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Measurement of the $e^+e^- \to \eta\gamma$ cross section near the $\phi(1020)$ resonance with the SND detector

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The $e^+e^- \to \eta\gamma$ cross section is measured in the center-of-mass energy range from 980 MeV to 1060 MeV in the experiment with the SND detector at the VEPP-2000 e^+e^- collider. The measurement is carried out in the $\eta \to 2\gamma$ decay mode. It is based on data with an integrated luminosity of $73pb^{-1}$, recorded in 2018 and 2024, which exceeds statistics used for earlier measurements by more than 7 times. The measured cross section has the best accuracy to date. The product of the branching fractions $B(\phi \to e^+e^-)B(\phi \to \eta\gamma)$ is obtained from the fit of the cross section energy dependance

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