DEPARTMENT OF MINING & MATERIALS ENGINEERING

ANNEX TO DEPARTMENTAL ANNUAL REPORT OF 2020

RESEARCH PUBLICATIONS – Articles in refereed journals

MATERIALS ENGINEERING (pages 1-9)

BEVAN, K.H.


BROCHU, M.


CERRUTI, M.
• Liu S, Cerruti M, Barthelat F*. Plastic forming of graphene oxide membranes into 3D structures. ACS Nano 2020, 14, 15936-15943
• Buck E, Li H, Cerruti M*. Surface modification strategies to improve the osseointegration of poly(etheretherketone) and its composites. Macromol Biosci 2020; 20: e1900271

CHROMIK, R.

DEMOPOULOS, G.P.
• Marianna Uceda, Hsien-Chieh Chiu, Jigang Zhou*, Raynald Gauvin*, Karim Zaghib* and George P. Demopoulos, Nanoscale Assembling of Graphene Oxide with Electrophoretic Deposition Leads to Superior Percolation Network in Li-ion Electrodes: TiNb2O7/rGO Composite Anodes, Nanoscale, 2020, 12, 23092-23104
• Mariana Llanos; Rana Yekani; George P. Demopoulos, Niladri Basu*, 2020, Alternatives Assessment of Perovskite Solar Cell Materials and their Methods of Fabrication, Renewable & Sustainable Energy Reviews, 133 (2020) 110207.
• Andrea Paolella*, Wen Zhu, Giovanni Bertoni, Alexis Perea, Hendrix Demers, Sylvio Savoie, Gabriel Girard, Amelie Forand, Alina Gheorghe Nita, Pascale Chevalier, Nicolas Delaporte, Ashok Vijh, Abdelbast Guerfi, George P. Demopoulos, Henning Lorrman, and Karim Zaghib*, 2020, Towards an all-ceramic cathode–electrolyte interface with low-temperature pressed Li1+xAlxGe2-x(PO4)3 ceramic, Advanced Materials Interfaces, 2020, 2000164
• Francois Larouche, Farouk Tedjar, Kamyab Amouzegar, Georges Houlachi, Patrick Bouchard, George P. Demopoulos, Karim Zaghib*, 2020, Progress and status of hydrometallurgical and direct recycling of Li-ion batteries and beyond, Materials, 2020, 13, 801

GAUVIN, R.

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• Sheng Chang, Wenxin Huang, Zongshu Zou, Baokuan Li, Roderick I.L. Guthrie, Motion behavior of micro-bubbles in a delta shape tundish using impact pad, Powder Technology, Volume 367, 1 May 2020, Pages 296-304.

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• J. Lee, D. Yu, Z. Zhu, X. Yao, C. Wang, Y. Dong, R. Malik, J. Li, Kinetic rejuvenation of Li-rich Li-ion battery cathodes upon oxygen redox, ACS Appl. Energy Mater. 3 (8), 7931-7943 (2020).
• D. Kwon†, J. Lee†, N. Artrith, H. Kim, L. Wu, Z. Lun, Y. Tian, Y. Zhu, G. Ceder, The impact of surface structure transformation on the performance of Li-excess cathodes, Cell Reports Physical Science 1, 100187 (2020) (†co-first authors)

NAZHAT, S.


OMELON, S.

PEKGULERYUZ, M.


QUITORIANO, N.


SONG, J.


• Li, Peifeng and Han, Ying and Zhou, Xiao* and Fan, Zhanxi and Xu, Shang and Cao, Ke and Meng, Fanling and Gao, Libo and Song, Jun and Zhang, Hua and others. (2020). Thermal effect and Rayleigh instability of ultrathin 4H hexagonal gold nanoribbons. Matter. 2(3): 658–665.

• Li, Bing* and Wei, Yulan and Meng, Fanchao* and Ou, Pengfei* and Chen, Yuying* and Che, Lei and Chen, Cheng* and Song, Jun. (2020). Atomistic simulations of vibration and damping in three-dimensional graphene honeycomb nanomechanical resonators. Superlattices and Microstructures. 139: 106420.


WATERS, K.
• Vinnett, L., Waters, K.E. (2020), Comparisons of kinetics models in batch flotation: their equivalences to first-order processes, Minerals, 10 (10), 913
• Vinnett, L., Yianatos, J., Arismendi, L., Waters, K.E. (2020), Assessment of two automated image processing methods to estimate bubble size in industrial flotation machines, Minerals Engineering, 159, 106636
• Marion, C., Li, R., Waters, K.E. (2020), A review of rare-earth mineral flotation, Advances in Colloid and Interface Science, 279, 102142
• Vinnett, L., Marion, C., Grammatikopoulos, T., Waters, K.E. (2020), Analysis of flotation rate distributions to assess erratic performances from size-by-size kinetic tests, Minerals Engineering, 149, 106229

YUE, S.

• Chu, X. and Che, H. and Teng, C. and Vo, P. and Yue, S. (2020). Understanding Particle–Particle Interactions from Deposition Efficiencies in Cold Spray of Mixed Fe/316L Powders with Different Particle Size Combinations. Journal of Thermal Spray Technology. 29(3): 413-422.


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MINING ENGINEERING (Pages 10-14)

DIMITRAKOPOULOS, R.

HASSANI, F.
• H. Rafezi, F. Hassani, Practicality of Tricone Bit Wear Condition Assessment, Journal of Experimental Results, Cambridge University Press, ISSN: 2516-712X, 2020
• H Rafezi and F. Hassani (2020) Practicality of Tricone Bit Wear Condition Assessment. Experimental Results , Volume 1 , 2020 , DOI: https://doi.org/10.1017/exp.2020.42

KUMRAL, M.


MITRI, H.


NAVARRA, A.

SASMITO, A.
