Abstract Submitted
for the GEC13 Meeting of
The American Physical Society

Transport Properties of Fluorine Ions in BF_3 VLADIMIR STOJANOVIC, ZORAN RASPOPOVIC, Institute of Physics, University of Belgrade, Belgrade, Serbia, JASMINA JOVANOVIC, Faculty of Mechanical Engineering, University of Belgrade, Belgrade, Serbia, ZELJKA NIKITOVIC, ZORAN PETROVIC, Institute of Physics, University of Belgrade, Belgrade, Serbia — Transport properties of F+ and F- ions in BF_3 in DC fields and at room temperature were calculated by using Monte Carlo simulation technique. Previously cross section sets were obtained by using Nanbu theory for resolving between elastic and reactive collision events and then resolving contribution of exothermic processes from available experimental data. We present transport coefficients for the conditions of low and moderate reduced electric fields E/N (E-electric field, N-gas density) accounting for non-conservative processes.

Vladimir Stojanovic
Institute of Physics, University of Belgrade, Belgrade, Serbia

Date submitted: 14 Jun 2013 Electronic form version 1.4