

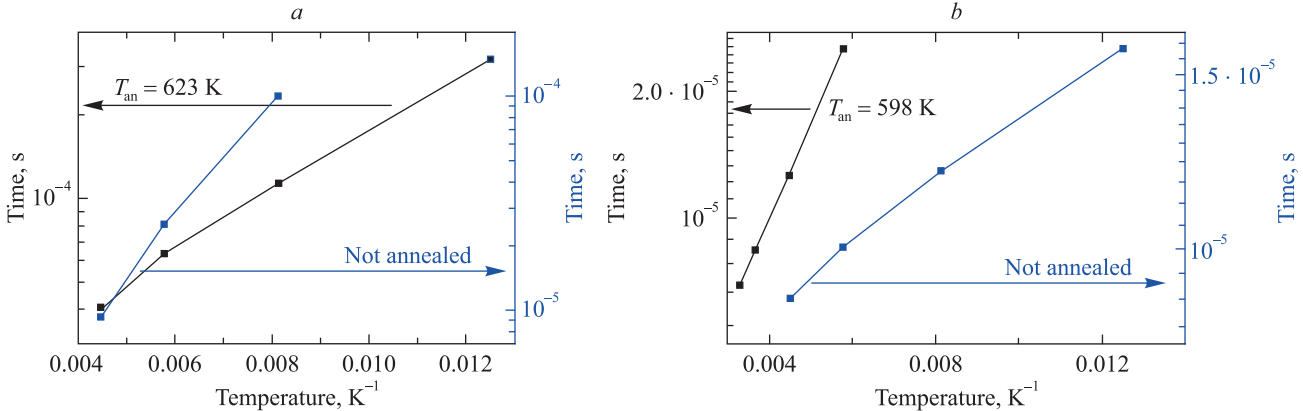


Fig. 3. Temperature dependences of the characteristic electron lifetime τ on nanoparticles before annealing (right ordinate axes) and in the case of annealing in air (left ordinate axes) for $(Fe_{0.45}Co_{0.45}Zr_{0.10})_{0.38}(Al_2O_3)_{0.62}$ film deposited in Ar – O_2 mixture ($T_{an} = 623$ K) (a) and for $(Fe_{0.45}Co_{0.45}Zr_{0.10})_{0.52}(PZT)_{0.48}$ film deposited in Ar – O_2 mixture at $P_{O_2} = 2.0 \cdot 10^{-3}$ Pa ($T_{an} = 598$ K) (b)