

List of Publications, K. J. Hunt

Journal Papers

- [1] K. J. Hunt and J. Saengsuwan, “Changes in heart rate variability with respect to exercise intensity and time during treadmill running,” *BioMedical Engineering OnLine*, vol. 17:128, 2018. <https://doi.org/10.1186/s12938-018-0561-x>.
- [2] E. A. Aksöz, M. A. Luder, M. Laubacher, R. Riener, S. A. Binder-Macleod, and K. J. Hunt, “Stochastically-modulated inter-pulse intervals to increase the efficiency of functional electrical stimulation cycling,” *J. Rehabil. Assist. Technol. Eng.*, vol. 5:1–6, 2018. <https://doi.org/10.1177/2055668318767364>.
- [3] K. J. Hunt and M. Liu, “Optimal control of heart rate during treadmill exercise,” *Optim. Control Appl. Meth.*, vol. 39, no. 2, pp. 503–518, 2018. Epub 2017 Sep 04. <https://doi.org/10.1002/oca.2355>.
- [4] F. Chrif, T. Nef, and K. J. Hunt, “Investigation of cardiopulmonary exercise testing using a dynamic leg press and comparison with a cycle ergometer,” *BMC Sports Sci. Med. Rehabil.*, vol. 10:5, 2018. <https://doi.org/10.1186/s13102-018-0095-3>.
- [5] K. J. Hunt, P. Anandakumaran, J. A. Loretz, and J. Saengsuwan, “A new method for self-paced peak performance testing on a treadmill,” *Clin. Physiol. Funct. Imaging*, vol. 38, pp. 108–117, January 2018. Epub 2016 Sep 28. <https://doi.org/10.1111/cpf.12390>.
- [6] J. Saengsuwan, T. Nef, and K. J. Hunt, “A method for predicting peak work rate for cycle ergometer and treadmill ramp tests,” *Clin. Physiol. Funct. Imaging*, vol. 37, pp. 610–614, November 2017. Epub 2016 Jan 12. <https://doi.org/10.1111/cpf.12344>.
- [7] M. Laubacher, E. A. Aksöz, I. Bersch, and K. J. Hunt, “The road to Cybathlon 2016 - functional electrical stimulation cycling team IRPT/SPZ,” *Eur. J. Transl. Myol.*, vol. 27, no. 4, pp. 259–264, 2017. Epub 2017 Nov 30. <https://doi.org/10.4081/ejtm.2017.7086>.
- [8] K. J. Hunt and S. Gerber, “A generalised stochastic optimal control formulation for heart rate regulation during treadmill exercise,” *Systems Science & Control Engineering*, vol. 5:1, pp. 481–494, 2017. Epub 2017 Nov 10. <https://doi.org/10.1080/21642583.2017.1398685>.
- [9] M. Laubacher, E. A. Aksöz, R. Riener, S. Binder-Macleod, and K. J. Hunt, “Power output and fatigue properties using spatially distributed sequential stimulation in a dynamic knee-extension task,” *Eur. J. Appl. Physiol.*, vol. 117, no. 9, pp. 1787–1798, 2017. Epub 2017 Jul 03. <https://doi.org/10.1007/s00421-017-3675-0>.
- [10] F. Chrif, T. Nef, M. Lungarella, R. Dravid, and K. J. Hunt, “Control design for a lower-limb paediatric therapy device using linear motor technology,” *Biomed. Signal Process. Control*, vol. 38, pp. 119–127, 2017. <https://doi.org/10.1016/j.bspc.2017.05.011>.
- [11] J. Riedo and K. J. Hunt, “Feedback control of oxygen uptake during robotics-assisted end-effector-based stair climbing,” *Systems Science & Control Engineering*, vol. 5:1, pp. 142–155, 2017. <https://doi.org/10.1080/21642583.2017.1297261>.
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- [13] J. Saengsuwan, L. Berger, C. Schuster-Amft, T. Nef, and K. J. Hunt, “Test-retest reliability and four-week changes in cardiopulmonary fitness in stroke patients: evaluation using a robotics-assisted tilt table,” *BMC Neurology*, vol. 16:163, 2016. <https://doi.org/10.1186/s12883-016-0686-0>.
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