

Supporting Information

Barium Acetate as an Additive for high Performance Perovskite Solar Cell

Yueming Wang,^{a,b} Yulei Wu,^b Sheng Fu,^b Changjian Song,^b Li Wan,^b Wenxiao Zhang,^b
Xiaodong Li,^b Weiguang Yang,^a Weijie Song,^b and Junfeng Fang ^{*b,c}

^a Department of Electronic Information Materials, School of Materials Science and Engineering, Shanghai University, Shanghai, 200444, China

^b Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo, 315201, China

^c School of Physics and Electronics Science, Ministry of Education Nanophotonics & Advanced Instrument Engineering Research Center, East China Normal University, Shanghai 200062, China

E-mail: jffang@phy.ecnu.edu.cn

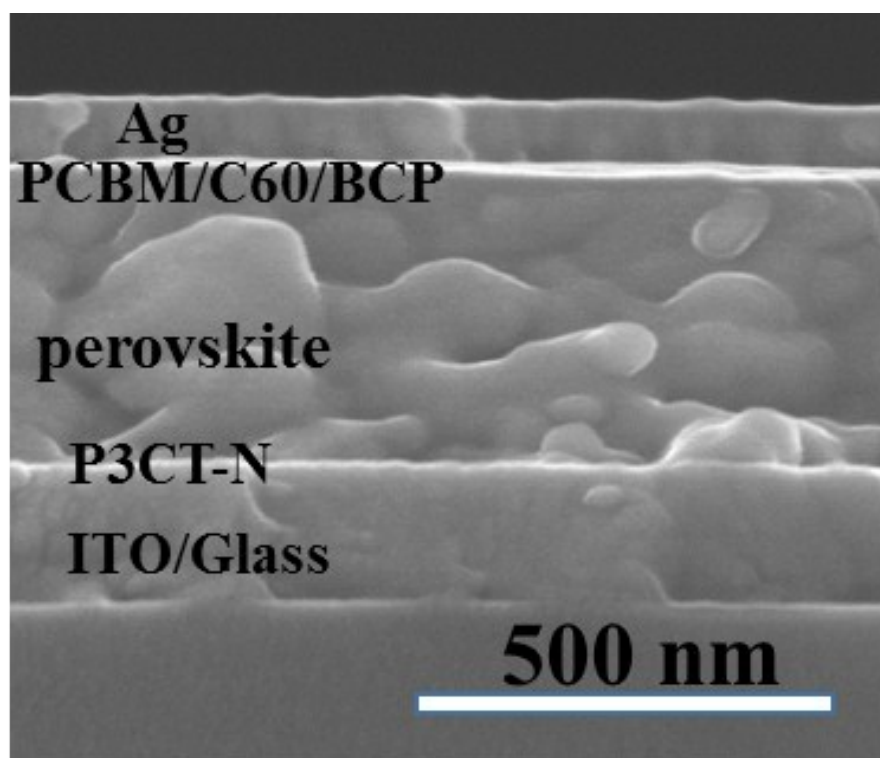


Figure S1. Cross-sectional SEM image of the PSC.

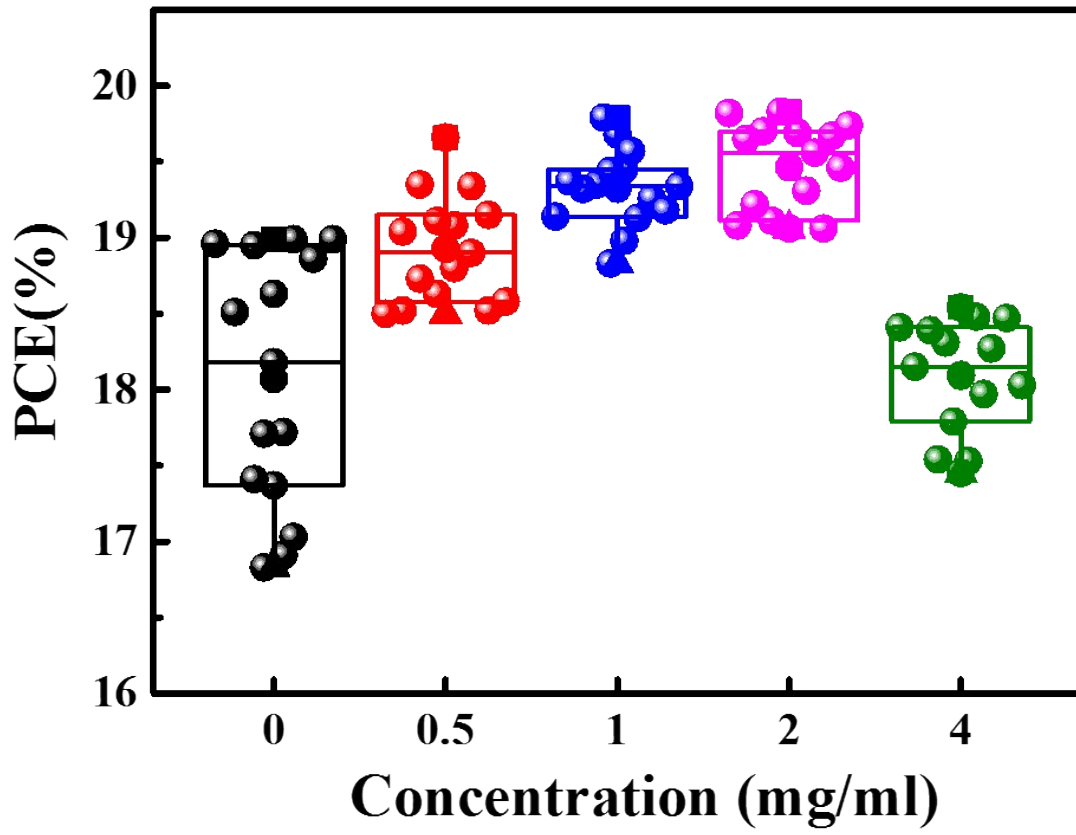


Figure S2. PCE statistics based on 15 separated devices of different BaAc₂ doping concentration.

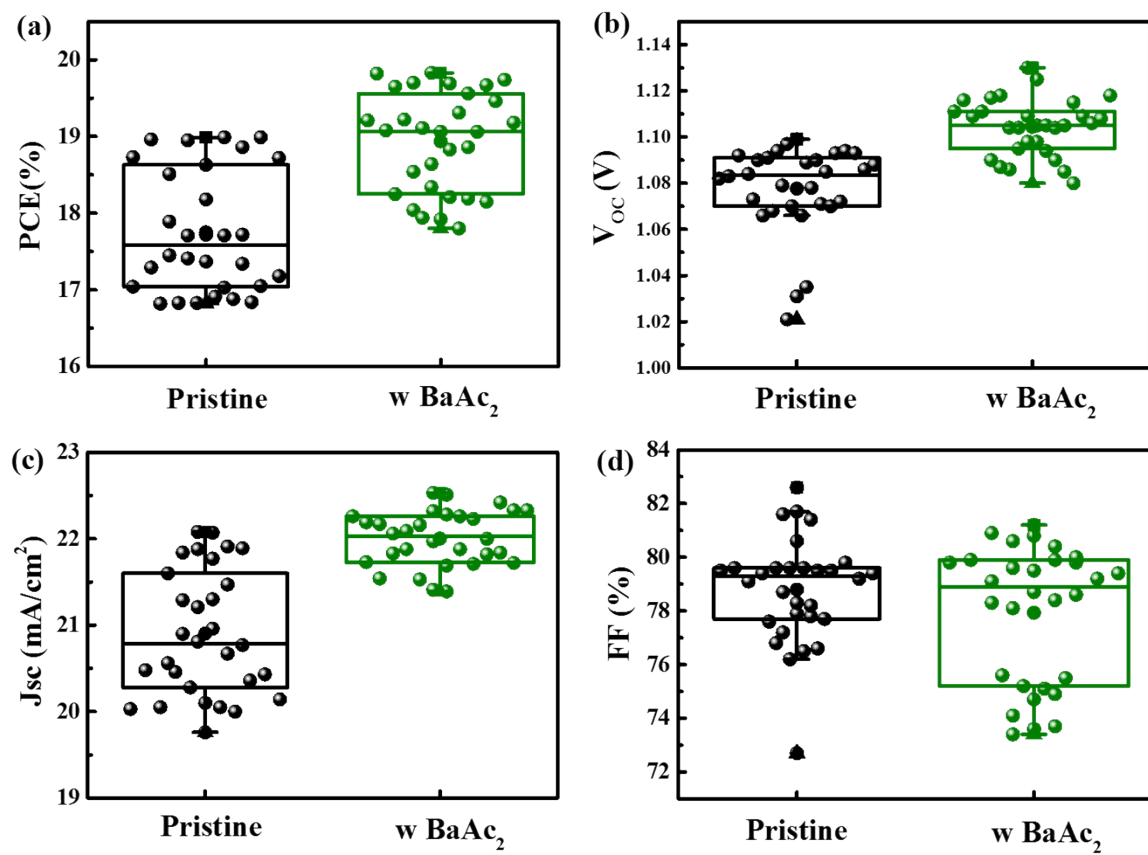


Figure S3. The $J-V$ metrics for 30 separated PSCs based on pristine MAPbI₃ and BaAc₂ doping samples.

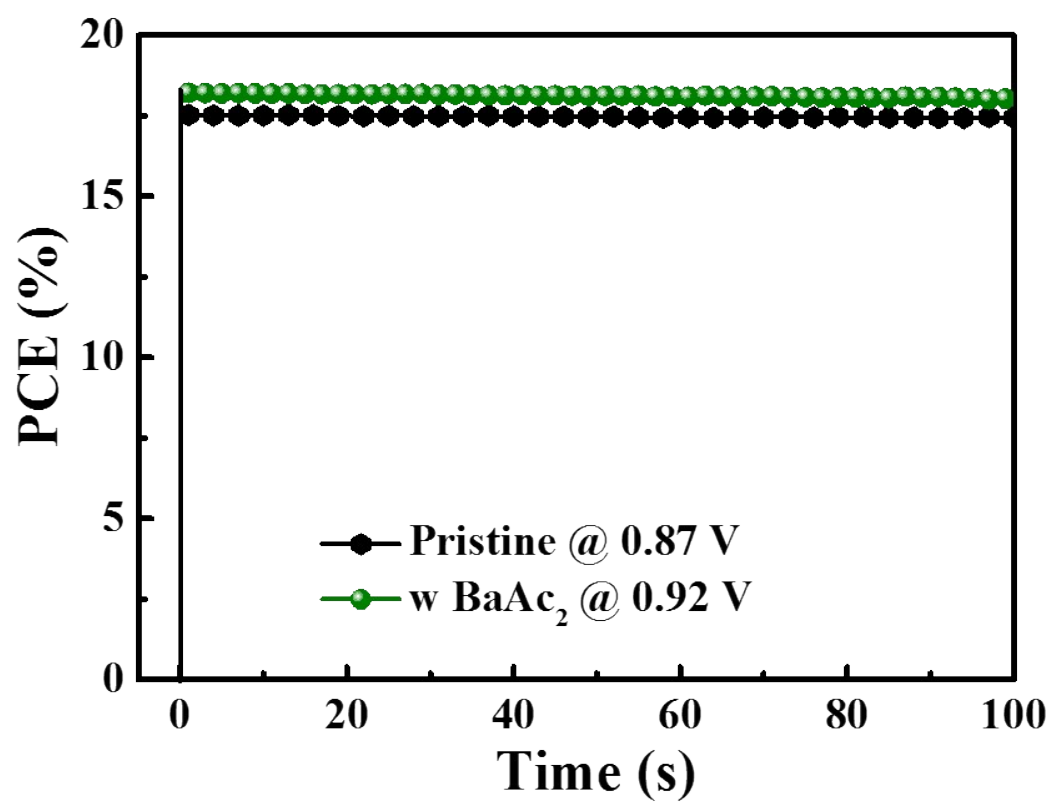


Figure S4. Max power point output of the devices with and without BaAc₂.

Table S1. Fitting parameters for time-resolved photoluminescence (TRPL) based on perovskite films with and without BaAc₂.

Samples	τ_{ava} (ns)	τ_1 (ns)	τ_2 (ns)	A_1	A_2
pristine	16.50	6.09	19.06	0.445	0.579
w BaAc ₂	33.40	7.08	36.81	0.409	0.605