SUPPORTING INFORMATION

Exploring the influence of ZnF_2 on zinc-tellurite glass: Unveiling changes in OH content, structure, and optical properties

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Supplementary figures

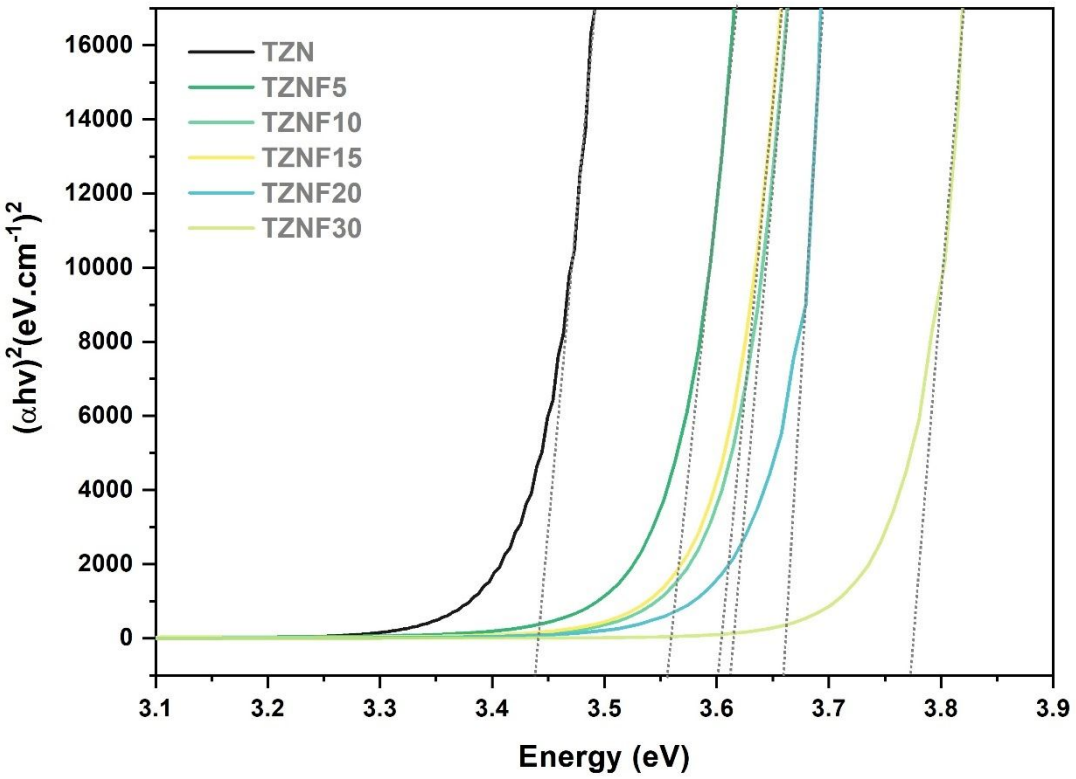

Figure S1. Bandgap energy curves calculated by Plot Tauc method.

Table S1. Bandgap energy values calculated for all undoped glass samples.

Samples	Bandgap Energy (eV)
TZN	3.43
TZNF5	3.56
TZNF10	3.60
TZNF15	3.61
TZNF20	3.65
TZNF30	3.76

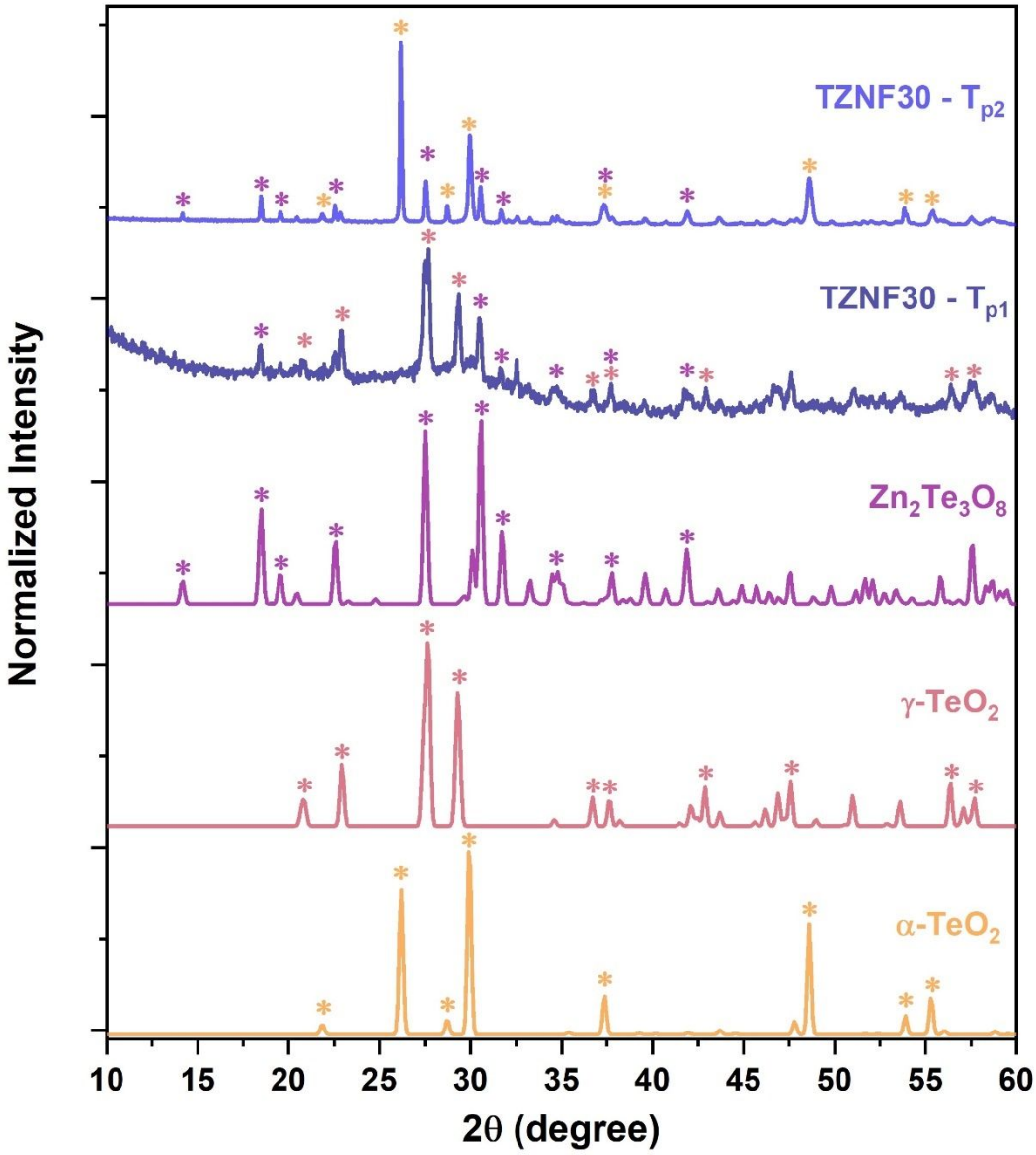

Figure S2. XRD diffractograms of TZNF30 sample treated at Tp1 = 347 °C and Tp2 = 406 °C and the diffraction patterns of α-TeO_2, γ--TeO_2, and $Zn_2Te_3O_8$ phases.

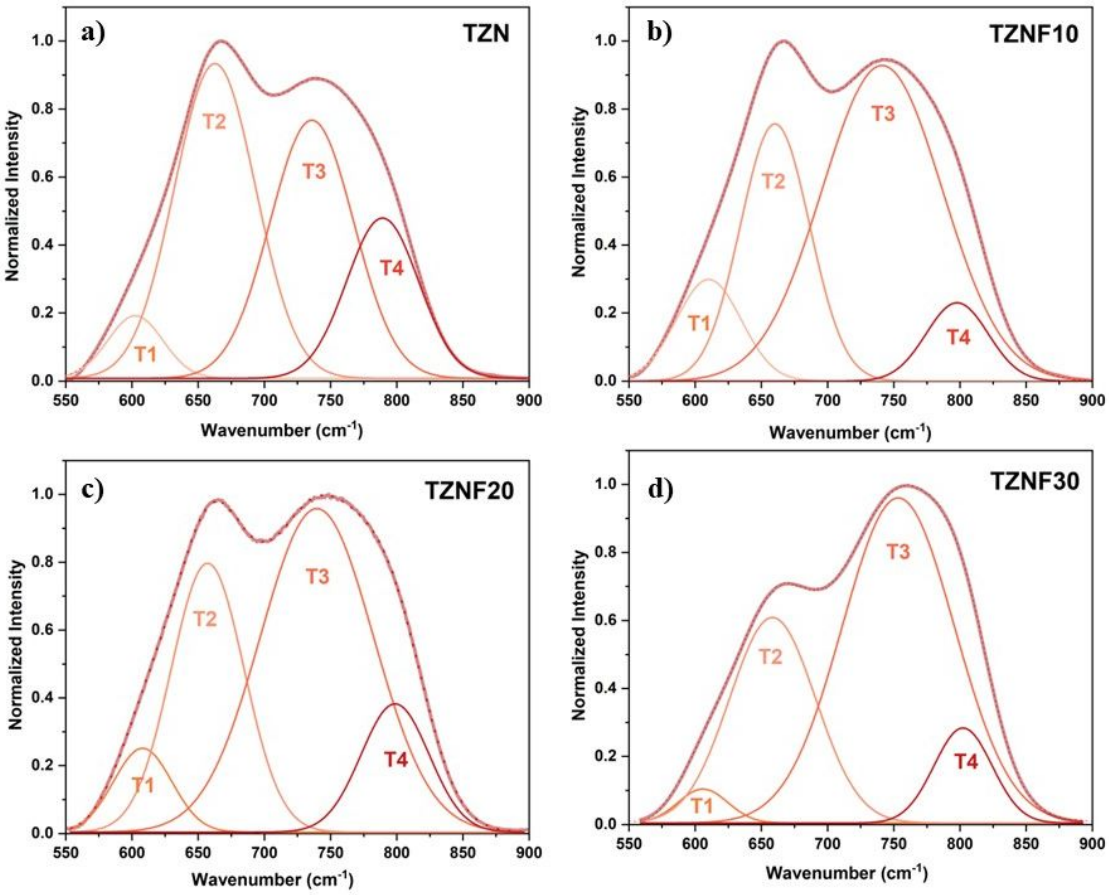

Figure S3. Representative Raman deconvoluted bands between 550 to 900 cm^{-1} (tellurite bands) for the (a) TZN, (b) TZNF10, (c) TZNF20, and (d) TZNF30 samples.

Table S2. Raman deconvoluted bands area in percent of the integral as obtained from the deconvolution of each Raman spectra.

Sample	Area (±0.5%)			
	T1 (610 cm^{-1})	T2 (660 cm^{-1})	T3 (715 cm^{-1})	T4 (755 cm^{-1})
TZN	5.6	41.1	34.7	18.6
TZNF5	6.7	38.0	35.6	19.6
TZNF10	9.8	26.5	56.5	7.2
TZNF15	9.5	25.7	57.6	7.1
TZNF20	7.0	28.2	52.3	12.5
TZNF30	2.7	28.9	59.3	9.1