Electronic Supporting Information for *J. Mater. Chem.* article by J. Choi and E. G. Gillan entitled “Low-temperature solvothermal synthesis of nanocrystalline indium nitride and Ga-In-N composites from the decomposition of metal azides”.

**Figure S1.** SEM of benchtop hexadecane reaction of InBr$_3$ + 3 NaN$_3$ at 275 °C.

![SEM of benchtop hexadecane reaction of InBr$_3$ + 3 NaN$_3$ at 275 °C](image)

**Figure S2.** TEM of benchtop hexadecane reaction showing sheet-like aggregation. (scale bar = 50 nm)

![TEM of benchtop hexadecane reaction showing sheet-like aggregation](image)
**Figure S3.** XRD of Ga\(_{0.5}\)In\(_{0.5}\)N composite synthesized at 250 °C in toluene (top curve) and after inert annealing a loose powder at 1000 °C for 3 hrs (bottom curve).

![XRD plot](image)

- wurtzite GaN
- residual NaCl\(_{1-x}\)Br\(_x\)
  - \(x \approx 0.2\)

**Figure S4.** Solid UV-vis of InN powder from toluene reaction at 280 °C.

![UV-vis plot](image)