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Study of nuclear level density and gamma-strength function in 90-Zr, 196-Pt, 197-Pt YOUNGSHIN BYUN, STEVEN GRIMES, ALEXANDER VOINOV, CARL BRUNE, Ohio University — The level density of ${}^{90}Zr$ was obtained by measuring neutron evaporation spectra from the ${}^{89}Y(d, n){}^{90}Zr$ reaction at $E_d = 7.5 MeV$. The experiment was carried out at the Edwards Accelerator Laboratory. The γ -strength functions and level densities of ${}^{196}Pt$ and ${}^{197}Pt$ from ${}^{196}Pt(p, p'\gamma){}^{196}Pt$ and ${}^{196}Pt(d, p\gamma){}^{197}Pt$ reactions were obtained at the Oslo Cyclotron Laboratory by measuring $p - \gamma$ coincidences. Level densities were compared to the known discrete levels and neutron resonance spacings at the neutron separation energy. They were also compared with model calculation.

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