

Nanofibers to nanocuboids of polyaniline by lead nitrate: Hierarchical self-assembly with lead ions

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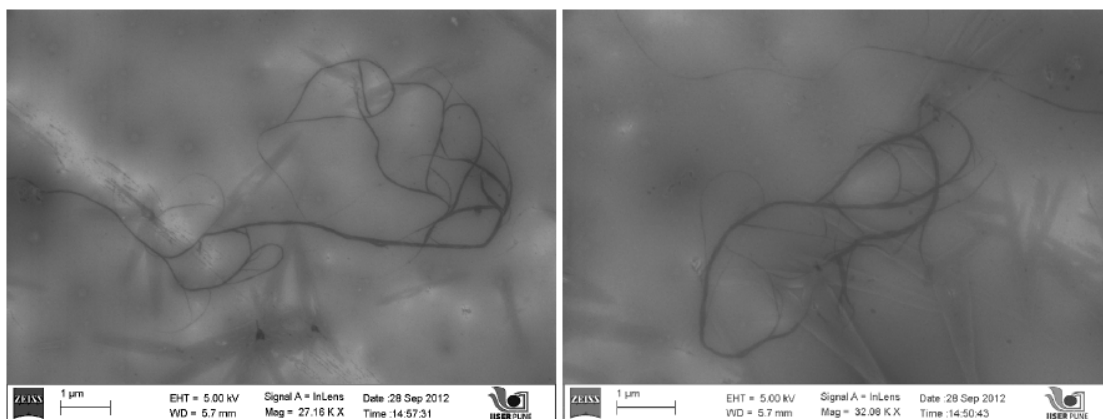


Figure S1. FESEM images of EB

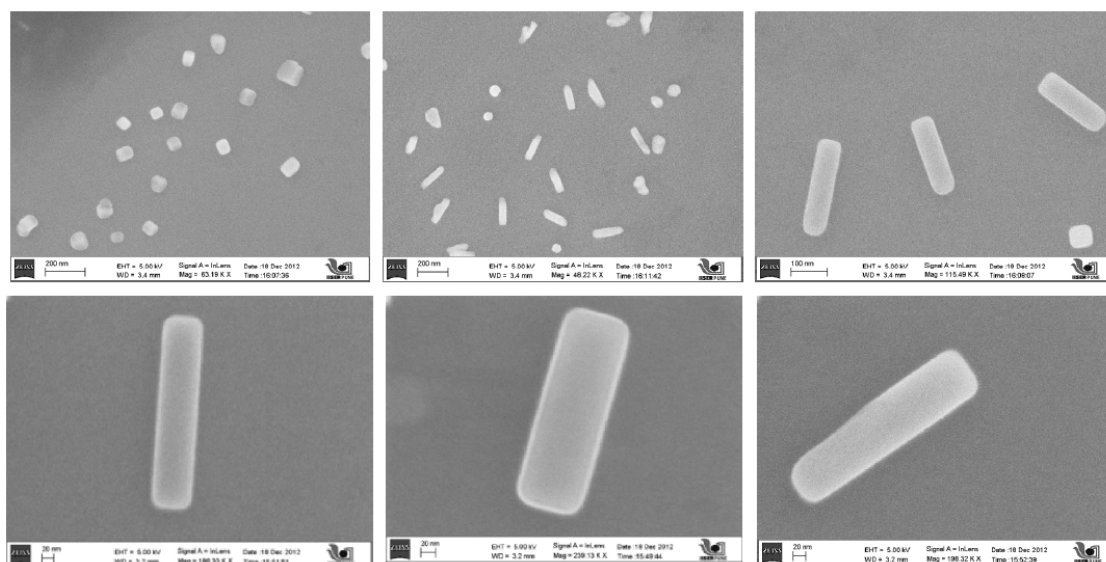


Figure S2. FESEM images of EB-Pb

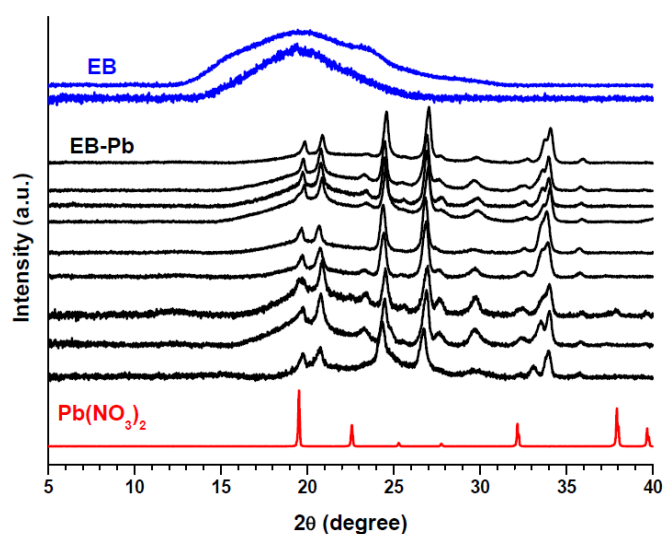


Figure S3. PXRD patterns of EB (blue), EB-Pb (black) and Pb(NO₃)₂ (red).

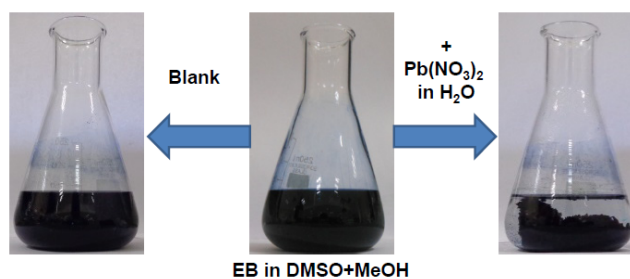


Figure S4. Optical photographs showing the role of Pb(NO₃)₂ (also for all divalent other nitrates) metal nitrates in the precipitation of self-assembled nanocrystals.

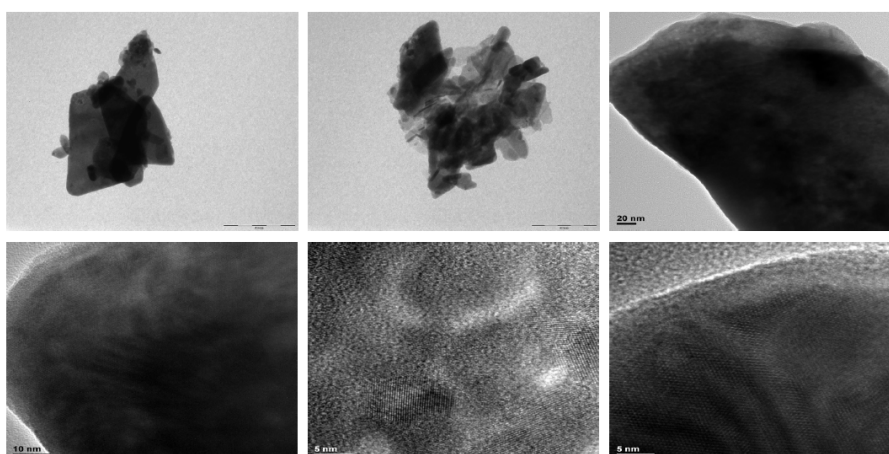


Figure S5. HRTEM images of the EB-Pb system.

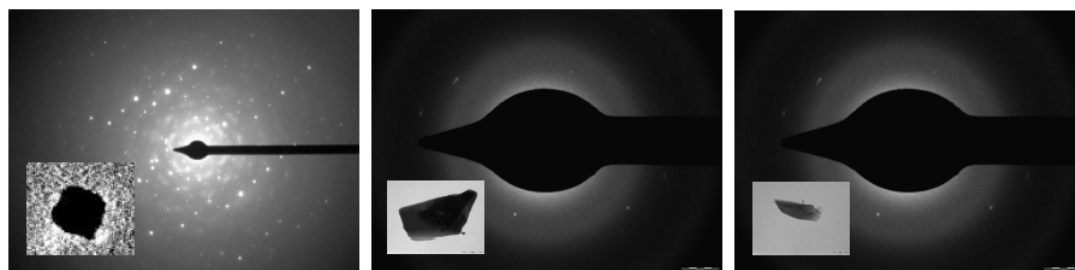


Figure S6. SAED patterns on EB-Pb (inset: sample from where the patterns were recorded).

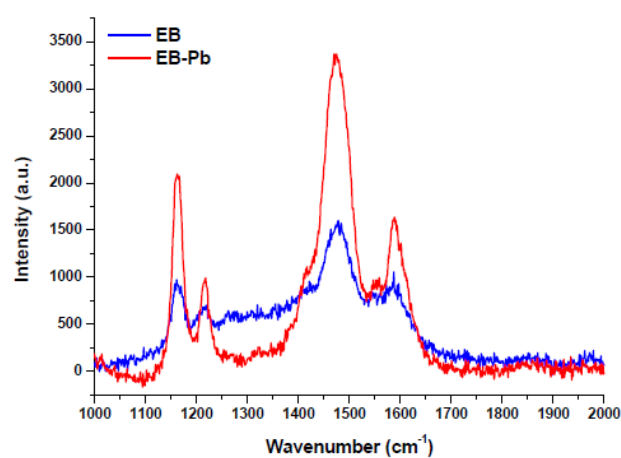


Figure S7. Raman spectra of EB (blue) and EB-Pb (red).

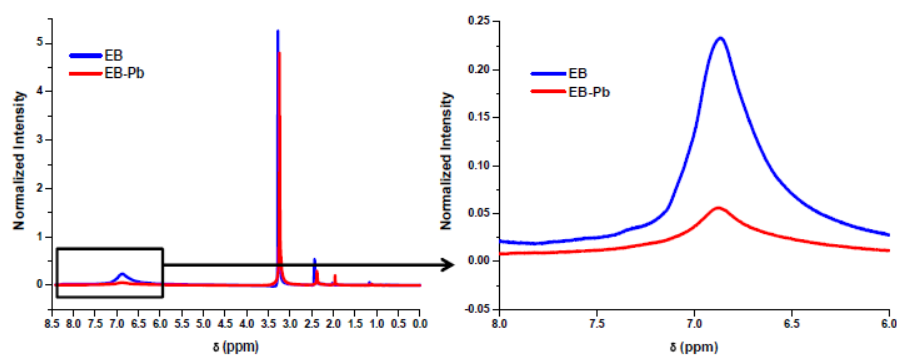


Figure S8. Left: ^1H NMR spectra of EB (blue) and EB-Pb (red). Right: zoomed-in section of the left marked zone (black).

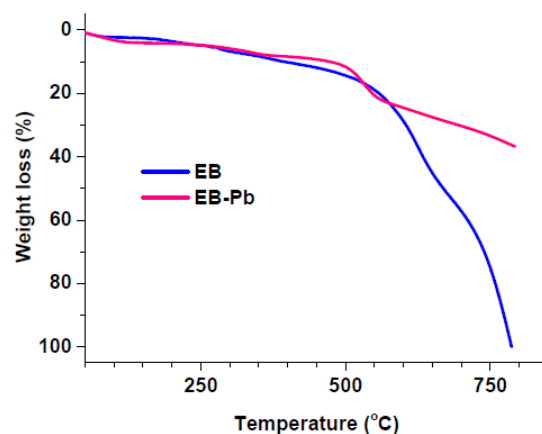


Figure S9. TGA plots for EB (blue) and EB-Pb (red).

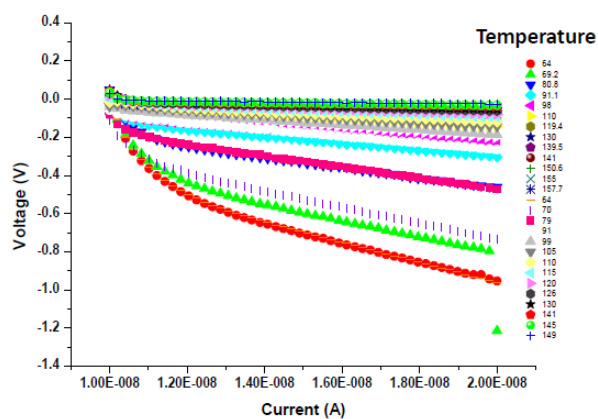


Figure S10. I-V plots for the EB-Pb at various temperatures (both heating and cooling).

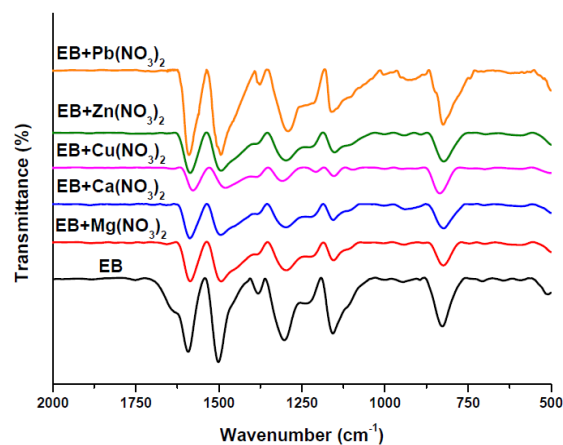


Figure S11. FTIR spectra of EB and the precipitates obtained upon reaction with various divalent nitrates.

Table S1: Elemental composition from XPS

Elements (%)	EB	EB-Pb
C	~85.8	~82.2
N	~13.8	~11.4
O	~0.4	~5.5
Pb	0	~0.9

Table S2: Elemental composition from EDX for the EB-Pb system

Elements	EB-Pb		Blank	
	Weight%	Atomic%	Weight%	Atomic%
C	18.44	15.75	10.58	10.58
N	4.62	3.85	----	----
O	2.35	1.39	----	----
Pb	26.74	27.32	----	----
Si	47.85	58.37	89.42	89.42

Table S3: Elemental composition from EDX for the so called EB-Mg system

Elements	EB-Mg		Blank	
	Weight%	Atomic%	Weight%	Atomic%
C	64.62	76.60	22.35	40.22
N	9.86	10.02	----	----
O	1.16	1.03	----	----
Mg	----	----	----	----
Si	24.37	12.35	77.65	59.78

Table S4: Elemental composition from EDX for the so called EB-Cu system

Elements	EB-Cu		Blank	
	Weight%	Atomic%	Weight%	Atomic%
C	63.33	71.10	13.90	27.40
N	19.77	19.03	----	----
O	6.58	5.54	----	----
Cu	2.33	0.50	----	----
Si	7.99	3.84	86.10	72.60