

## EFFECTIVE THREE-PHOTON VERTEX IN A DENSE FERMIONIC MEDIUM

*E. V. Reznikov, V. V. Skalozub*

Oles' Gonchar Dnipropetrovsk National University  
(72, Gagarin Ave., Dnipropetrovsk 49010, Ukraine;  
e-mail: reznikovevgenii@mail.ru,  
skalozubv@daad-alumni.de)

### S u m m a r y

The tensor of an effective three-photon vertex has been calculated in the one-loop approximation for a medium with non-zero chemical potential. The tensor properties at various photon wavelengths and frequencies have been analyzed. The case of photon scattering by a magnetic field has been studied in detail. Possible applications of the results obtained have been discussed.