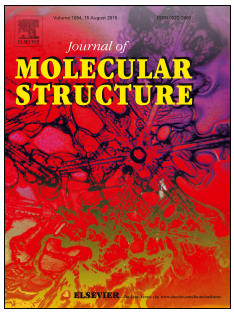
Accepted Manuscript



Anisotropic dielectric phase transition triggered by pendulum-like motion coupled with proton transfer in a layered hybrid crystalline material (4-nitroanilinium^{+}) (18-crown-6) ($H_2PO_4^{-}$) $(H_3PO_4)_2$

Yang Liu, Chun-li Zhu, Liu-lei Qin, Xiao-yuan Zheng, Zun-qi Liu

PII: S0022-2860(18)30399-5

DOI: 10.1016/j.molstruc.2018.03.102

Reference: MOLSTR 25041

To appear in: *Journal of Molecular Structure*

Received Date: 24 December 2017

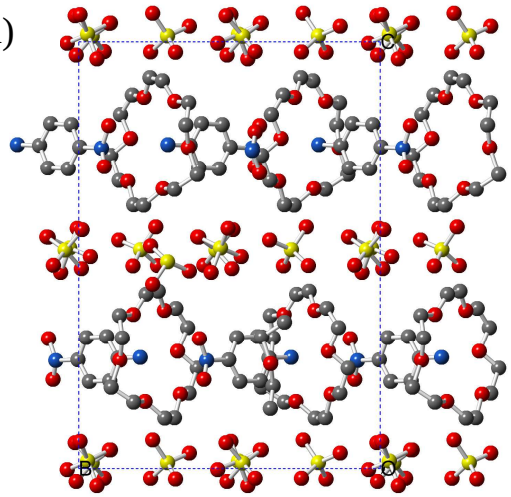
Revised Date: 22 March 2018

Accepted Date: 24 March 2018

Please cite this article as: Y. Liu, C.-l. Zhu, L.-l. Qin, X.-y. Zheng, Z.-q. Liu, Anisotropic dielectric phase transition triggered by pendulum-like motion coupled with proton transfer in a layered hybrid crystalline material (4-nitroanilinium^{+}) (18-crown-6) ($H_2PO_4^{-}$) $(H_3PO_4)_2$, *Journal of Molecular Structure* (2018), doi: 10.1016/j.molstruc.2018.03.102.

a) View of the self-assembly packing of supramolecular cations and anions along the *a*-axis in complex **1**, showing the organic cation layer and the inorganic phosphate anion layer were arranged alternately. b) Dielectric constants of 1 measured along the *a*-axis at frequencies of 5 KHz and 10 KHz. Inset: calculated potential energy for the pendulum-like motion of the nitro-group.

(a)



(b)