

Supporting Information

Controlling ZIF-8 nano- and macrocrystal formation and reactivity through zinc salts variations

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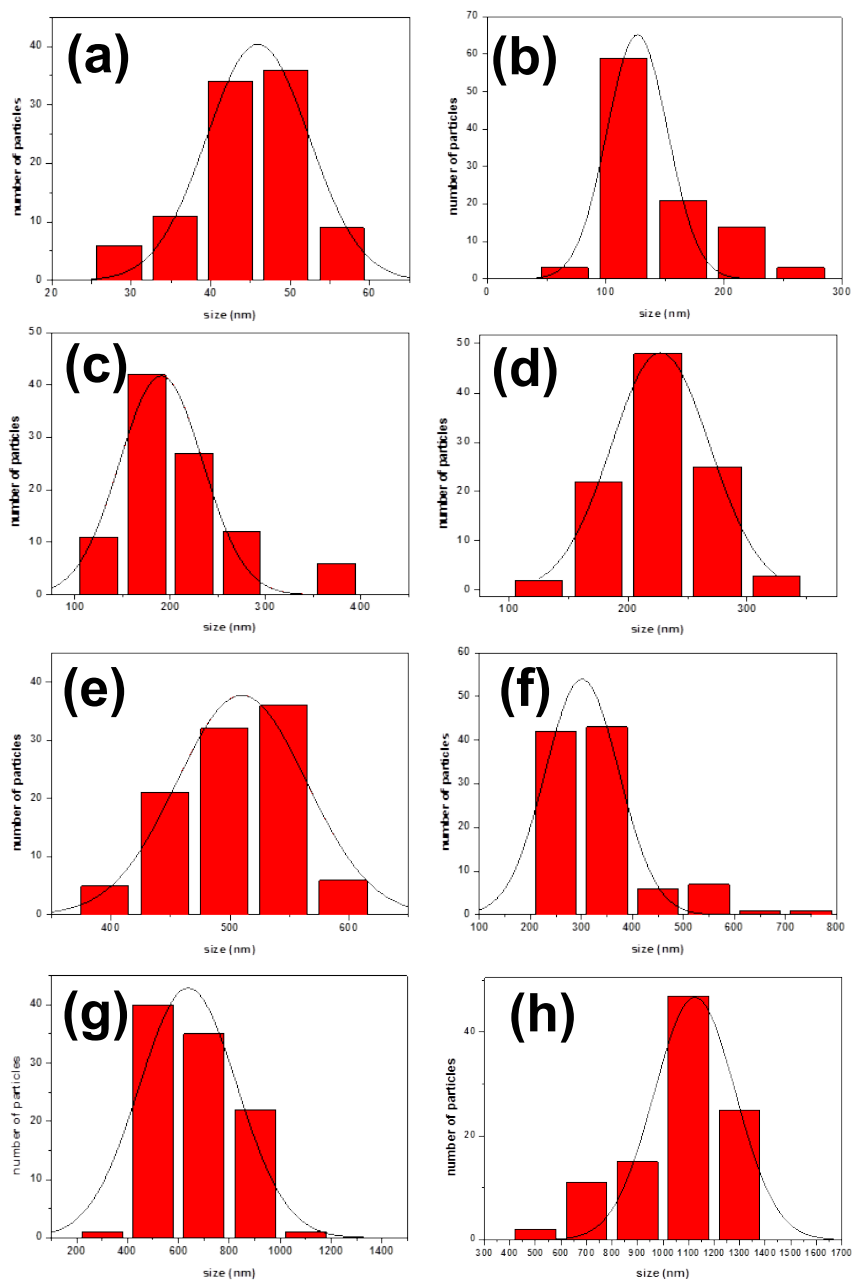
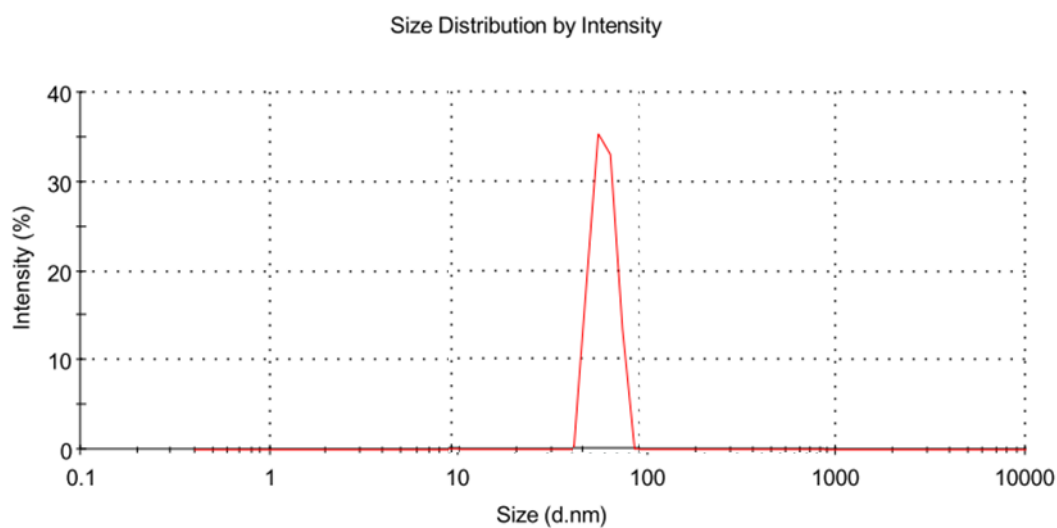


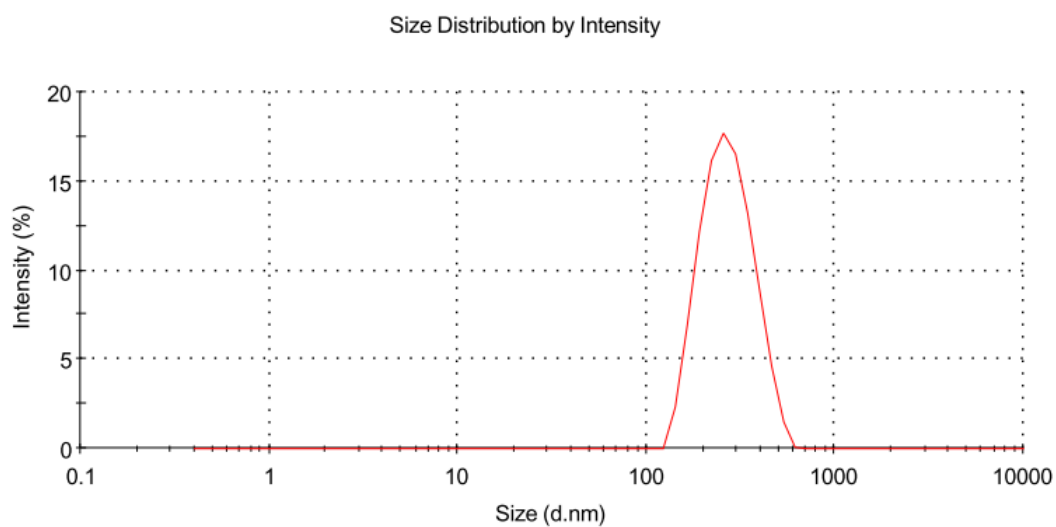
Fig. S1. Size distributions of ZIF-8 crystals obtained from SEM images described in Fig. 3.

Zn(acac)₂



Peak	Size [nm]	Intensity [%]	Width [nm]
1	85,0	100,0	21,58

Zn(NO₃)₂

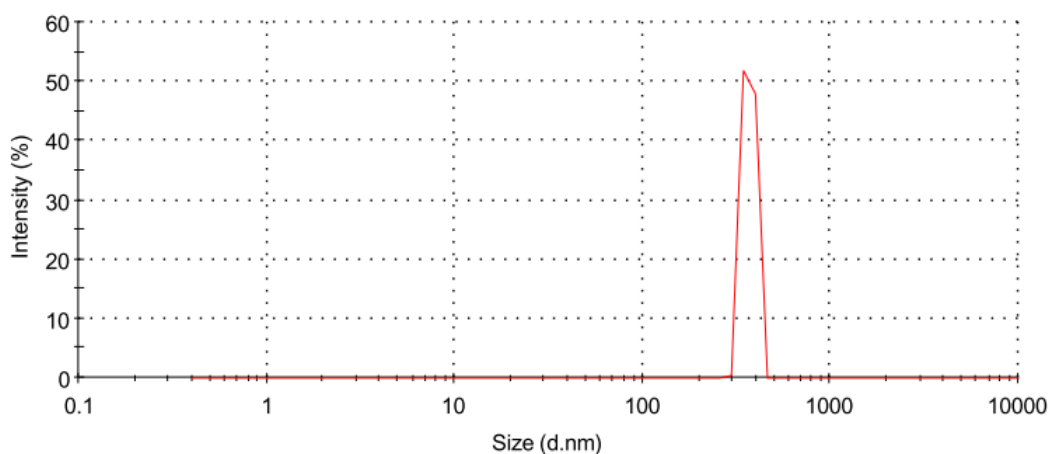


Peak	Size [nm]	Intensity [%]	Width [nm]
1	192,0	100,0	85,31

Fig. S2. Size distributions by intensity obtained by DLS for ZIF-8 crystals prepared from Zn(acac)₂ and Zn(NO₃)₂.

ZnSO₄

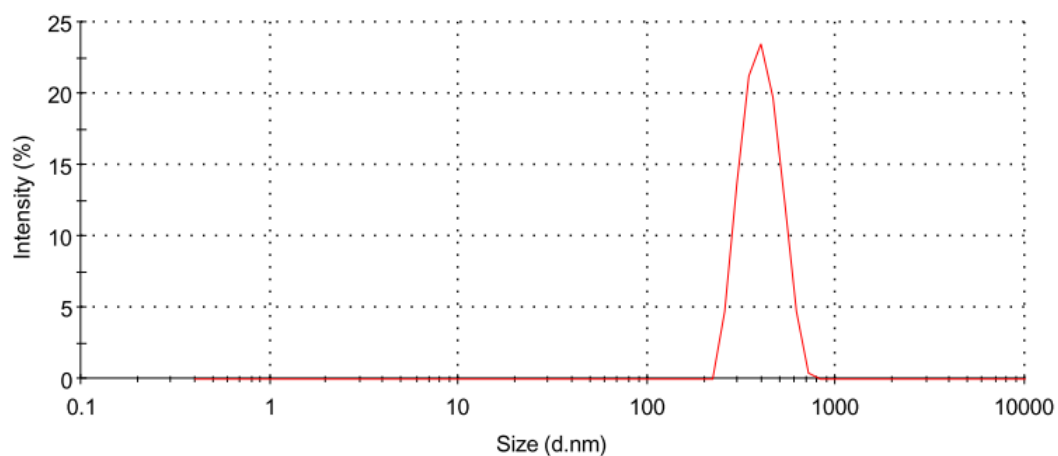
Size Distribution by Intensity



Peak	Size [nm]	Intensity [%]	Width [nm]
1	247,0	100,0	27,38

Zn(ClO₄)₂

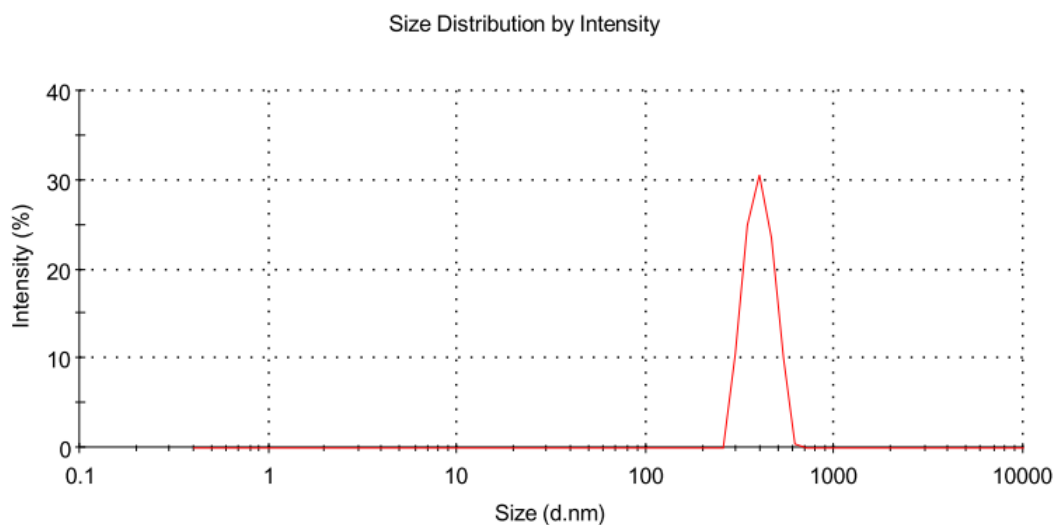
Size Distribution by Intensity



Peak	Size [nm]	Intensity [%]	Width [nm]
1	312,0	100,0	92,42

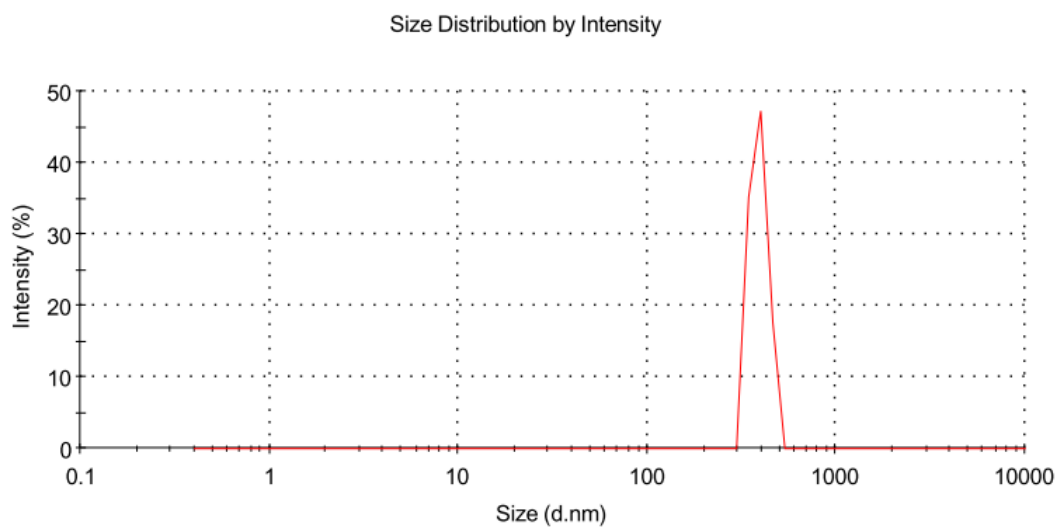
Fig. S2 (continued). Size distributions by intensity obtained by DLS for ZIF-8 crystals prepared from ZnSO₄ and Zn(ClO₄)₂.

Zn(OAc)₂



Peak	Size [nm]	Intensity [%]	Width [nm]
1	480,0	100,0	62,78

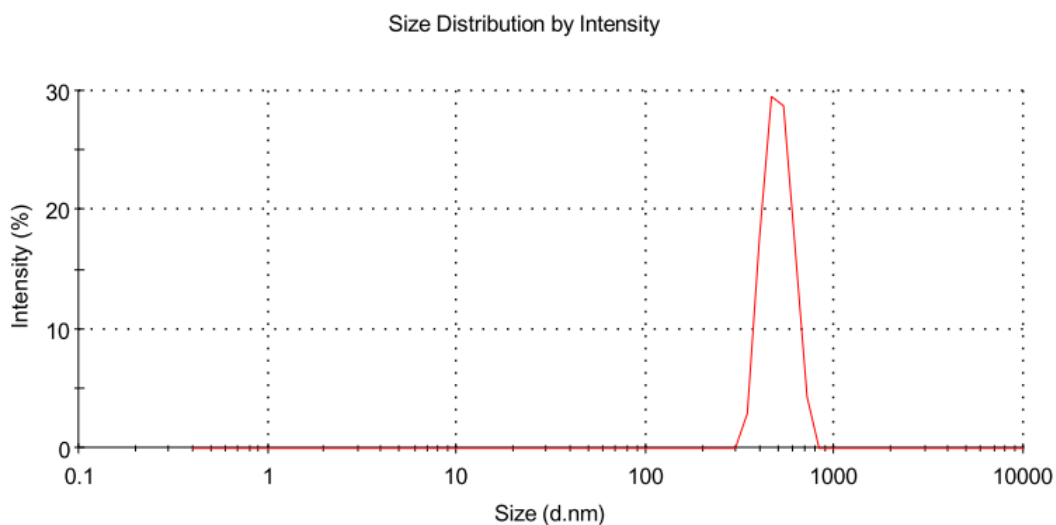
ZnCl₂



Peak	Size [nm]	Intensity [%]	Width [nm]
1	388,0	100,0	40,69

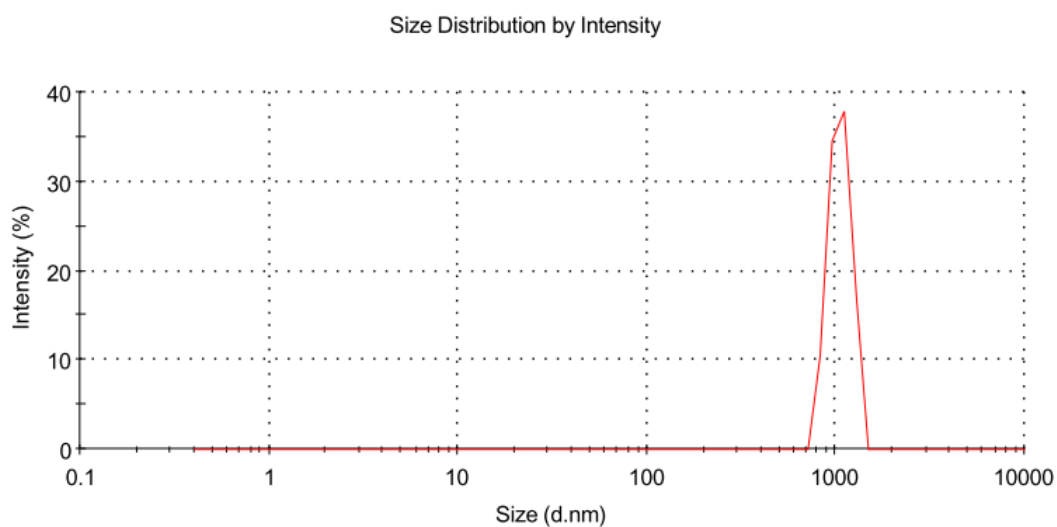
Fig. S2 (continued). Size distributions by intensity obtained by DLS for ZIF-8 crystals prepared from Zn(OAc)₂ and ZnCl₂.

ZnI₂



Peak	Size [nm]	Intensity [%]	Width [nm]
1	589,0	100,0	87,26

ZnBr₂



Peak	Size [nm]	Intensity [%]	Width [nm]
1	1160,0	100,0	137,0

Fig. S2 (continued). Size distributions by intensity obtained by DLS for ZIF-8 crystals prepared from ZnI₂ and ZnBr₂.

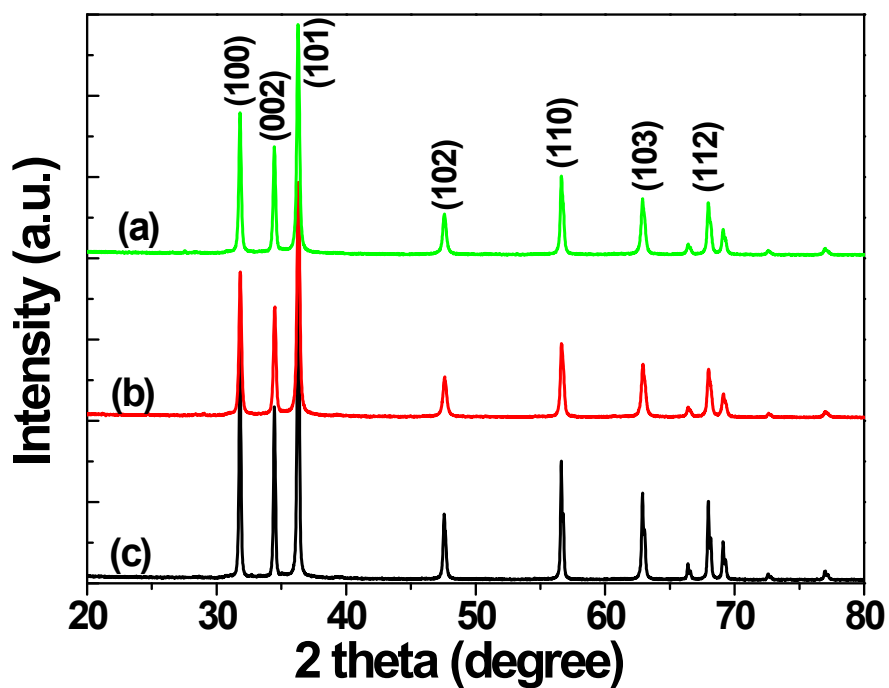


Fig. S3. XRD patterns of ZnO crystals obtained upon TGA experiments on ZIF-8 nanocrystals. (a) ZIF-8 prepared from zinc nitrate, (b) ZIF-8 prepared from zinc bromide, and (c) ZIF-8 prepared from zinc acetate.