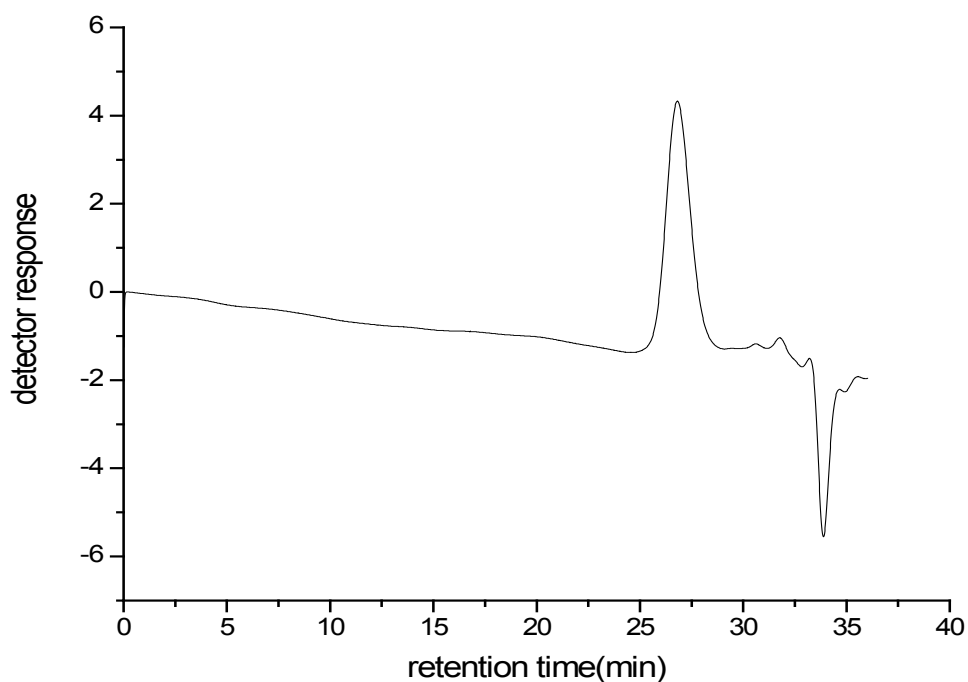


## Supplementary Information

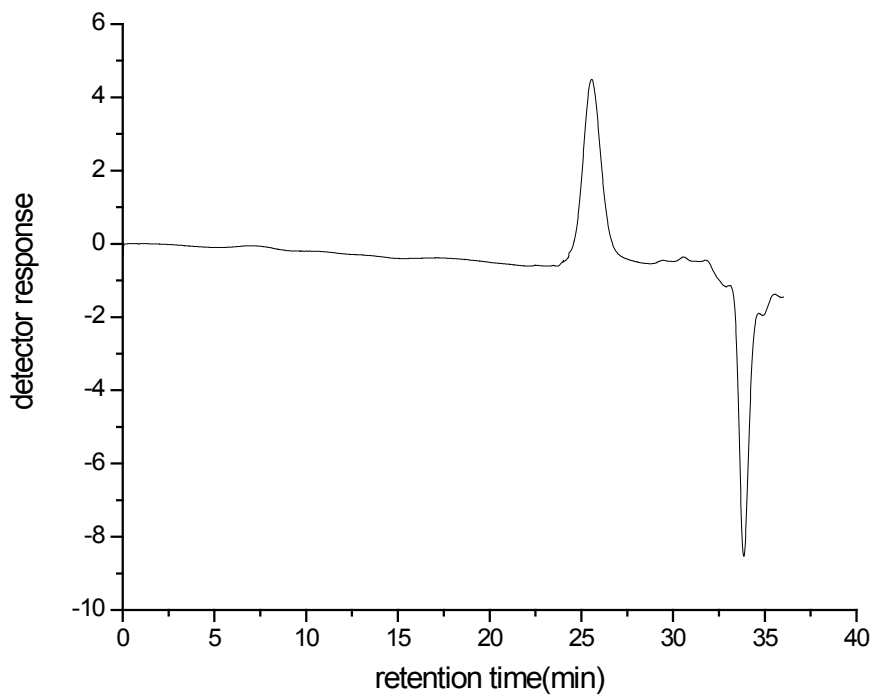
### Synthesis and Structures of Tridentate $\beta$ -Diketiminato Zinc Phenoxides as Catalysts for immortal Ring-Opening Polymerization of L-lactide

*Zhongran Dai, Jinjin Zhang, Yuan Gao, Ning Tang, Yong Huang, Jincui Wu\**

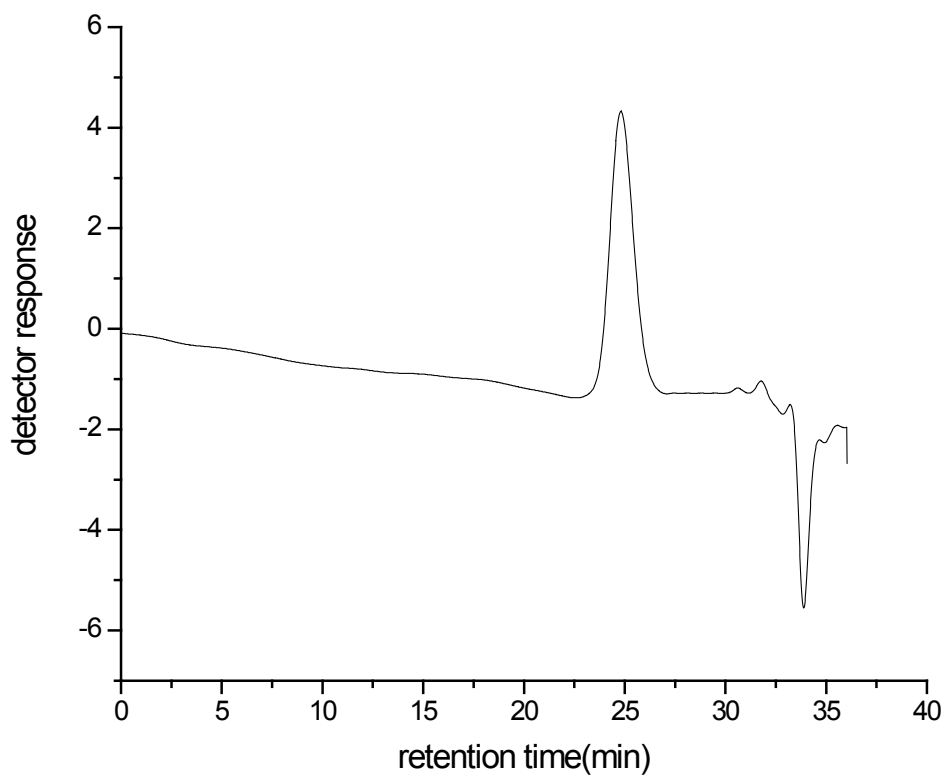
5 Key Laboratory of Nonferrous Metal Chemistry and Resources Utilization of Gansu Province,  
State Key Laboratory of Applied Organic Chemistry, College of Chemistry and Chemical  
Engineering, Lanzhou University, Lanzhou 730000, People's Republic of China.



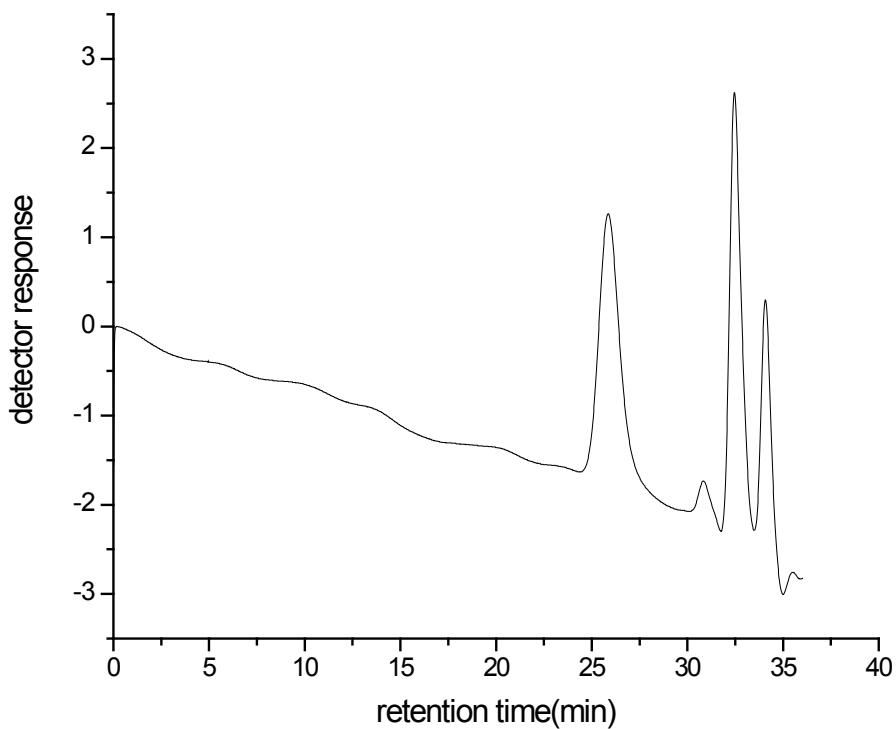
10 Fig. S1 GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2a]_0:[BnOH]_0 = 250 : 1 : 10$ , table 3 entry 1,  $M_w = 5800$  g/mol).



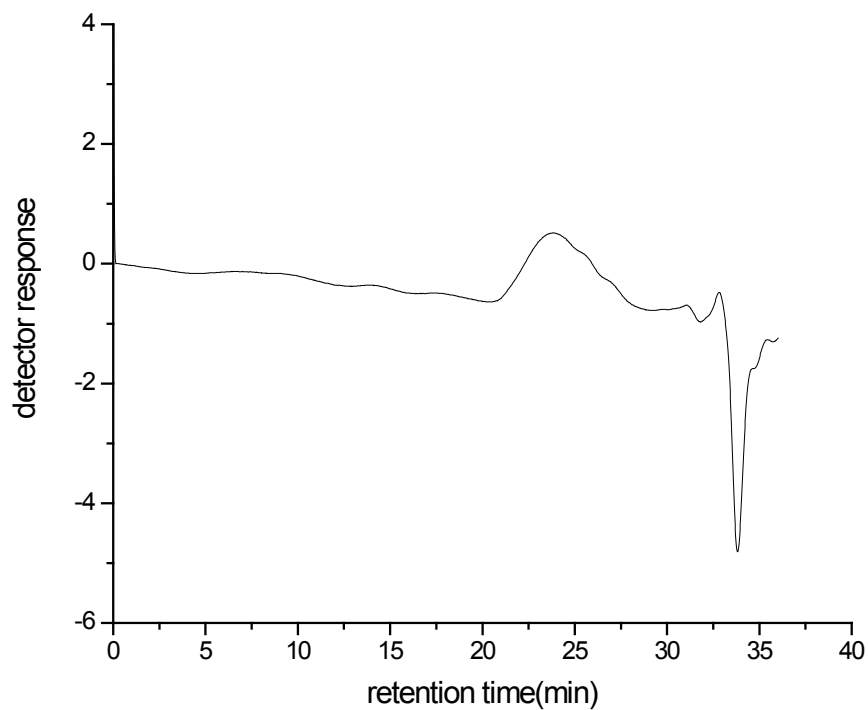
**Fig. S2** GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2a]_0:[BnOH]_0 = 500 : 1 : 10$ , table 3 entry 2,  $M_w = 11700$  g/mol).



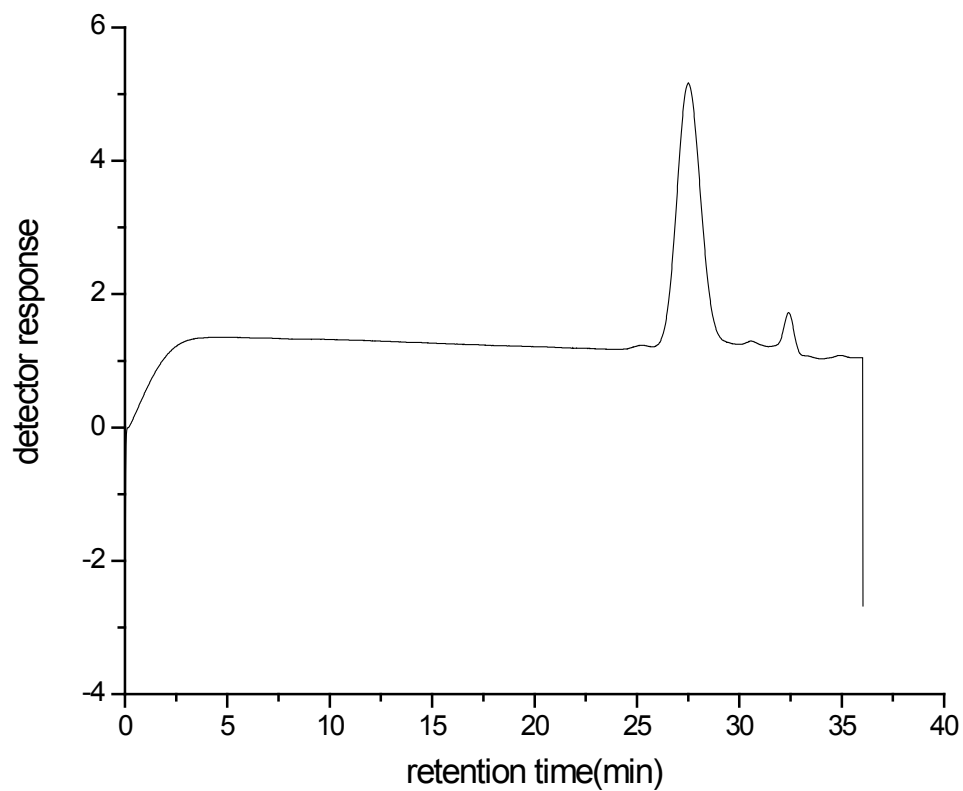
**Fig. S3** GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2a]_0:[BnOH]_0 = 750 : 1 : 10$ , table 3 entry 3,  $M_w = 17600$  g/mol).



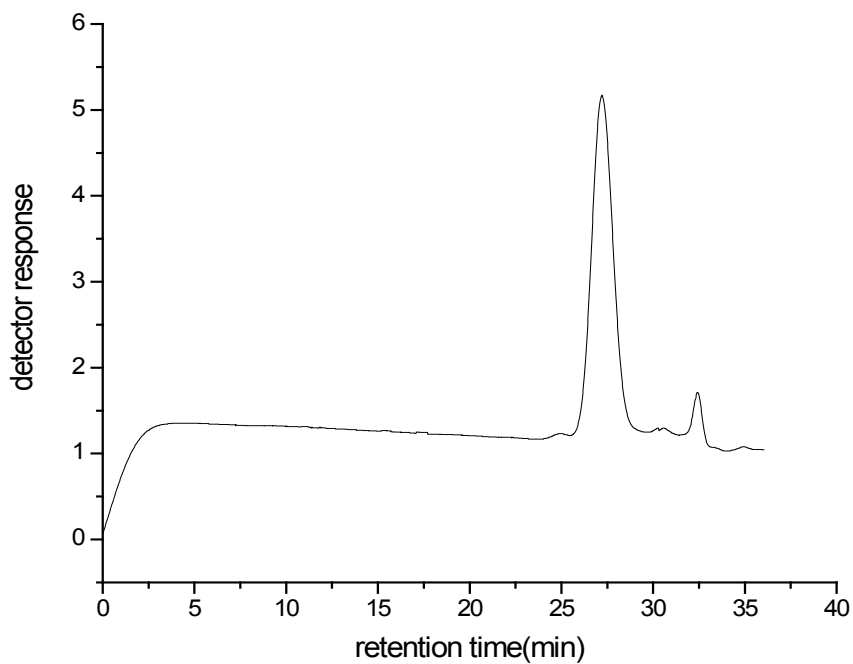
**Fig. S4** GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2a]_0:[BnOH]_0 = 1000 : 1 : 10$ , table 3 entry 4,  $M_w = 23300$  g/mol).



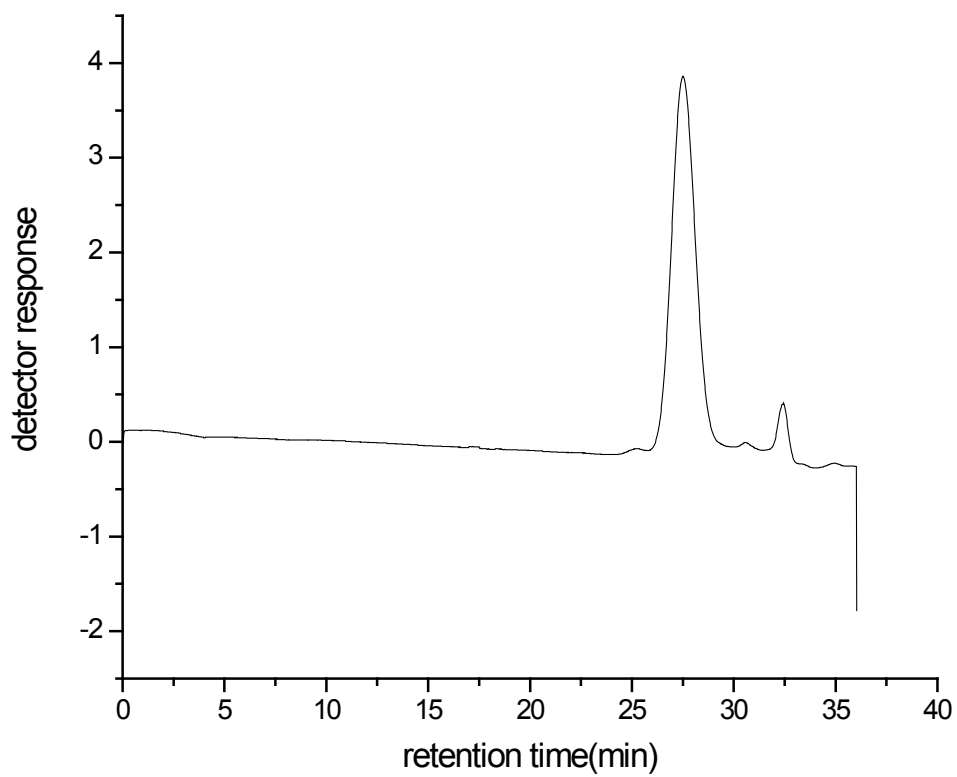
**Fig. S5** GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2a]_0:[BnOH]_0 = 5000 : 1 : 10$ , table 3 entry 5,  $M_w = 104500$  g/mol).



**Fig. S6** GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2b]_0:[BnOH]_0 = 250 : 1 : 10$ , table 3 entry 6,  $M_w = 4700$  g/mol).



**Fig. S7** GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2c]_0:[BnOH]_0 = 250 : 1 : 10$ , table 3 entry 7,  $M_w = 4500$  g/mol).



**Fig. S8** GPC spectrum of poly (L-LA) prepared by ROP of L-LA ( $[LA]_0:[2d]_0:[BnOH]_0 = 250 : 1 : 10$ , table 3 entry 8,  $M_w = 4300$  g/mol).