

## List of Publications for Dr. R. Bekarevich

1. R. Bekarevich, Y. Pihosh, Y. Tanaka, K. Nishikawa, Y. Matsushita, T. Hiroto, H. Ohata, T. Ohno, T. Minegishi, M. Sugiyama, T. Kitamori, K. Mitsuishi, K. Takada, Conversion reaction in the WO<sub>3</sub>-nanorods-based anode for fast-charging Li-ion batteries, *ACS Applied Energy Materials* (accepted on 2020.05.21).
2. R. Bekarevich, K. Mitsuishi, T. Ohnishi, F. Uesugi, M. Takeguchi, Novel electron microscopy method for accurate measurements of the lattice constant changes in layered structures, *Journal of Surface Analysis*, Vol. 26, 2019, 190-191.
3. R. Bekarevich, K. Mitsuishi, T. Ohnishi, T. Mano, F. Uesugi, M. Takeguchi, Accurate determination of lattice constant changes at thin-film interface by selected-area electron diffraction mapping, *Japanese Journal of Applied Physics*, Vol. 58, 2019, SIIA03 (6 pp).
4. S. Kosar, Y. Pihosh, R. Bekarevich, K. Mitsuishi, K. Mawatari, Y. Kazoe, T. Kitamori, M. Tosa, A.B. Tarasov, E.A. Goodilin, Y.M. Struk, M. Kondo, I. Turkevych, Highly efficient photocatalytic conversion of solar energy to hydrogen by WO<sub>3</sub>/BiVO<sub>4</sub> core-shell heterojunction nanorods, *Applied Nanoscience*, Vol. 9, 2019, 1017-1024.
5. M. Elborg, Y. Yao, T. Noda, T. Mano, R. Bekarevich, K. Mitsuishi, Y. Sakuma, Carrier transfer in closely stacked GaAs/AlGaAs quantum dots grown by droplet epitaxy, *Journal of the Korean Physical Society*, Vol. 72, 2018, 1356-1363.
6. R. Bekarevich, K. Mitsuishi, T. Ohnishi, F. Uesugi, M. Takeguchi, Y. Inaguma, T. Ohno, K. Takada, Two-dimensional Gaussian fitting for accurate measurement of lattice constant deviation from selected area diffraction map, *Microscopy*, Vol. 67, 2018, i142-i149.
7. K. Shirasu, I. Tamaki, T. Miyazaki, G. Yamamoto, R. Bekarevich, K. Hirahara, Y. Shimamura, Y. Inoue, T. Hashida, Key factors limiting carbon nanotube strength: structural characterization and mechanical properties of multi-walled carbon nanotubes, *Mechanical Engineering Journal*, Vol. 4, 2017, 17-00029 (11 pp).
8. H. Yamada, T. Ito, R. Hongahally Basappa, R. Bekarevich, K. Mitsuishi, Influence of strain on local structure and lithium ionic conduction in garnet-type solid electrolyte, *Journal of Power Sources*, Vol. 368, 2017, 97-106.
9. R. Hongahally Basappa, T. Ito, T. Morimura, R. Bekarevich, K. Mitsuishi, H. Yamada, Grain boundary modification to suppress lithium

penetration through garnet-type solid electrolyte, *Journal of Power Sources*, Vol. 363, 2017, 145-152.

10. R. Bekarevich, M. Toyoda, S. Baba, K. Zhang, T. Nakata, S. Taniguchi, K. Hirahara, Joule heat-assisted loading of an individual gold nanoparticle into carbon nanotube, *Proceeding of Chemistry Conferences*, Vol. 2, 2017, 1–7.

11. R. Bekarevich, M. Toyoda, K. Zhang, T. Nakata, S. Taniguchi, K. Hirahara, Coalescence of metal nanoparticles as the origin of nanocapillary forces in carbon nanotubes, *Journal of Physical Chemistry C*, Vol. 121, 2017, 9606–9611.

12. I. Tamaki, K. Shirasu, T. Miyazaki, G. Yamamoto, R. Bekarevich, K. Hirahara, Y. Shimamura, Y. Inoue, T. Hashida, Effects of structural defects on strength and fracture properties of multi-walled carbon nanotubes (in Japanese), *Transactions of the JSME*, Vol. 83, 2017, 16-00283 (14 pp).

13. R. Bekarevich, M. Toyoda, S. Baba, T. Nakata, K. Hirahara, Refilling of carbon nanotube cartridges for 3D nanomanufacturing, *Nanoscale*, Vol. 8, 2016, 7217-7223.

14. R. Bekarevich, I. Motrescu, A. Rahachou, M. Nagatsu, Mass spectrometric study of ammonia/methane surface-wave plasma applied to low temperature growth of carbon nanomaterials, *Journal of Physics D: Applied Physics*, Vol. 48, 2015, 045201 (10pp).

15. R. Bekarevich, S. Miura, A. Ogino, A. Rahachou, M. Nagatsu, The effect of substrate on the low-temperature carbon nanomaterials growth by microwave excited surface-wave plasma chemical vapor deposition, *Journal of Physics: Conferences Series*, Vol. 417, 2013, 012042 (5 pp).

16. R. Bekarevich, S. Miura, A. Ogino, A. Rogachev, M. Nagatsu, Low temperature growth of carbon nanomaterials on the polymer substrate using ion assisted microwave plasma CVD, *Journal of Photopolymer Science and Technology*, Vol. 25, 2012, 545-549.

17. A. Rahachou, Z. Peng, D. Piliptsov, M. Fiadosenka, R. Bekarevich, The features of synthesis, structure and mechanical properties of alloyed diamond-like coatings, *Physics Procedia*, Vol. 32, 2012, 561-565.

18. R. Bekarevich, S. Miura, A. Ogino, A. Rahachou, M. Nagatsu, Low-temperature synthesis of carbon nanotubes and graphene sheets using microwave plasma, *Microwave Discharges: Fundamentals and Applications*, Moscow, Russia, 2012, 197-205.

19. M. Nagatsu, R. Bekarevich, A. Balmakov, I. Motrescu, A. Ogino, A. Murakawa, E.Y. Park, Low-temperature plasma processing of micro- and nanostructured materials for biomedical applications, *MRS Online Proceedings Library*, Vol. 1469, 2012, mrss12-1469-ww08-02 doi:10.1557/opl.2012.876 (8 pp).

20. R. Bekarevich, S. Miura, A. Ogino, A. Rahachou, M. Nagatsu, Low temperature growth of carbon nanomaterials on the polymer substrates by microwave plasma technique, Transactions of the Materials Research Society of Japan, Vol. 37, 2012, 157-160.

21. R. Bekarevich, S. Miura, D. Lu, A. Ogino, A. Rogachev, M. Nagatsu, The influence of plasma conditions on the low temperature growth of carbon nanomaterials, Fullerenes and Nanostructures in Condensed Matter, Minsk, Belarus, 2011, 257-262.

22. D. Piliptsou, A. Rudenkov, R. Bekarevich, The morphology of the carbon based composition coatings processed by nitrogen ions (in Russian), Problems of Physics, Mathematics and Technics, 2010, 31-34.

23. D. Piliptsou, A. Rahachou, M. Fiadosenka, R. Bekarevich, Mechanical properties of the copper alloyed carbon coatings deposited from cathodic pulse plasma (in Russian), Problems of Physics, Mathematics and Technics, 2010, 25-30.

24. Z. Peng, N. Fedosenko, D. Piliptsov, R. Bekarevich, Study of the preparation CuO and boron films, Problems of Physics, Mathematics and Technics, 2010, 80-82.

25. A. Rahachou, M. Fiadosenka, D. Piliptsou, R. Bekarevich, Effect of the nature and concentration of alloying elements on the morphology of friction zone of the carbon coatings (in Russian), News of Homiel State University, 2009, 100-103.