Runaway electron experiments with solid state pellet injector at the COMPASS tokamak

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In the past two years the room temperature solid state pellet injector (RTSP) was operated at the COMPASS tokamak during campaigns dedicated to runaway electron studies to support investigation of interaction of fast particles with solid state materials. The carbon pellets were used to explore alternative methods of runaway electron beam mitigation and also to study possible generation of runaway electron beams by carbon pellet injection. For the investigation of the impact of pellet injection on runaway electron beam dynamics, a set of fast cameras was installed to observe not only the beam evolution, but also the interaction of pellets with fast particles in detail. Another key diagnostic employed for runaway electron beam characterization was the HXR spectrometer, which can provide estimates about maximal runaway electron energy. The aim of the contribution is to give an overview of successfully performed experiments with RTSP at the COMPASS tokamak and point out the most interesting results achieved within the last two experimental campaigns devoted to runaway electron physics.