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Temperature Dependent Scintillation Properties and Mechanisms of (PEA)2PbBr4 Single Crystals

Supplementary Information

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Figure S1: Powder XRD spectrum (PEA)₂PbBr₄.



Figure S2: Fitted decay spectra, from left to right, at 10K, 150K, and 300K.

Table S1: Parameters obtained from fitting the decay spectra shown in Figure S3

	$ au_{440nm}(ns)$	I_{440nm}	$ au_{550nm}(ns)$	I_{550nm}	$ au_{410nm}(ns)$	I_{410nm}
300K	35.2	0.855				
150K	90.2	0.748				
10K			154	0.0385	1.53	1.21



Figure S3: Linear attenuation coefficient PEA₂PbBr₄.



Figure S4: Comparison of the photoluminescence spectra measured in reflectivity mode and transmission mode.



Figure S5: Comparison of the photoluminescence emission and x-ray excited emission spectra recorded at 10K.