

Supporting Information

Enhanced Electroluminescence Efficiency Using Reverse Intersystem Crossing Induced by Strong Triplet Fusion of Rubrene as a Sensitizer

Fenlan Qu,^a Weiyao Jia,^a Hongqiang Zhu,^{*b} Xiantong Tang,^a Jing Xu,^a Xi Zhao,^a Caihong Ma,^a Shengnan Ye,^a and Zuhong Xiong^{*a}

^a School of Physical Science and Technology, MOE Key Laboratory on Luminescence and Real-Time Analysis, Southwest University, Chongqing 400715, People's Republic of China
E-mail: zhxiong@swu.edu.cn

^b Chongqing Key Laboratory of Photo-Electric Functional Materials, Chongqing Normal University, Chongqing 401331, People's Republic of China
E-mail: 20132013@cqnu.edu.cn

Corresponding Authors:

zhxiong@swu.edu.cn

Supporting Figures:

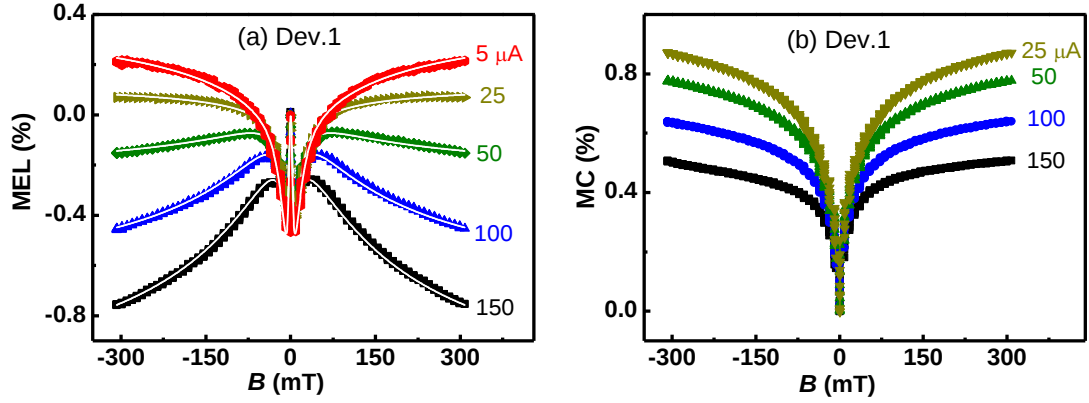


Figure S1 (a, b) Current-dependent MEL and MC experimental curves of Dev.1 at room temperature, respectively. The white solid lines are the fitted curves from Dev.1.

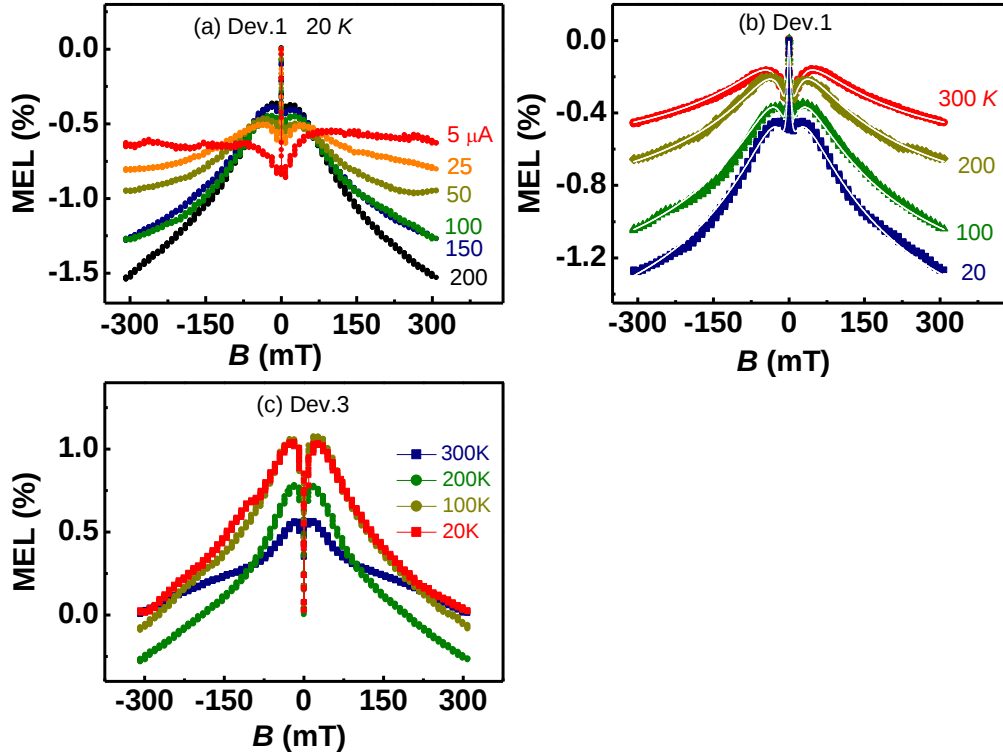


Figure S2 (a) Current-dependent MEL experimental curves at 20K. (b) Temperature-dependent MEL experimental curves at 100 μA . The white solid lines are the fitted curves from Dev.1. (c) Temperature-dependent MEL curves at 100 μA in Dev.3.

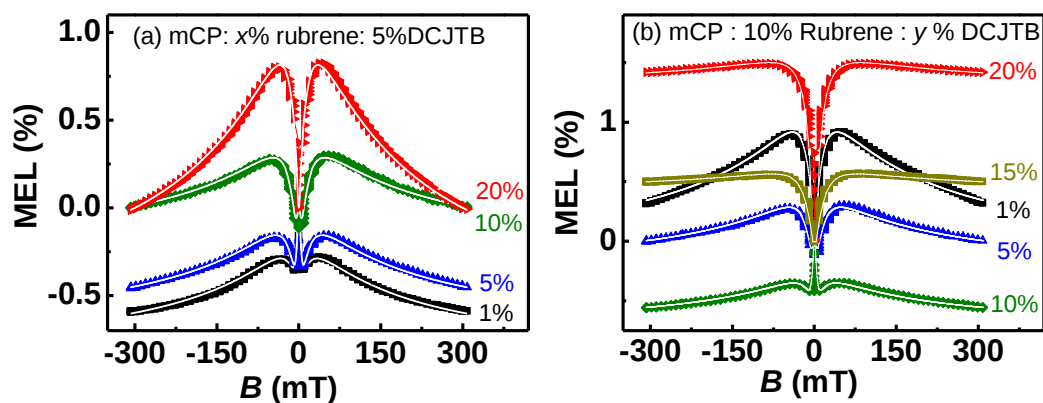


Figure S3 (a, b) Rubrene and DCJTB Concentration-dependent MEL experimental curves of Dev.1 (mCP: $x\%$ rubrene: $y\%$ DCJTB), respectively. The white solid lines are the fitted curves.

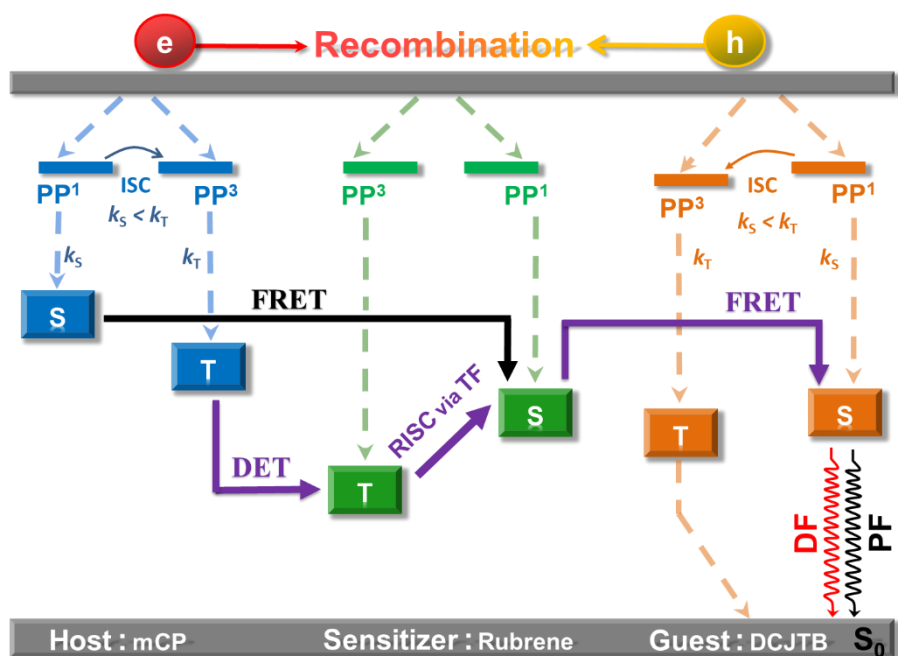


Figure S4 Schematic diagram of spin-pair states in Dev. 1 with the high DCJTB doping concentration.