, A.J. Heeger, S.K. Buratto, *Synth. Met.* 102 Ž1999. 865.

- [20] S.H.M. Persson, P. Dyreklev, O. Inganäs, *Adv. Mater.* **5** (1995). 405.
- [21] P.W.M. Blom, M.J.M. de Jong, M.G. van Munster, *Phys. Rev. B* **55** (1997). R656.
- [22] J.M. Lupton, I.D. Samuel, *J. Phys. D: Appl. Phys.* **32** (1999). 2973
- [23] Yu G, Gao J, Hummelen J C, Wudl F and Heeger A J 1995 *Science* **270** 1789
- [24] Reyes-Reyes M, Kim K and Carroll D L 2005 *Appl. Phys. Lett.* **87** 083506
- [25] Kim J Y, Lee K, Coates N E, Moses D, Nguyen T Q, Dante M and Heeger A J 2007 *Science* **317** 222
- [26] Dennler G, Scharber M C and Brabec C J 2009 *Adv. Mater.* **21** 1323
- [27] Door Waldo J.E. Beek. - Eindhoven ,(2005), Hybrid polymer solar cells, Technische Universiteit Proefschrift. - ISBN 90-386-2796-3 NUR 913.
- [28] A. Mayer, S. Scully, B. Hardin, M. Rowell, M. McGehee, (2007). Polymer-based solar cells, *Materials Today* 10.
- [29] H. Hoppe and N. S. Sariciftci, *Polymer Solar Cells*, in *Photoresponsive Polymers II*, Eds.: S. R. Marder and K.-S. Lee, *Advances in Polymer Science*, Springer, Berlin-Heidelberg (2008).
- [30] N.S. Sariciftci, L. Smilowitz, A.J. Heeger, F. Wudl, (1992), Photoinduced Electron Transfer from Conducting Polymers onto Buckminsterfullerene, *Science* 258.
- [31] Christoph J. Brabec, N. Serdar Sariciftci, and Jan C. Hummelen (2001), 1, No. 1, February. plastic solar cells.
- [32] Hoke, E. T. Vandewal, K., Bartelt, J. A., Mateker, W. R., Douglas, J. D., Noriega, R., Graham, K. R., Fréchet, J. M., Salbeck, A. & McGehee, M. D.

Recombination in Polymer:Fullerene Solar Cells with Open-Circuit Voltages Approaching and Exceeding 1.0 V. *Adv. Energy Mater.* 3,220–230 (2013).

[33] C. J. Brabec, et al., "Polymer-Fullerene Bulk-Heterojunction Solar Cells," *Advanced Materials*, vol. 22, pp. 3839-3856, Sep (2010)

[34] Introduction to polymer solar cells, René Janssen: Departments of Chemical Engineering & Chemistry and Applied Physics Eindhoven University of Technology, The Netherlands (2005) .

[35] Ma, Z., Wang, E., Jarvid, M. E., Henriksson, P., Inganäs, O., Zhang, F. & Andersson, M. R. Synthesis and characterization of benzodithiophene–isoindigo polymers for solar cells. *J. Mater. Chem.* 22,2306–2314 (2012).

[36] Dennler, G. & Sariciftci, S. N. 2005. Flexible Conjugated Polymer-based Plastic Solar Cells: From Basics to Applications. *Proceedings of the IEEE*.

[37] Brabec C J, Shaheen S E, Winder C, Sariciftci N S and Denk P 2002 *Appl. Phys. Lett.* **80** 1288

[38] Kim M S, Kang M G, Guo L J and Kim J 2008 *Appl. Phys. Lett.* **92** 133301

[39] Peumans P and Forrest S R 2001 *Appl. Phys. Lett.* **79** 126 [15] Chan M Y, Lee C S, Lai S L, Fung M K, Wong F L, Sun H Y, Lau K M and Lee S T 2006 *J. Appl. Phys.* **100** 094506

[40] Zhao D W, Liu P, Sun X W, Tan S T, Ke L and Kyaw A K K 2009 *Appl. Phys. Lett.* **95** 153304

[41] Wu Z X, Wang L D, Lei G T and Qiu Y 2005 *J. Appl. Phys.* **97** 103105

[42] Liu Z T, Kwong C Y, Cheung C H, Djurišić A B, Chan Y and Chui P C 2005 *Synth. Met.* **150** 159

- [43] Liu X D, Xu Z, Zhang F J, Zhao S L, Zhang T H, Gong W, Song J L, Kong C, Yan G and Xu X R 2010 *Chin. Phys. B* **19** 118601
- [44] Peumans P, Yakimov A and Forrest S R 2003 *J. Appl. Phys.* **93** 3693
- [45] Wang N N, Yu J S, Zang Y, Huang J and Jiang Y D 2010 *Sol. Energy Mater. Sol. Cells* **94** 263
- [46] Zhang F, Ceder M and Ingañias O 2007 *Adv. Mater.* **19** 1835
- [47] Ichikawa M, Amagai J, Horiba Y, Koyama T and Taniguchi Y 2003 *J. Appl. Phys.* **94** 7796
- [48] Naka S, Okada H, Onnagawa H and Tsutsui T 2000 *Appl. Phys. Lett.* **76** 197.
- [49] Chen H Y, Hou J H, Zhang S Q, Liang Y Y, Yang G W, Yang Y, Yu L P, Wu Y and Li G 2009 *Nature Photon.* **3** 649
- [50] Liang Y Y, Xu Z, Xia J B, Tsai S T, Wu Y, Li G, Ray C and Yu L P 2010 *Adv. Mater.* **22** E135
- [51] Li G, Chu C W, Shrotriya V, Huang J and Yang Y 2006 *Appl. Phys. Lett.* **88** 253503
- [52] Song Q L, Li F Y, Yang H, Wu H R, Wang X Z, Zhou W, Zhao J M, Ding X M, Huang C H and Hou X Y 2005 *Chem. Phys. Lett.* **416** 42
- [53] Kang B, Tan L W and Silva S R P 2008 *Appl. Phys. Lett.* **93** 133302
- [54] Yoo I, Lee M, Lee C, Kim D W, Moon I S and Hwang D H 2005 *Synth. Met.* **153** 97
- [55] Tao C, Ruan S P, Xie G H, Kong X Z, Shen L, Meng F X, Liu C X, Zhang X D, Dong W and Chen W Y 2009 *Appl. Phys. Lett.* **94** 043311.
- [56] A. Bewick, M. Fleischmann, H.R. Thirsk, *Trans. Faraday Soc.*, 58 (1962) 2200.

- [57] I. Danaee, F. Shoghi, M. Dehghani Mobarake, M. Kameli, *J. Solid State Electrochem.*, 14 (2010) 57.
- [58] S. Bijani, R. Schrebler, E.A. Dalchiele, M. Gabás, L. Martínez, and J. R. Ramos-Barrado, *J. Phys. Chem. C*, 115 (2011) 21373.
- [59] T.L. Barr, Y.L. Liu, *J. Phys. Chem. Solids*, 50 (1989) 657.
- [60] B.D. Cullity, *Elements of X-ray Diffraction 2nd Ed.* (Addison-Wesley, Reading, MA, 1978).
- [61] W. Vallejo, J. Clavijo, *Brazilian Journal of Physics*, 40 (2010) 30.
- [62] P. O'Brien, D. J. Otway, and J. R. Walsh, *Thin Solid Films*, 315 (1998) 57.
- [63] R. Henríquez, P. Grez, E. Muñoz, H. Gómez, J.A. Badán, R.E. Marotti, E.A. Dalchiele, *Thin Solid Films*, 518 (2010) 1774.
- [64] R. Yoosuf, M.K. Jayaraj, *Sol Energy Mater Sol Cells*, 89 (2005) 85.
- [65] R.E. Marotti, C.D. Bojorge, E. Broitman, H.R. Cánepa, J.A. Badán, E.A. Dalchiele, A.J. Gellman, *Thin Solid Films*, 517 (2008) 1077.
- [66] A. Akkari, C. Guasch, M. Castange, *J. Mater. Sci.*, 46 (2011) 6285.