

# McKEEVER PUBLICATIONS

(since retirement in 2017)

## BOOK

S.W.S. McKeever. *A Course in Luminescence Measurements and Analyses for Radiation Dosimetry*. Wiley (2022).

## REPORTS

S.W.S. McKeever, C. Woda, S. Amundson, P. Fattibene, A. Romanyukha, H. Romm, A. Testa, S.L. Simon, F. Trompier, R. Wilkins. *Methods for Initial-Phase Assessment of Individual Doses Following Acute Exposure to Ionizing Radiation*, International Commission on Radiation Units and Measurements (ICRU), ICRU Report 94 J. ICRU, 19, 1-162 (2019).

## CHAPTERS IN BOOKS

S.W.S. McKeever and S. Sholom. *Luminescence Measurements for Retrospective Dosimetry*. In *Advances in Physics and Applications of Optically and Thermally Stimulated Luminescence*. Eds. R. Chen and V. Pagonis. World Scientific Press, Singapore. Doi: 10.1142/9781786345790\_0009 (2019)

## PAPERS

### 2017

- 1 E. Ainsbury, C. Badie, S. Barnard, G. Manning, J. Moquet, M. Abend, A. C. Antunes, L. Barrios, C. Bassinet, C. Beinke, E. Bortolin, L. Bossin, C. Bricknell, K. Brzoska, I. Buraczewska, C. H. Castaño, Z. Čemusová, M. Christiansson, S.M. Cordero, G. Cosler, S. Della Monaca, F. Desangles, M. Discher, I. Dominguez, S. Doucha-Senf, J. Eakins, P. Fattibene, S. Filippi, M. Frenzel, D. Georgieva, E. Gregoire, K. Guogyte, V. Hadjidekova, L. Hadjiiska, R. Hristova, M. Karakosta, E. Kis, R. Kriehuber, J. Lee, D. Lloyd, K. Lumniczky, F. Lyng, E. Macaeva, M. Majewski, S.V. Martins, S.W.S. McKeever, A. Meade, D. Medipally, R. Meschini, R. M'kacher, O.M. Gil, A. Montero, M. Moreno, M. Noditi, U. Oestreicher, D. Oskamp, F. Palitti, V. Palma, G. Pantelias, J. Pateux, C. Patrono, G. Pepe, M. Port, M.J. Prieto, M.C. Quattrini, R. Quintens, M. Ricoul, L. Roy, L. Sabatier, N. Sebastià, S. Sholom, S. Sommer, A. Staynova, S. Strunz, G. Terzoudi, A. Testa, F. Trompier, M. Valente, O. Van Hoey, I. Veronese, A. Wojcik and C. Woda. *Integration of new biological and physical retrospective dosimetry methods into EU emergency response plans – joint RENEb and EURADOS inter-laboratory comparisons*, Int.J. Radiat. Biol, **93**, 99-109, (2017) DOI: 10.1080/09553002.2016.1206233 (2017).
- 2 S. Sholom and S.W.S. McKeever. *Stability of X-band EPR signals from finernails under vacuum storage*. Radiat. Phys. Chem. **141**, 78-87 (2017).

- 3 E. A. Ainsbury, D. Samaga, S. Della Monaca, M. Marrale, C. Bassinet, C.I. Burbidge, V. Correcher, M. Discher, J. Eakins, P. Fattibene, Đ. Guclu, M. Higuera, E. Lund, N. Maltar-Strmečki, S. McKeever, C. L. Raaf, S. Sholom, I. Veronese, A. Wieser, C. Woda, F. Tromprier. *Uncertainty on radiation doses estimated by biological and retrospective physical methods*. Radiat. Prto. Dosim. <http://doi:10.1093/rpd/ncx125> (2017)
- 4 K. Remy, S. Sholom, B. Obryk and S.W.S. McKeever. *Optical absorption in LiF, LiF:Mg, LiF:MCP-N irradiated with high gamma and beta doses*. 18<sup>th</sup> Solid State Dosimetry Conf., Munich, Sept., 2016. Radiat. Meas. 106, 113-117 (2017).
- 5 S.W.S. McKeever, R. Minniti, and S. Sholom. *Phototransferred thermoluminescence (PTTL) dosimetry using Gorilla<sup>®</sup> glass from mobile phones*. 18<sup>th</sup> Solid State Dosimetry Conf., Munich, Sept. 2016. Radiat. Meas. 106, 423-430 (2017).
- 6 S. Sholom and S.W.S. McKeever. *Developments for emergency dosimetry using components of mobile phones*. 18<sup>th</sup> Solid State Dosimetry Conf., Munich, Sept. 2016. Radiat. Meas. 106, 416-422 (2017).

## 2018

- 7 S.W.S. McKeever, S. Sholom and J.R. Chandler. *A comparative study of EPR and TL signals in Gorilla<sup>®</sup> glass*. BioDose 2018, Munich., 2018. Radiat. Protect. Dosim. doi:10.1093/rpd/ncy243 (2018)
- 8 S. Sholom and S.W.S. McKeever. *An advance in EPR dosimetry with nails*. BioDose 2018, Munich., 2018. Radiat. Protect. Dosim. <https://doi.org/10.1093/rpd/ncz019> (2018).
- 9 S. Sholom, A. Weiser and S.W.S. McKeever. *A comparison of different deconvolution methods used in EPR dosimetry with Gorilla<sup>®</sup> glass*. BioDose 2018, Munich., 2018. Radiat. Protect. Dosim. <https://doi.org/10.1093/rpd/ncy260> (2018).

## 2019

- 10 S. W. S. McKeever, S. Sholom and N. Shrestha. *Observations regarding the build-up effect in radiophotoluminescence of silver-doped phosphate glasses*. Luminescent Detectors and Transformers of Ionizing Radiation, Prague, 2018. Radiat. Meas. 123, 13-20 (2019).
- 11 J.R. Chandler, S. Sholom, S.W.S. McKeever, H.L. Hall. *Thermoluminescence and phototransferred thermoluminescence dosimetry on mobile phone protective touchscreen glass* J. Appl. Phys. **126**, 074901 <https://doi.org/10.1063/1.5108971> (2019).
- 12 McKeever, S.W. S. and Sholom, S. Luminescence measurements for retrospective dosimetry. In: *Advances in Physics and Applications of Optically and Thermally Stimulated Luminescence*. Chen, R. and Pagonis, V., Eds (London, UK:World Scientific Publishing Europe Ltd.) pp. 319–362 (2019).

## 2020

- 13 S. Sholom, and S.W.S. McKeever. *High-dose dosimetry with Ag-based phosphate glass: Applicability test with different techniques*. Radiat. Meas. 132, 106263 doi.org/10.1016/j.radmeas.2020.106283. (2020).
- 14 S. W. S. McKeever, S. Sholom, N. Shrestha and D.M. Klein *An in-situ, fiber-optic system for sub-surface, environmental dose measurements using radiophotoluminescence from Ag-doped alkali-phosphate glass*. Radiat. Meas. **132**, 106273 <https://doi.org/10.1016/j.radmeas.2020.106273> (2020).

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- 17 S.W.S. McKeever, S. Sholom and J.R. Chandler. *Developments in the use of Thermoluminescence and optically stimulated luminescence in emergency dosimetry.* Radiat. Protect. Dosim., **192**, 205-235 (2020).

## 2021

- 18 S.W.S. McKeever and S. Sholom. *Trap level spectroscopy of disordered materials using thermoluminescence: An application to aluminosilicate glass.* J. Lumin. **234**, 11790 <https://doi.org/10.1016/j.jlumin.2021.117950> (2021).
- 19 S. Sholom and S.W.S. McKeever. *OSL with chips from US credit cards.* Radiat. Meas. **141**, 106536 <https://doi.org/10.1016/j.radmeas.2021.106536> (2021)
- 20 J.R. Chandler, S. Sholom, S.W.S. McKeever, D.T. Seagraves, H.L. Hall. *Optically stimulated luminescence dosimetry on mobile phone back protective glass.* Physics Open, **7**, 100072 <https://doi.org/10.1016/j.physo.2021.100072> (2021)
- 21 L. Pan, S. Sholom, McKeever, S.W.S., Jacobsohn, L.G. *Magnesium aluminate soinel for optically stimulated luminescence dosimetry.* J. Alloys Comp. **880**, 160503(1-9). <https://doi.org.10.1016/j.jallcom.2021.160503> (2021).
- 22 P.D. Townsend,, Y. Wang, S.W.S. McKeever. *Spectral evidence for defect clustering: Relevance to radiation dosimetry materials.* Radiat. Meas. **147**, 106634 (2021) <https://doi.org/10.1016/j.radmeas.2021.106634>
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## 2022

- 24 S. Sholom, S.W.S. McKeever. *The potential of protective glass from smartphones as an emergency personal dosimeter for members of the general public in radiological accidents.* Brazilian J. Radiat. Sci., **10-02A**, 1-13, (2022).
- 25 S. Sholom., S.W.S. McKeever, M.B. Escalona, T.L. Ryan, A. S. Balajee. *A comparative validation of biodosimetry and physical dosimetry techniques for possible triage applications in emergency dosimetry.* J. Radiol. Protect. **42**, 021515 (2022) <https://doi.org/10.1088/1361-6498/ac5815>
- 26 E.G. Yukihara, S.W.S. McKeever, C.E. Anderson, A.J.J. Bos, I.K. Bailiff, E.M. Yoshimura, G.O. Sawakuchi, L. Bossin, J.B. Christensen. *Luminescence Dosimetry. Nature Reviews Methods Primers* **2**, 26, 1-21 (2022) <https://doi.org/10.1038/s43586-022-00102-0>
- 27 J.R. Chandler, S. Sholom, S.W.S. McKeever, E. Bakhanova, V. Chumak, D. Velasquez, H.L. Hall. *Dose conversion factors for absorbed dose in a mobile phone to absorbed dose in critical organs in an anthropomorphic phantom for emergency dosimetry applications: OSL and TL experimental results, and Monte Carlo simulations.* Radiat. Meas. **154**, 106781 (2022). <https://doi.org/10.1016/j.radmeas.2022.106781>

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