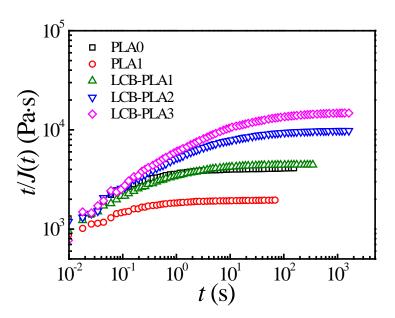
## **Supplementary information for**

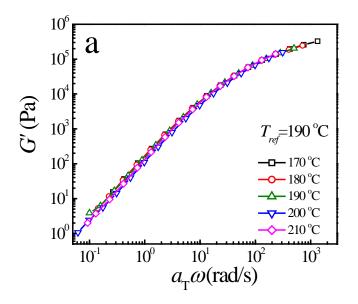
## Bimodal architecture and rheological and foaming properties for gamma-irradiated long-chain branched polylactides†

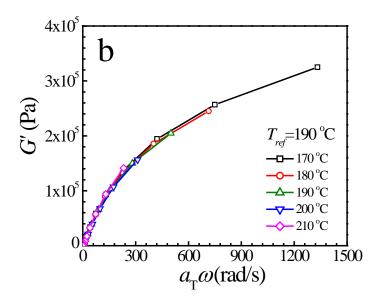
Huagao Fang, Yaqiong Zhang, Jing Bai, Zhongkai Wang and Zhigang Wang\*

CAS Key Laboratory of Soft Matter Chemistry, Department of Polymer Science and Engineering, Hefei National Laboratory for Physical Sciences at the Microscale, University of Science and Technology of China, Hefei, Anhui Province 230026 P. R. China. E-mail: zgwang2@ustc.edu.cn; Fax: +86-0551-63607703; Tel: +86-0551-63607703

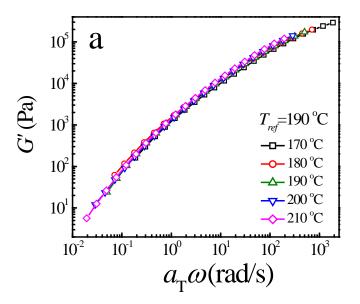


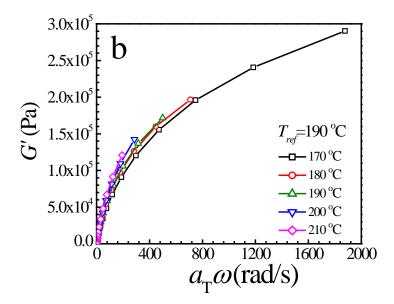
**Fig. S1** Changes of t/J(t) as functions of creep time, t for linear PLA samples and LCB-PLAs at 180 °C.





**Fig. S2** Mastercurves of storage modulus, G' as functions of shifted frequency,  $a_T \omega$  for PLA0 on (a) a double logarithmic scale and (b) a linear scale.





**Fig. S3.** "Mastercurves" of storage modulus, G' as functions of shifted frequency,  $\alpha_T \omega$  for LCB-PLA2 on (a) a double logarithmic scale and (b) a linear scale.