Supporting Information

Controlled Synthesis and Upconverted Avalanche Luminescence of Cerium(III) and Neodymium(III) Orthovanadate Nanocrystals with High Uniformity of Size and Shape

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1. AFM images of square-plate and H-like NCs of $CeVO_4$ for height analysis.

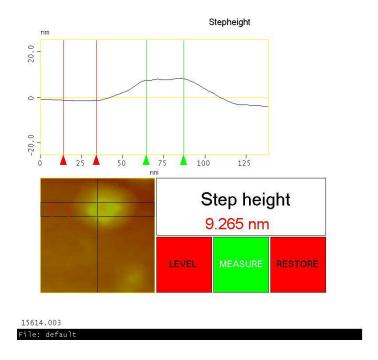


Figure S1. AFM image of a single CeVO₄ square-plate NC. The step height corresponds to the thickness of the NC.

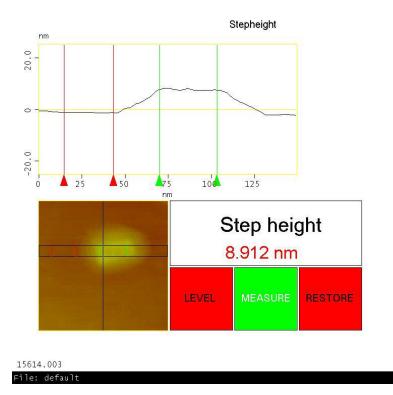


Figure S2. AFM image of a single CeVO₄ H-like NC. The step height corresponds to the thickness of the NC.

2. TEM images of CeVO₄ H-like NCs showing the effect of reaction time.

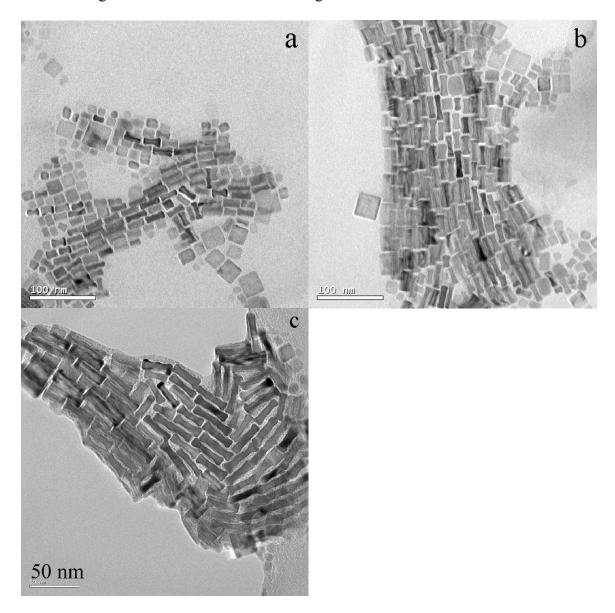


Figure S3. TEM images of CeVO₄ H-like NCs prepared after reaction for 10 h (a), 16 h (b) and 20 h (c). The initial pH of the reaction mixture was pH = 11.