Abstract Submitted
for the GEC17 Meeting of
The American Physical Society

Simulation of low energy ion bombardment of alkane in low pressure RF plasmas[1] VIKTOR ZHELTUKHIN, Retired, ALBINA AZANOVA, IGOR BORODAEV, AIDOGDY SHAKHYROV[2], Kazan National Research Technological University — Results of molecular dynamics simulation of low energy (up to 100 eV) ion bombardment of both crystalline and amorphous alkanes in low pressure RF plasmas are described. An united-atom model of alkane chains where each site represents a CH2 group or a CH3 end group is used. The covalent bond between adjacent sites is modeled by a Dreiding potential. The interaction between the sites in different chains, as well as between argon and alkane sites is described by a LJ potential. A classical molecular dynamics code LAMMPS is used.

[1]The work was funded by RFBR, according to the research projects No. 15-41-0276, 16-31-00482

[2]68, K.Marx St., Kazan, 420015, Russia

Viktor Zheltukhin
Retired

Date submitted: 02 Jun 2017 Electronic form version 1.4