

Findings from Wuhan University in Quinones Reported

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By a News Reporter-Staff News Editor at Electronics Newsweekly -- Data detailed on Quinones have been presented. According to news reporting out of Wuhan, People's Republic of China, by VerticalNews editors, research stated, "A facile and reliable method is applied to prepare the electrolyte based on hydroquinone (HQ)/benzoquinone (BQ) redox couple for dye-sensitized solar cells (DSSCs) in open environment by adding moderate amount of acetic acid (HAc), and the best conversion efficiency (η) of 5.82% is achieved under 100 mW cm⁻² (AM 1.5 G) illumination."

Our news journalists obtained a quote from the research from Wuhan University, "Electrochemistry properties of DSSCs using such redox couple are measured and the results show a higher current and better charge transfer in contrast to I-/I⁻³(-). And a slightly higher efficiency of 5.88% is obtained when HQ and BQ are symmetrically substituted by two methyls."

According to the news editors, the research concluded: "With advantages of high efficiency, compatible with the most common dye N719 and easily tuned by facile structural modification, the redox shuttle employing HQ/BQ via HAc treatment is very promising to be employed in efficient DSSCs."

For more information on this research see: Effect of HAc treatment on an open-environment prepared organic redox couple based on hydroquinone/benzoquinone and its application in dye-sensitized solar cells. *Electrochimica Acta*, 2013;107():695-700. *Electrochimica Acta* can be contacted at: Pergamon-Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, England.

Our news journalists report that additional information may be obtained by contacting Z.H. Yu, Wuhan University, Minist Educ, Key Lab Artificial Micro Nano Struct, Wuhan 430072, People's Republic of China. Additional authors for this research include C.H. Bu, Z.Y. Zhou, Y.M. Liu, N. Huang, S.H. Bai, H. Q. Fu, S.S. Guo and X.Z. Zhao.

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