Firstly, on my opinion and on Reviewer #2 opinion the major revision of the manuscript was required. Unfortunately authors have done minor revision only. Moreover some indicated mistakes have not been corrected.

* References Gullu et al., 2008a and Gur et al., 2008 are incorrect (last numbers are unnecessary).

* Equation (8) is incorrect (see Rhoderick and Williams, 1988, eq. (1.23)).

* The accuracy of the parameter determination is absent in the manuscript (both in the text and in the Table 1). For example, values 114.20 Ω (page 7, line 45) and 27.18 10^{-11} eV^{-1} cm^{-2} (page 9, line 40) are used. But accuracy 0.01% or 0.04% is unreal for presented measurements.

* The report Trefilova et al., 2001 does not contain any information about peak on G-V curve (see manuscript, page 9 line 37). This report does not contain any information about MS structures at all.

* The exponent of the interface states density value (table and text) is wrong.

* The sentence "*Furthermore, the studies of the modification due to irradiation for many applications in semiconductor devices mentioned above are of both scientific interest and technological importance (Ma, 1989; Atanassova et al., 2001; Ta et al., 2010)*" (page 2, lines 26-31) is identical with sentence "*It is very important to determine the particle irradiation effect on the devices due to the need for usage of these devices in radiation environments (Ma, 1989; Atanassova et al., 2001; Ta et al., 2010; Ergin et al., 2010)*" (page 2, lines 41-46).

* "*Recently, some researchers have begun to investigate the influence of electron irradiation on the electrical properties of organic compound interfacial layer (Aydoğan et al. 2011a; Cınar et al., 2009...*" (page 3, lines 2-7)

The paper Cınar et al., 2009 is not concern of organic compound interfacial layer.

* "*It is seen from Fig. 3 that the values of the conductance increase with increasing voltage before and after irradiation and decrease after 11.4 kGy irradiation dose. This irradiation effect can be referred to the decrease in the net ionized dopant concentration with irradiation (Gullu et al., 2008b; Uğurel et al., 2008).*" (page 6, lines 35-45)

The irradiation effect can be referred to the decrease in the net ionized dopant concentration or **to the change in dielectric constant** (Gullu et al., 2008b; Uğurel et al., 2008).

The alteration of the capacitance value is discussed in Gullu et al., 2008b; Uğurel et al., 2008 only; the alteration of the conductance value is not discussed.

* "*Fig. 4 shows the voltage dependence of the series resistance (Rs) determined from Eq. (1) before and after 11.4 kGy ^{60}Co γ-ray irradiation. This voltage dependence of Rs is the result of voltage dependent charges such as interface trapped charge, fixed oxide charge, oxide trapped charge and mobile oxide charge and also at the grain boundaries of PMI/n-Si structures.*" (page 7, lines 10-21)

Rs does not depend on voltage practically (see Fig.4).

* "*The series resistance as a function of voltage gives a peak in approximately the same voltage range.* " (page7, lines 23-28)

The peak is absent on Fig.4.

* "*It is also clear from Fig. 4 that the values of Rs are very effective especially in the depletion region*" (page7, lines 28-31)

The depletion region is absent on Fig.4.

* "*There is a discrepancy in the values of Cc,acc before and after 11.4 kGy in Fig. 5(a) due to the effect of interface states. The interface states have a passivation after 11.4 kGy irradiation and interface states cannot follow the ac signal. This makes the contribution of interface state capacitance to the total capacitance small.*" (page 8, lines 5-16)

But passivation of the interface states cannot be a reason for alteration of the capacitance value because "*The effect of interface state density can be eliminated when the C-V curve is measured at sufficiently high frequency (f ≥ 500 kHz), since the charges at the interface states cannot follow an ac signal (Rhoderick and Williams, 1988; Ocak et al., 2010; Aydoğan et al., 2011a; Tuğluoğlu and Karadeniz, 2012a).*" (page 5, lines 55-58; page 6, lines 1-3). May be, there two types of interface state with different characteristic time are presented and irradiation affect selectively on different interface state. But this mechanism is not discussed in the manuscript.

Another way for discrepancy in the values of Cc,acc before and after irradiation is the change of the organic layer capacitance due to thickness variation or/and permittivity variation. But this mechanism is not discussed too.

* I don't understand the reason for V_d determination from $1/(C_c-C_0)^2$ vs V plots. At this stage V_d have been determined already (" *V_0 is the diffusion potential at zero bias determined from the extrapolation of the linear reverse bias C_c^{-2}-V plot to the V axis. The V_d value has been determined from V_0 plus q/kT.*" page 9, lines 52-58) and V_d have been used for C_0 (Fig.6).

The data on Fig.6 began at $(V_d - V)^{-1/2} = 0.55\ V^{-1/2}$. If V_d = 1.22 V (Table 1), then voltage must be equals to (-2.08) V. Simultaneously the data on Fig.2, 3, 5 began at (-1) V only.

May be, authors have used two set of Vd (two set of C-V characteristic), but it have not been described in manuscript.

* "*The Nss yield an excess capacitance (C_0)… As can be seen from Fig. 6, after 11.4 kGy irradiation dose, the excess capacitance increases.*" (page 10, lines 9-11, 25-28).

If C_0 increases then Nss must increase too (see Hill and Coleman, 1980, eq.(13)). But "*As shown in Table 1, the density of interface states decreases after 11.4 kGy irradiation dose*" (page 9, line 42-47)

* "*Some researchers (Gur et al., 2008, Mamor et al., 2007; Fonash et al., 1981; Grussell et al., 1980) also reported that particle or gamma irradiation induces defects in the band gap which influences the free carrier concentration and leads to an increase and decrease in the barrier height in p-type and n-type semiconductors, respectively.*" (page 12, line 42-53)

All cited works (Gur et al., 2008, Mamor et al., 2007; Fonash et al., 1981; Grussell et al., 1980) **don't** report about gamma irradiation! The irradiations induced defects produced by non-zero-mass particle and by photon are different and authors can't use these reports for result explanation.

The manuscript reported about capacitance, conductance, barrier height, Nss decrease and Rs increases after gamma-irradiation. Gullu et al. (Gullu et al., 2008a) reported opposite results for Rs, barrier height, Nss and similar results for capacitance. Ocak et al. (Ocak et al., 2010) reported opposite results for capacitance, conductance and similar results for barrier height. Another authors (e.g. Radiation Physics and Chemistry 81 (2012) p.362–369) report gamma-irradiation influence on organic-based Schottky barrier diodes too. But authors have not discussed completely how their results relate to previous research.

* The Research Highlights #1, #3 and #5 are almost identical.

Finally, the manuscript presents a set of measured and calculated results. But real discussion is absent. On my opinion, the real major revision is needed before publication.