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**Dielectric spectroscopy on 2D and 3D metal halide perovskites using an interdigitated electrode geometry** C. EMMA MCCLURE, Brigham Young University, KAMERON HANSEN, University of Utah, JOHN COLTON, Brigham Young University — Metal halide perovskites are a class of 2D and 3D materials that are currently being used in solar energy and other applications. Fundamental characteristics such as exciton binding energy and complex permittivity are important to know in order to design better materials, but have proven challenging to accurately measure. We present experimental measurements of the capacitance of perovskite layers on interdigitated electrodes, along with a model to deduce the frequency dependence of dielectric constant, and we analyze different models which have been used by others for similar situations.

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