



Contents

Scientific and Technical Articles

- Developmental validation of an enhanced mRNA-based multiplex system for body fluid and cell type identification
Patricia Pearl Albani and Rachel Fleming 217
- Mass spectrometry-based SNP genotyping as a potential tool for ancestry inference and human identification in Chinese Han and Uyghur populations
Jiashuo Zhang, Jingyi Zhang, Ruiyang Tao, Zihao Yang, Suhua Zhang and Chengtao Li 228
- *In silico* toxicity as a tool for harm reduction: A study of new psychoactive amphetamines and cathinones in the context of criminal science
Caio Henrique Pinke Rodrigues and Aline Thaís Bruni 234
- An investigation on the secondary transfer of organic gunshot residues
Matthieu Maitre, Scott Chadwick, K. Paul Kirkbride, Anne-Laure Gassner, Céline Weyermann, Alison Beavis and Claude Roux 248
- Fragrance transfer between fabrics for forensic reconstruction applications
Simona Gherghel, Ruth M. Morgan, Javier F. Arrebola-Liébanas, Chris S. Blackman and Ivan P. Parkin 256
- The effect of tape type, taping method and tape storage temperature on the retrieval rate of fibres from various surfaces: An example of data generation and analysis to facilitate trace evidence recovery validation and optimisation
Zoe V. Jones, Claire Gwinnett and Andrew R.W. Jackson 268
- Freshwater diatom transfer to clothing: Spatial and temporal influences on trace evidence in forensic reconstructions
K.R. Scott, R.M. Morgan, N.G. Cameron and V.J. Jones 292
- Journey history reconstruction from the soils and sediments on footwear: An empirical approach
Ruth M. Morgan, Kirstie R. Scott, Jessica Ainley and Peter A. Bull 306
- Estimating actual foot size from a static bare foot print in a White British Population
Michael Curran, Laura Gillespie, Sarah Melville, Jackie Campbell and Bryan Kagan 317
- Evaluation of neodymium isotope analysis of human dental enamel as a provenance indicator using $10^{13} \Omega$ amplifiers (TIMS)
E. Plomp, I.C.C. von Holstein, J.M. Koornneef, R.J. Smeets, J.A. Baart, T. Forouzanfar and G.R. Davies 322
- The impact of trauma and blood loss on human decomposition
Diane L. Cockle and Lynne S. Bell 332
- Forensic investigation of cross platform massively multiplayer online games: Minecraft as a case study
D.C. Paul J. Taylor, Henry Mwiki, Ali Dehghantanha, Alex Akibini, Kim Kwang Raymond Choo, Mohammad Hammoudeh and Reza Parizi 337

Technical Notes

- An evaluation of the effect of incorporating metal salts into 1,8 diazafluoren-9-one (DFO) formulations for fingermark enhancement
Kelly Mayse, Vaughn G. Sears, Niko Nicolasora and Stephen Bleay 349
- Case study: Loss of Kastle-Meyer test specificity on jeans
Wendy Lalonde and Jonathan S. Millman 359

Letter to the Editor

- Letter to the editor: Commentary on "Strategic choice in linear sequential unmasking, Roger Koppl, Science & Justice, <https://doi.org/10.1016/j.scijus.2018.10.010>"
Alex Biedermann and Simone Gittelson 362