

Abstract Submitted
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Energy of the quasi-free electron in low density Ar and Kr: Extension of the local Wigner-Seitz model XIANBO SHI, LUXI LI, Queens College & The Graduate Center – CUNY, GINA MORIARTY, CHERICE EVANS, Queens College – CUNY, GARY FINDLEY, University of Louisiana at Monroe — We present new measurements of the perturber induced shift of the CH₃I ionization energy at low perturber number densities and analyze these data within the local Wigner-Seitz model previously used at high density. We compare the local Wigner-Seitz model with the scattering approach developed by Fermi, and modified by Alekseev and Sobel'man, and show that the local Wigner-Seitz model extends smoothly into the low density region and accurately predicts the temperature dependence of the shift in ionization energy.

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Xianbo Shi
Queens College & The Graduate Center – CUNY

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