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## Supporting Information The ratiometric luminescence pH sensor based on YAG:V<sup>3+</sup>,V<sup>5+</sup> nanoparticles

## K. Kniec<sup>1\*</sup>, L. Marciniak<sup>1\*</sup>

<sup>1</sup>Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Okólna 2, 50-422 Wroclaw, Poland \* corresponding author: *k.kniec@intibs.pl, l.marciniak@intibs.pl* 

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Figure S1. The kinetics of the luminescence of V<sup>3+</sup> -a) and V<sup>5+</sup> -b) as a function of pH upon  $\lambda_{exc}$ =266 nm.



Figure S2. Comparison of the LIR measured for different solvent.