lithium/sodium-ion batteries. RSC Adv. 6(20): 16624-16633. http://dx.doi.org/10.1039/C5RA25835A

[12] Li F, Jiang X, Zhao J, Zhang S. (2015). Graphene oxide: A promising nanomaterial for energy and environmental applications. Nano Energy 16: 488-515. https://doi.org/10.1016/j.nanoen.2015.07.014

[13] Zhu J, Zhu T, Zhou X, Zhang Y, Lou XW, Chen X, Zhang H, Hng HH, Yan Q. (2011). Facile synthesis of metal oxide/reduced graphene oxide hybrids with high lithium storage capacity and stable cyclability. Nanoscale 3(3): 1084-1089. http://dx.doi.org/10.1039/C0NR00744G

[14] Zhang ZJ, Wang YX, Chou SL, Li HJ, Liu HK, Wang JZ. (2015). Rapid synthesis of α -Fe_2O_3/rGO nanocomposites by microwave autoclave as superior anodes for sodium-ion batteries. J. Power Sources 280: 107-113. https://doi.org/10.1016/j.jpowsour.2015.01.092

[15] Hummers Jr. WS, Offeman RE. (1958). Preparation of Graphitic Oxide. J. Am. Chem. Soc. 80(6): 1339-1339. http://dx.doi.org/10.1021/ja01539a017

[16] Alcántara R, Jiménez-Mateos JM, Lavela P, Tirado JL. (2001). Carbon black: a promising electrode material for sodium-ion batteries. Electrochem. Commun. 3(11): 639-642. http://dx.doi.org/10.1016/S1388-2481(01)00244-2

[17] Fathy M, Gomaa A, Taher FA. El-Fass MM, Kashyout AEl-HB. (2016). Optimizing the preparation parameters of GO and rGO for large-scale production. J. Mater. Sci. 51(12): 5664–5675. http://dx.doi.org/10.1007/s10853-016-9869-8

[18] Wang HW, Hu ZA, Chang YQ, Chen YL, Zhang ZY, Yang YY, Wu HY. (2011). Preparation of reduced graphene oxide/cobalt oxide composites and their enhanced capacitive behaviors by homogeneous incorporation of reduced graphene oxide sheets in cobalt oxide matrix. Mater. Chem. Phys. 130(1-2): 672–679. https://doi.org/10.1016/j.matchemphys. 2011.07.043

[19] Wang YX, Chou SL, Liu HK, Dou SX. (2013). Reduced graphene oxide with superior cycling stability and rate capability for sodium storage. Carbon 57: 202-208. http://dx.doi.org/10.1016/j.carbon.2013.01. 064

[20] Liu X, Chen T, Chu H, Niu L, Sun Z, Pan L, Sun CQ. (2015). Fe_2O_3-reduced graphene oxide composites synthesized via microwave-assisted method for sodium ion batteries. Electrochim. Acta 166(1): 12-16. https://doi.org/10.1016/j.electacta.2015.03.081

[21] Ferrari AC, Robertson J. (2001). Interpretation of Raman spectra of disordered and amorphous carbon, Phys. Rev. B 61(20): 14095–14107. http://dx.doi.org/10.1103/PhysRevB.61.14095

[22] Santangelo S. (2016). Controlled surface functionalisation of carbon nanotubes by nitric acid vapors generated from sub-azeotropic solution. Surf. Interf. Analysis 48(1): 17–25. https://doi.org/10.1002/sia.5875

[23] Zhang R, Santangelo S, Fazio E, Neri F, D'Arienzo M, Morazzoni F, Zhang Y, Pinna N, Russo PA. (2015). Stabilization of TiO_2 nanoparticles at the surface of carbon nanomaterials promoted by microwave heating. Chemistry – A European Journal 21(42): 14901–14910. https://doi.org/10.1002/chem. 201502433

[24] Chernyshova IV, Hochella Jr M., Madden AS. (2007). Size-dependent structural transformations of hematite nanoparticles. 1. Phase transition. Phys. Chem. Chem. Phys. 9(14): 1736–1750. http://dx.doi.org/10.1039/B618790K

[25] Chaudhari S, Srinivasan M. (2012). 1D hollow α-Fe_2O_3 electrospun nanofibers as high performance anode material for lithium ion batteries. J. Mater. Chem. 22(43): 23049–23056. http://dx.doi.org/10.1039/C2JM32989A

[26] Cesar I, Sivula K, Kay A, Zboril R, Grätzel M. (2009). Influence of feature size, film thickness, and silicon doping on the performance of nanostructured hematite photoanodes for solar water splitting. J. Phys. Chem. C 113(2): 772–782. http://dx.doi.org/ 10.1021/jp809060p

[27] Santangelo S, Frontera P, Pantò F, Stelitano S, Marelli M, Malara F, Patané S, Dal Santo V, Antonucci PL. (2017). Effect of Ti- or Si-doping on nanostructure and photo-electro-chemical activity of electro-spun iron oxide fibres. Int. J. Hydrogen En. 42(46): 28070-28081. http://dx.doi.org/10.1016/j.ijhydene.2017.03. 204

[28] Bersani D, Lottici PP, Montenero A. (1999). Micro-Raman Investigation of Iron Oxide Films and Powders Produced by Sol–Gel Syntheses. J. Raman Spectrosc. 30(5): 355–360. https://doi.org/10.1002/(SICI)1097-4555(199905)30:5<355:AID-JRS398>3.0.CO;2-C

[29] Santangelo S, Piperopoulos E, Fazio E, Faggio G, Ansari S, Lanza M, Neri F, Messina G, Milone C. (2014). A safer and flexible method for the oxygen functionalisation of carbon nanotubes by nitric acid vapors. Appl. Surf. Sci. 303: 446–455. https://doi.org/10.1016/j.apsusc.2014.03.023

[30] Baltrusaitis J, Cwiertny DM, Grassian VH. (2007). Adsorption of sulfur dioxide on hematite and goethite particle surfaces. Phys. Chem. Chem. Phys. 9(41): 5542–5554. http://dx.doi.org/10.1039/b709167b

[31] Saremi-Yarahmadi S, Wijayantha KGU, Tahir AA, Vaidhyanathan B. (2009). Nanostructured α-Fe_2O_3 electrodes for solar driven water splitting: effect of doping agents on preparation and performance. J. Phys. Chem. C 113(12): 4768–4778. http://dx.doi.org/10.1021/jp808453z

[32] Klein F, Jache B, Bhide A, Adelhelm P. (2013). Conversion reactions for sodium-ion batteries. Phys. Chem. Chem. Phys. 15(38): 15876-15887. http://dx.doi.org/10.1039/c3cp52125g

[33] Fiore M, Longoni G, Santangelo S, Pantò F, Stelitano S, Frontera P, Antonucci PL, Ruffo R. (2018). Electrochemical characterization of highly abundant, low cost iron (III) oxide as anode material for sodium-ion rechargeable batteries. Elettrochim. Acta 269: 367-377. http://dx.doi.org/10.1016/j.electacta.2018.02.161