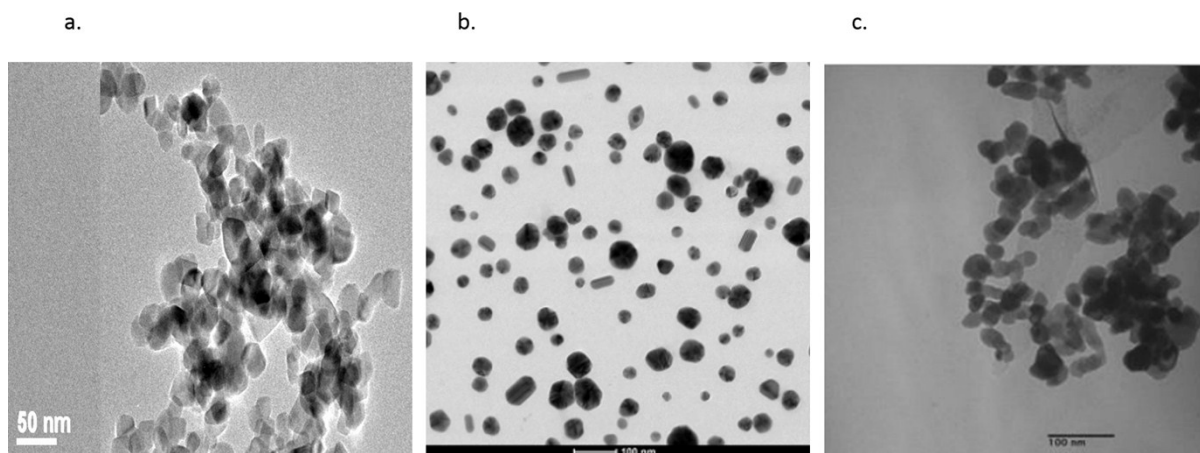


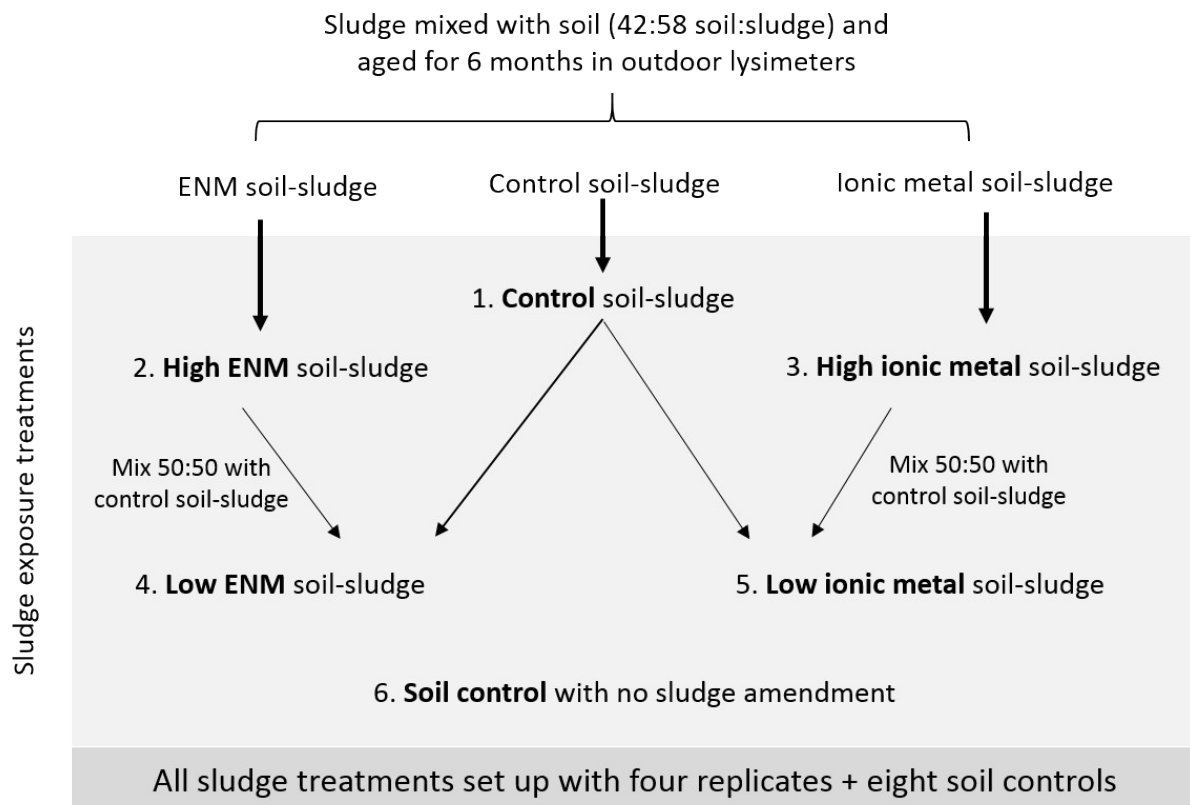
**Table S1:** The EC<sub>25</sub>, EC<sub>90</sub> and EC<sub>50</sub> values<sup>†</sup> and slopes (b) derived as parameter estimates from the model fits (Equation 2) for the as-synthesised Zn and Ag ENM and bulk metal soil exposures based on the total metal concentration in the soil and the earthworm body concentrations.

	Total soil concentration (mg/kg)				Earthworm body concentration (µg/g)			
	b	EC <sub>25</sub>	EC <sub>50</sub>	EC <sub>90</sub>	b	EC <sub>25</sub>	EC <sub>50</sub>	EC <sub>90</sub>
Zn bulk metal	3.3	185	310 ± 29	605	16.3	n.d.	159 ± 3.9	n.d.
Ag bulk metal	2.6	20	33 ± 5.2	74	6.03	5.6	7.4 ± 0.59	10.6
ZnO ENM <sup>a</sup>	4.1	413	780 ± 109	1926	3.9	146	210 ± 16.3	369
Ag ENM	1.5	35	97 ± 16.6	420	7.3	12.1	15 ± 0.9	22

<sup>†</sup>EC<sub>50</sub> value ± standard error. <sup>a</sup>ENM = engineered nanomaterials. n.d. = not determined



**Figure S1:** The TEM images of three different nanomaterials added to the influent of the pilot WWTP; a= TiO<sub>2</sub>, b = Ag and c = ZnO (b&c from Ma *et al.* 2014).



**Figure S2**