Наукові праці
Ковальчук Сергій Миколайович

2007

Патент, А.Л. Андріївна, А.Ю. Бояринцев, Б.В. Гриньов, О.М. Кудін, В.І. Кошель, С.М. Ковальчук, В.О. Тарасов. Спосіб обробки поверхні лужно-галоїдних кристалів. //ІСМА UA 79015 C2

2009

1. Kilimchuk, I.V., Tarasov, V.A., Alameda, J.M., (...), Boyarintsev, A.Yu., Kovalchuk, S.N. Study of surface roughness of CsI:Tl crystals treated by various abrasives // 2009 IEEE Transactions on Nuclear Science
2. А. А. Бобовников, Т. А. Непокупная, С. Н. Ковальчук Ю.Д. Онуфриев, Детекторы на основе монокристаллов Li:Eu с улучшенными эксплуатационными характеристиками //LUMCOS 2009, 17-20 ноября, Харьков, Украина

2016

3. Onufriyev Yu., Nepokupnaya T., Boyarintsev A., Kovalchuk S.N., Bobovnikov A. A. Composite scintillation element based on GPS:Ce, LYSO:Ce and YSO:Ce for High Energy Physics: 4th International Scientific and Technical Conference for young Scientist LUMCOS, (Kharkov, 07-09 October 2015.). Kharkov, 2015. P. 34.
4. Composite scintillators for neutron detection / A. Boyarintsev, A. Bobovnikov, N.Galunov, A. Gektin, N.Karavaeva, S. Kovalchuk T. Nepokupnaya, Yu. Onufriyev, V. Tarasov, S. Vasyukov, O. Zelenskaya. // 2016 IEEE Sorma West 2016, 22-26 May.
5. Scintillation element for HEP application / Boyarinrsev A., Bobovnikov. A., Gektin A., Gerasymov. Ia, Grynyov. B. Kovalchuk S., Nepokupnaya T., Onufriyev. // Fifth International Conference Engineering and Radiation Technologies ISMART 2016, 26-30 September, Minsk, Belarus, P. 31.
6. Combined detector for the registration of low-energy γ-radiation / Ananenko A, Boyarinrsev A., Bobovnikov. A., Gektin A., Kovalchuk S., Nepokupnaya T., Onufriyev. Yu, Pedash V. // Fifth International Conference Engineering and Radiation Technologies ISMART .-2016, 26-30 September 2016, Minsk, Belarus, P. 16.
7. LiI(Eu) based composite detector for thermal neutron registration / Boyarinrsev A., Bobovnikov. A., Gektin A., Grynyov. B. Kovalchuk S., Nepokupnaya T., Onufriyev, V. Tarasov, // Fifth International Conference Engineering and Radiation Technologies ISMART 2016, 26-30 September 2016, Minsk, Belarus, P. 32.
8. Light-collection in the scintillation element for HEP. / Boyarinrsev A., Bobovnikov. A., Gektin A., Kovalchuk S., Nepokupnaya T., Onufriyev, V. Tarasov // Fifth International Conference Engineering and Radiation Technologies ISMART 2016, 26-30 September, Minsk, Belarus, P. 33.
9. Radiation hard composite element for high energy physics. / A. Boyarintsev, A. Bobovnikov, A. Gektin, Ya. Gerasimov, B. Grynyov, K. Hubenko, S. Kovalchuk, L. Levchuk, T. Nepokupnaya, Yu. Onufriyev, V. Popov, O. Sidletskiy, V. Tarasov. // 2016 IEEE NSS/MIC/RTSD symposium, 29 October – 05 November, P. 56.
10. Composite scintillators for neutron and X-ray detection. / A. Boyarintsev, A. Bobovnikov, A. Gektin, Ya. Gerasimov, S. Kovalchuk, T. Nepokupnaya, Yu. Onufriyev, V. Tarasov. // 2016 IEEE NSS/MIC/RTSD symposium, 29 October – 05 November.

2017

11. Ю. Онуфриев, А.Бояринцев, А.Гектин, Б. Гринев, С. Ковальчук, Т. Непокупная. Светособирание в композиционном детекторе для физики высоких энергий // Аспекты сцинтилляционной техники – Харьков: «ИСМА», 2017 – с.141-148.

12. А. Бояринцев, А. Бобовников, А.Гектин, С. Ковальчук, Т. Непокупная, Ю. Онуфриев, В. Тарасов. Композиционных детектор 6LiI (Eu) для регистрации тепловых нейтронов. Аспекты сцинтилляционной техники – Харьков: «ИСМА», 2017 – с.132-140
13. T.A. Nepokupnaya, A.A. Ananenko, A.Yu. Boyarintsev, A.A. Bobovnikov, S.N. Kovalchuk, Yu.D. Onufriyev, V.Yu. Pedash. Large area detector of low-energy gamma radiation. Functional Materials (24), № 4 2017, p. 678-681.
14. A. Boyarintsev., A. Bobovnikov, A. Gektin, Ya. Gerasimov, B. Grynyov, S. Kovalchuk, T. Nepokupnaya , Yu. Onufriyev, O. Sidletskiy. Composite scintillators for high energy physics // 14th Int. Conference on Scintillating Materials and their Applications, SCINT-2017.
15. A. Boyarintsev., A. Bobovnikov, A. Gektin, Ya. Gerasimov, S. Kovalchuk, T. Nepokupnaya , Yu. Onufriyev , A. Opolonin Composite films for X-ray imaging // IEEE Nuclear Science Symposium and Medical Imaging Conference, 2017

2018

16. Nepokupnaya T.A.*, Boyarintsev A.Yu., Galkin S.N., Gektin A.V., Gerasymov Ia.V., Kovalchuk S. N., Minenko S.S., Onufriyev Yu.D., Sibilieva T.G., Tretyak S.E. New composite detectors for medical x-ray diagnostics: The Sixth International Conference on Engineering of scintillation materials and radiation technologies ISMART 2018, (Minsk, 2018.). Minsk, 2018. P.75.
17. Onufriyev Yu.D., Boyarintsev A.Yu., Galunov N.Z., Kovalchuk S.N., Minenko S.S., Nepokupnaya T.A., Sibilieva T.G., Zhmurin P.N. Radiation hard reflectors for scintillation modules for HEP: The Sixth International Conference on Engineering of scintillation materials and radiation technologies ISMART 2018, (Minsk, 2018.). Minsk, 2018. P.78.
18. Ananenko A., Boyarintsev A., Gektin A., Kovalchuk S., Minenko S., Nepokupnaya T., Onufriyev Yu., Sibilieva T., Tarasov V. Light collection in composite scintillators for radiation detectors: 2018 IEEE Nuclear Science Symposium and Medical Imaging Conference, (Sydney, 2018.). Sydney, 2018. P.290.
19. Ковальчук С.М., Бояринцев А.Ю., Нагорняк В.Т. «Створення пластмасових сцинтиляторів великих габаритів на основі полістиролу з однорідними оптичними властивостями» Functional materials for technical and biomaterial applications, School seminar ISMA September 7—10, 2020, p.47
20. V. Kolesnikov, A. Boyarintsev, P. N. Zhmurin, S. N. Kovalchuk. Neutron and gamma ray pulse shape discrimination with plastic scintillator and Bayes Network, October 31 – November 7, IEEE-2020.

2021

21. Reflection materials for 3d-printing of plastic scintillation elements. T.G. Sibilieva, A.Yu. Boyarintsev, T.A. Nepokupnaya, S.N. Kovalchuk Institute for Scintillation Materials NAS of Ukraine, September 06 - September 10, 2021, Kharkov, Ukraine
22. A. Boyarintsev, A. Kolesnikov, S. Kovalchuk, T. Nepokupnaya, I. Nevliudov, V. Tarasov. High-sensitive combined gamma detector. XII International Scientific Conference, Functional Basis of Nanoelectronics, September 20 - September 24, 2021, Odesa, Ukraine
23. Development of large-size polystyrene based plastic scintillators with uniform optical propertiesA.Yu. Boyarintsev, A.V. Kolesnikov, S.N. Kovalchuk, I. S. Nevliudov *in press*
24. Demonstrating a single-block 3D-segmented plastic-scintillator detector for neutrino *in press*