

# Supplemental data to “Intercalation of p-Aminopyridine and p-Ethylenediamine Molecules into Orthorhombic In<sub>1.2</sub>Ga<sub>0.8</sub>S<sub>3</sub> Single Crystals”

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**Table S1.** Bond critical points (BCP) with the following properties: atom ends connected by the BCP, interatomic distance  $d$ , the ratio of the distances between the BCP and the atom ends  $d_1/d_2$ , angle  $\theta$  between the BCP and the atom ends (BCP being the apex), electron density Laplacian eigenvalues  $\lambda_i$  ( $i = 1, 2, 3$ ), ellipticity  $\lambda_1/\lambda_2 - 1$ , electron density Laplacian  $\nabla^2\rho$ , the electron density in  $\rho$  in Bohr<sup>-3</sup>, the kinetic energy density  $G$  in Ha.Bohr<sup>-3</sup>, the potential energy density  $V$  in Ha.Bohr<sup>-3</sup>, the bond degree  $H/\rho$  in Ha.e<sup>-1</sup>, potential to kinetic energy density ratio  $|V|/G$ , and the and kinetic energy per electron  $G/\rho$  in Ha.e<sup>-1</sup>.

BCP	Ato ms	d (Å)	$d_1/d_2$	$\theta$ (°)	$\lambda_1 \times 10^2$	$\lambda_2 \times 10^2$	$\lambda_3 \times 10^2$	$\lambda_1/\lambda_2 - 1 \times 10^2$	$\nabla^2\rho \times 10^2$	$\rho \times 10^2$	$G \times 10^2$	$V \times 10^2$	$H/\rho$	$V/G$	$G/\rho$
b1	S-S	3.873	0.995	179.6 8	-0.22 6	-0.20 6	1.71	9.42	1.28	0.489	0.254	-0.18 7	0.136	-0.73 8	0.520
b2	S-S	3.589	0.995	178.7 1	-0.46 8	-0.43 0	3.00	8.76	2.11	0.820	0.447	-0.36 7	0.097	-0.82 2	0.545
b3	In-S	2.658	0.903	179.8 5	-4.64 5	-4.38	16.3	5.83	7.31	5.17	3.28	-4.73	-0.28 1	-0.14 4	0.634
b4	In-S	2.708	0.902	178.5 0	-3.88 0	-3.77	15.2	2.97	7.59	4.53	2.92	-3.94	-0.22 6	-1.35	0.644
b5	In-S	2.628	0.912	179.8 5	-4.61 5	-4.57	17.4	0.984	8.23	5.17	3.43	-481	-0.26 6	-1.40	0.664
b6	In-S	2.578	0.912	177.9 4	-5.46 4	-5.37	19.3	1.60	8.47	5.88	3.96	-5.81	-0.31 4	-1.47	0.674
b7	Ga-S	2.343	0.809	178.3 4	-7.56 4	-7.26	21.6	4.17	6.83	7.52	4.98	-8.25	-0.43 6	-1.66	0.663
b8	Ga-S	2.343	0.809	178.2 9	-7.67 9	-7.32	22.1	4.84	7.07	7.61	5.11	-8.44	-0.43 9	-1.65	0.670
b9	Ga-S	2.256	0.777	178.4 1	-8.91 1	-8.66	27.0	2.84	9.43	8.77	6.54	-10.7	-0.47 7	-1.64	0.746