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Recent Papers

- R Drago-Ferrante, R Di Fiore, F Karouia, Y Subbannayya, S Das, BA Mathyk, S Arif, AP Guevara-Cerdan, A Seylani, AS Galsinh, W Kukulska, J Borg, S Suleiman, DM Porterfield, A Camera, LK Christenson, AE Ronca, JG Steller, A Beheshti, J Calleja-Agius. 2022. Extraterrestrial Gynecology: Could Spaceflight Increase the Risk of Developing Cancer in Female Astronauts? An Updated Review. International Journal of Molecular Sciences 23 (13), 7465.
- KH Yano, KS Mao, JP Wharry, DM Porterfield. 2018. Investing in a permanent and sustainable nuclear waste disposal solution. Progress in Nuclear Energy 108, 474-479.
- DM Porterfield. 2018. Hacking life: Engineering biological systems beyond genomics. Dawn or Doom, Purdue University.
- ES McLamore, DM Porterfield, Y Wan. 2017. Measuring spatial and temporal oxygen flux near plant tissues using a self-referencing optrode. Plant Respiration and Internal Oxygen, 267-281.
- J Park, ML Salmi, WWA Salim, A Rademacher, B Wickizer, A Schooley, J Benton, A Cantero, PF Argote, M Ren, M Zhang, DM Porterfield, AJ Ricco, SJ Roux, JL Rickus. 2017. An autonomous lab on a chip for space flight calibration of gravity-induced transcellular calcium polarization in single-cell fern spores. Lab on a Chip 17 (6), 1095-1103.
- E Stulberg, D Fravel, LM Proctor, DM Murray, J LoTempio, L Chrisey, J Garland, K Goodwin, J Graber, MC Harris, S Jackson, M Mishking, DM Porterfield, A Records. 2016. An assessment of US microbiome research. Nature microbiology 1 (1), 1-7.
- WWA Wan Salim, AC Hermann, MA Zietcheck, JE Pfluger, JH Park, F Sanober, DM Porterfield. 2015. Ion-selective electrode biochip for applications in a liquid environment. International Conference for Innovation in Biomedical Engineering and Life Sciences . ICIBEL 2015. IFMBE Proceedings, vol 56.

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W Xu, SJ Hong, A Zhong, P Xie, S Jia, Z Xie, M Zeitcheck, S Niknam-Bienia, J Zhao, DM Porterfield, DJ Surmeier, KP Leung, RD Galiano, TA Mustoe. 2015. Sodium channel Nax is a regulator in epithelial sodium homeostasis. Science translational medicine 7 (312), 312ra177-312ra177.

W Zheng, F Tayyari, GAN Gowda, D Raftery, ES McLamore, DM Porterfield, SS Donkin, B Bequette, D Teegarden. 2015. Altered glucose metabolism in Harvey-ras transformed MCF10A cells. Molecular carcinogenesis 54 (2), 111-120.

MC Stensberg, R Madangopal, G Yale, Q Wei, H Ochoa-Acuña, A Wei, ES McLamore, J Rickus, DM Porterfield, MS Sepulveda. 2014. Silver nanoparticle-specific mitotoxicity in *Daphnia magna*. Nanotoxicology 8 (8), 833-842.

G Liu, DM Porterfield. 2014. Oxygen enrichment with magnesium peroxide for minimizing hypoxic stress of flooded corn. Journal of Plant Nutrition and Soil Science 177 (5), 733-740.

MC Stensberg, MA Zeitcheck, K Inn, ES McLamore, DM Porterfield, MS Sepulveda. 2014. Comparative study of non-invasive methods for assessing *Daphnia magna* embryo toxicity. Environmental Science and Pollution Research 21 (18), 10803-10814.

Recent Patents

JC Claussen, A Kumar, TS Fisher, RG Reifenberger, G Xiong, DB Jaroch, DM Porterfield, R Paul. 2019. Modified graphitic electrodes for electrochemical energy storage enhancement. US Patent 10,319,537

DM Porterfield, TG Cha, JH Choi, JC Claussen, AR Diggs, J Shi. 2014. Microbiosensors based on DNA modified single-walled carbon nanotube and PT black nanocomposites. US Patent 8,882,977.