

Estimation of charge carrier mobility in polymer thin-film structures

Khafizov I., Saveleva T.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. In this article, the polymer polydiphenylenphthalide. The estimates of the mobility of charge carriers for FDP films of different thicknesses by the CELIV method are carried out. During the measurements it was concluded that the mobility value does not depend on the thickness of the polymer film within 100-800 nm.

<http://dx.doi.org/10.1088/1757-899X/412/1/012041>

References

- [1] Lachinov A N and Vorobyova N V 2006 Electronics of thin layers of broad-band polymers-UFN 176 1249-66
- [2] Zolotukhin M G, Kavardakov V, Salazkin S N and Rafikov S R 1984 Some patterns of the synthesis poliatilenglikol homopolymerisation n-(3-chloro-3-phthalidyl)-biphenyl (head of the. Coed) T 26 A 1212-17
- [3] Novoselov V I 1996 dis... kand. chem. sciences. 02.00.06: protected 15.03.96 (IOH UNTS RAS, Ufa) The Interaction poliatilenglikol and their analogs with iodine 135
- [4] Salazkin S N, Zolotukhin M G, Kovardakov V, Dubrovina L V, Gladkova E A, Pavlova S S and Rafikov S R 1987 Molecular-mass characteristics of polyarylene sulfide Head of the coed A 29 1431-36
- [5] Wu C R, Johansson N, Lachinov A N, Stafstrom S, Kugler T, Rasmusson J and Salaneck W R 1994 The chemical and electronic structure of the conjugated polymer poly (3.3-phthalidyliden-4.4-bihenyilene) Synth. Metals 67 125-28
- [6] Juska G, Arlauskas K and Viliunas M 2000 Extraction Current Transients: New Method of Study of Charge Transport in Microcrystalline Silicon Phys. Rev. Letts V 84 4946
- [7] Khafizov I I 2015 Processing methods with imposing of electric field at low- waste division of materials IOP Conf. Series: Materials Science and Engineering 86 012013
- [8] Khafizov I I, Saveleva T N and Lyubtsov V S 2017 Estimation of parameters of charge carriers in dielectric materials by CELIV method IOP Conference Series: Materials Science and Engineering 240 012040