

CURRICULUM VITAE

Dr. Vasilis Pagonis

McDaniel College
Physics Department
Westminster, MD 21157, USA

Academic Rank: Full Professor
E-mail: vpagonis@mcdaniel.edu
Marital Status: Married, 2 children.

PROFESSIONAL PREPARATION

University of Athens, Athens, Greece
University of Birmingham, Birmingham, England

Northeastern University, Boston, Massachusetts
Northeastern University, Boston, Massachusetts

Major: Physics B.S. 1976
Major: Physics M.Sc. 1978
Specialty: Applied Radiation Physics
Major: Physics M.S. 1979
Major: Physics Ph.D. 1982
Specialty: Experimental Solid State Physics

Title of Master's Thesis: Thermoluminescence study of meteorites
Title of Doctoral Dissertation: Neutron studies of ferromagnetic materials
Name of Doctorate Supervisor: Prof. C. Perry.

ACADEMIC AND PROFESSIONAL EXPERIENCE:

McDaniel College	(8/96 to Present)	Professor Dept. of Physics
McDaniel College	(9/07 to 9/14)	Kopp Endowed Chair Professor of Physics
McDaniel College	(9/12 to 2014)	Department Chair Dept. of Physics
McDaniel College	(8/87 to 2001)	Department Chair Dept. of Physics
McDaniel College	(8/89 to 8/96)	Associate Professor Dept. of Physics
McDaniel College	(8/86 to 8/89)	Assistant Professor Dept. of Physics
Allegheny College	(8/82 to 8/86)	Assistant Professor Dept. of Physics
Northeastern University	(8/79 to 8/82)	Lecturer Dept. of Mathematics
Northeastern University	(8/79 to 8/82)	Research Assistant Dept. of Physics

Awards:

McDaniel College *Special Achievement Professional Publications award*: 2016
McDaniel College *Faculty Book award*: 2011
McDaniel College *Kopp Endowed Chair in the sciences award*: 2007-present
McDaniel College *Faculty Book award*: 2006
McDaniel College *Faculty Research award for Scholarly publications*: 2006
McDaniel College *Faculty Research award for Scholarly publications*: 2002
McDaniel College *Faculty Research award for Scholarly publications*: 1998

PUBLISHED GRADUATE TEXTBOOKS

1. Dr. Pagonis is the co-author of a graduate-level book entitled "***Practical and Numerical Exercises in Thermoluminescence***". The book is co-authored with Dr. George Kitis of the Aristotle University in Thessaloniki-Greece, and with Dr. Claudio Furetta of the University of Rome-Italy. This is a graduate level textbook that is meant to be used for training graduate students in the field of Thermoluminescence, and contains complete numerical and theoretical exercises and their solutions. The textbook was published in 2006 by Springer-Verlag-USA.
2. Dr. Pagonis is the co-author of the book "Thermally and Optically Stimulated Luminescence: A simulations approach". The book is co-authored with Dr. Reuven Chen, Professor Emeritus of Tel-Aviv University, Israel. The book was published in spring 2011 by Wiley.
3. Dr. Pagonis is the co-editor of the book "Recent Advances in Physics and Applications of TL and OSL". The book was published in spring 2019 by World Scientific. This is an Advanced Topics Review book containing 12 authoritative chapters written by experts in the field of TL/OSL.

BOOK CURRENTLY IN PROGRESS

4. Pagonis, V., and Kulp, C., 2018. Classical Mechanics: a computational approach (under contract to CRC Press). This undergraduate physics textbook is currently in the editing stage, with an anticipated publications date in Spring 2020.

Editorial work

Reviewer for the following international peer reviewed journals:

Journal of Luminescence
Radiation Measurements
The Physics Teacher
Int. Journal of Radiation Effects and Isotopes
Journal of Physics D: Applied Physics
Physica B
Nuclear Instruments Methods and Instruments B
European Journal of Physics
Journal of Archaeological Science
Applied Radiation and Isotopes
Mediterranean Archaeology
Boreas
Journal of Archaeology Science Reports

PAPERS CO-AUTHORED WITH MCDANIEL STUDENTS

The following are publications in refereed journals, co-authored with McDaniel students:
Bold indicates McDaniel College undergraduate students

1. Thermoluminescence due to tunneling in nanodosimetric materials: A Monte Carlo study

Vasilis Pagonis , **Phuc Truong**

Physica B: Condensed Matter 531 (2018) 171–179

2.The effect of crystal size on tunneling phenomena in luminescent
nanodosimetric materials

Vasilis Pagonis, **Shannon Bernier, Francisco Marques dos Santos Vieira, Shane Steele**

Nuclear Inst. and Methods in Physics Research, B 412 (2017) 198–206

3.Quantum tunneling recombination in a system of randomly distributed trapped electrons and positive
ions

Vasilis Pagonis, Christopher Kulp, **Charity-Grace Chaney** and M Tachiya

J. Phys.: Condens. Matter 29 (2017) 365701

4.Mathematical characterization of continuous wave infrared stimulated luminescence signals (CW-
IRSL) from feldspars

V. Pagonis, **Huy Phan, Rebecca Goodnow, Sara Rosenfeld**, P.Mortheikai

Journal of Luminescence 154 (2014) 362–368

5.Vasilis Pagonis, **Ethan Gochnour, Michael Hennessey, Charles Knower**

Monte Carlo simulations of luminescence processes under quasiequilibrium (QE) conditions

Radiation Measurements 67 (2014) 67-76

6.Vasilis Pagonis, **Huy Phan, David Ruth**, George Kitis

Further investigations of tunneling recombination processes in random distributions
of defects. Radiation Measurements (2013),

<http://dx.doi.org/10.1016/j.radmeas.2013.08.006>

7. Vasilis Pagonis, **Leigh Blohm, Mark Brengle, Gina Mayonado, Patrick Woglam.**

Anomalous heating rate effect in thermoluminescence intensity using a simplified
semi-localized transition (SLT) model. Radiation Measurements (2013)

<http://dx.doi.org/10.1016/j.radmeas.2013.01.025>

8. Vasilis Pagonis, Reuven Chen, **John W. Maddrey, Benjamin Sapp**. Simulations of timeresolved
photoluminescence experiments in a-Al₂O₃:C . Journal of Luminescence 131 (2011)

1086–1094

9. Vasilis Pagonis, **Atlee Baker, Meredith Larsen, Zachary Thompson**. Precision and accuracy
of two luminescence dating techniques for retrospective dosimetry: SAR-OSL and SARITL.

Nuclear Instruments and Methods in Physics Research B 269 (2011) 653–663

10. Pagonis, S. Mian, **R. Mellinger, K. Chapman** (2009). Thermoluminescence kinetic study of binary lead-silicate glasses. *Journal of Luminescence* 129 (2009) 570–577.
11. V Pagonis, S M Mian, M L Chithambo, E Christensen and **C Barnold** (2009) Experimental and modelling study of pulsed optically stimulated luminescence in quartz, marble and beta irradiated salt. *J. Phys. D: Appl. Phys.* 42 (2009) 055407.
12. V. Pagonis, **E. Balsamo, C. Barnold, K. Duling, S. McCole** (2008) Simulations of the predose technique for retrospective dosimetry and authenticity testing. *Radiation Measurements* 43 (2008) 1343–1353.
13. C. Soares, **C. Drupieski, B. Wingert, G. Pritchett**, V. Pagonis, M. O'Brien, A. Sliski, P. Bilski and P. Olko (2006). Absorbed dose measurements of a handheld 50 kvp x-ray source in water with thermoluminescence dosimeters. *Radiation Protection Dosimetry*, Vol. 120, pp. 78–82.
14. Vasilis Pagonis and **Hezekiah Carty** (2004). Simulation of the experimental pre-dose technique for retrospective dosimetry in quartz. *Radiation Protection Dosimetry* (2004), Vol. 109, No. 3, pp. 225-234.
15. G. Kitis, V. Pagonis, and **C. Drupieski** (2003). Cooling rate effects on the thermoluminescence glow curves of Arkansas quartz. *Phys. stat. sol. (a)* 198, No. 2, 312- 321 (2003).
16. V. Pagonis, E. Tatsis, G. Kitis and **C. Drupieski** (2002). Search for common characteristics in the glow curves of quartz of various origins *Radiation Protection Dosimetry* (2002), Vol. 100, Nos. 1-4, pp. 373-376.
17. G. Kitis, V. Pagonis, **H. Carty** and E. Tatsis (2002). Detailed kinetic study of the thermoluminescence glow curve of synthetic quartz. *Radiation Protection Dosimetry* Vol. 100, Nos. 1-4, pp. 225-228.
18. V. Pagonis and **C. Shannon** (2000). An improved experimental procedure of separating a composite thermoluminescence glow curve into its components. *Radiation Measurements*, 32, 805-812.
19. V. Pagonis, **R. Drake, M. Morgan, T. Peters, C. Riddle, and K. Rollins**, (1999). “Modeling the forces on the human body using Interactive Physics,” *The Physics Teacher* 37:8, 469-474.
20. Vasilis Pagonis, **Sean Chauduri, Brian Hornbecker, and Nathan Smith**, (1997). “Video measurements: Effects of air resistance.” *The Physics Teacher* 35:6, 364-369 (1997).
21. V. Pagonis, **E. Allman, and A. Wooten Jr.**, (1996). “Thermoluminescence from a distribution of trapping levels in UV irradiated calcite,” *Radiation Measurements*, 26, 265-280 (1996)

PUBLISHED ARTICLES IN REFEREE JOURNALS

120. Thermoluminescence due to tunneling in nanodosimetric materials: A Monte Carlo study

Vasilis Pagonis , Phuc Truong

Physica B: Condensed Matter 531 (2018) 171–179

119. Anomalous fading in TL, OSL and TA – OSL signals of Durango apatite for various grain size fractions; from micro to nano scale

G.S. Polymeris, I.K. Sfampa, M. Niora, E.C. Stefanaki, L. Malletzidou, V. Giannoulatou, V. Pagonis, G. Kitis
Journal of Luminescence 195 (2018) 216–224

118. The effect of crystal size on tunneling phenomena in luminescent nanodosimetric materials

Vasilis Pagonis, Shannon Bernier, Francisco Marques dos Santos Vieira, Shane Steele
Nuclear Inst. and Methods in Physics Research, B 412 (2017) 198–206

117. Can thermoluminescence be used to determine soil heating from a wildfire?

Francis K. Rengers, Vasilis Pagonis, Shannon A. Mahan
Radiation Measurements 107 (2017) 119-127

116. Sublinear dose dependence of thermoluminescence as a result of competition between electron and hole trapping centers

S.V. Nikiforov , V. Pagonis , A.S. Merezhnikov
Radiation Measurements 105 (2017) 54-61

115. Quantum tunneling recombination in a system of randomly distributed trapped electrons and positive ions

Vasilis Pagonis, Christopher Kulp, Charity-Grace Chaney and M Tachiya
J. Phys.: Condens. Matter 29 (2017) 365701

114. Tunnelling recombination in conventional, post-infrared and post-infrared multi-elevated temperature IRSL signals in microcline K-feldspar

Eren Şahiner, George Kitis, Vasilis Pagonis, Niyazi Meriç, George S. Polymeris
Journal of Luminescence 188 (2017) 514–523

113. Quartz radiofluorescence: a modelling approach

Johannes Friedrich, Vasilis Pagonis, Reuven Chen, Sebastian Kreutzer, Christoph Schmidt
Journal of Luminescence, 186 (2017) 318-325

112. The influence of competition effects on the initial rise method during thermal stimulation of luminescence: A simulation study

George Kitis, Vasilis Pagonis, S. E. Tzamarias
Radiation Measurements 100 (2017) 27-36

111. Thermoluminescence associated with two-electron traps

R. Chen , J.L. Lawless, V. Pagonis
Radiation Measurements 99 (2017) 10-17

110. An overview of recent developments in luminescence models with a focus on localized transitions

Vasilis Pagonis, Reuven Chen, Christopher Kulp, George Kitis
Radiation Measurements 106 (2017) 3-12

109. New expressions for half life, peak maximum temperature, activation energy and kinetic order of a thermoluminescence glow peak based on the Lambert W function

George Kitis , Vasilis Pagonis
Radiation Measurements 97 (2017) 28-34

108. Thermoluminescence glow curves in preheated feldspar samples:

An interpretation based on random defect distributions

George S. Polymeris, Vasilis Pagonis, George Kitis
Radiation Measurements 97 (2017) 20-27

107. Quantitative analysis of time-resolved infrared stimulated luminescence in feldspars

Vasilis Pagonis, Christina Ankjærgaard, Mayank Jain, Makaiko L. Chithambo
Physica B 497 (2016) 78–85

106. On the intrinsic accuracy and precision of the standardised growth curve (SGC) and global-SGC (gSGC) methods for equivalent dose determination: A simulation study

Jun Peng, Vasilis Pagonis , Bo Li
Radiation Measurements 94 (2016) 53-64

105. Monte Carlo simulations of tunneling phenomena and nearest neighbor hopping mechanism in feldspars

Vasilis Pagonis, Christopher Kulp
Journal of Luminescence 181 (2017) 114–120

104. Reliability of single aliquot regenerative protocol (SAR) for dose estimation in quartz at different burial temperatures: A simulation study

D.K. Koul , V. Pagonis, P. Patil
Radiation Measurements 91 (2016) 28-35

103. Spectral and kinetic analysis of thermoluminescence from manganiferous carbonatite

M.L. Chithambo, V. Pagonis, F.O. Ogundare
Journal of Luminescence 145 (2014) 180–187

102. Prompt isothermal decay of thermoluminescence in MgB₄O₇:Dy, Na and LiB₄O₇:Cu, In dosimeters

G. Kitis , G.S. Polymeris , I.K. Sfampa, M. Prokic, N. Meriç , V. Pagonis
Radiation Measurements 84 (2016) 15-25

101. Simulating comprehensive kinetic models for quartz luminescence using the R program KMS

Jun Peng, Vasilis Pagonis
Radiation Measurements, Vol. 86, (2016), 63–67

100. Mathematical aspects of ground state tunneling models in luminescence materials

Vasilis Pagonis , George Kitis
Journal of Luminescence 168 (2015) 137–144

99. Time-resolved luminescence from quartz: An overview of contemporary developments and applications
M.L. Chithambo, C.Ankjærgaard, V.Pagonis
Physica B 481 (2016) 8–18

98. Time and dose-rate dependence of TL and OSL due to competition between excitation and fading
R. Chen , V. Pagonis , J.L. Lawless
Radiation Measurements 82 (2015) 115-121

97. Dating quartz near saturation – Simulations and application at archaeological sites in South Africa and South Carolina

James K. Feathers , Vasilis Pagonis
Quaternary Geochronology xxx (2015) 1-6

96. On the effect of optical and isothermal treatments on luminescence signals from feldspars
Vasilis Pagonis, George Polymeris, George Kitis
Radiation Measurements 82 (2015) 93-101

95. Correlation of basic TL, OSL and IRSL properties of ten K-feldspar samples of various origins

I.K. Sfampa, G.S. Polymeris, V. Pagonis, E. Theodosoglou, N.C. Tsirliganis, G. Kitis
Nuclear Instruments and Methods in Physics Research B 359 (2015) 89–98

94. Monte Carlo simulations of TL and OSL in nanodosimetric materials and feldspars

Vasilis Pagonis, Reuven Chen
Radiation Measurements (2015), <http://dx.doi.org/10.1016/j.radmeas.2014.1>

93. Radiation-induced growth and isothermal decay of infrared-stimulated luminescence from feldspar

Benny Guralnik, Bo Li, Mayank Jain, Reuven Chen, Richard B. Paris, Andrew S. Murray, Sheng-Hua Li, Vasilis Pagonis, Pierre G. Valla, Frédéric Herman
Radiation Measurements (2015),
DOI: 10.1016/j.radmeas.2015.02.011

92. Study of the stability of the TL and OSL signals

R. Chen, V. Pagonis
Radiation Measurements (2015),
<http://dx.doi.org/10.1016/j.radmeas.2015.01.006>

91. Intrinsic superlinear dose dependence of thermoluminescence and optically stimulated luminescence at high excitation dose rates

R. Chen, J.L. Lawless, V. Pagonis
Radiation Measurements 71 (2014) 220-225

90. Mathematical characterization of continuous wave infrared stimulated luminescence signals(CW-IRSL) from feldspars

V. Pagonis, Huy Phan, Rebecca Goodnow, Sara Rosenfeld, P.Morthekai
Journal of Luminescence 154 (2014) 362–368

89. Monte Carlo simulations of luminescence processes under quasiequilibrium (QE) conditions

Vasilis Pagonis, Ethan Gochnour, Michael Hennessey, Charles Knower

Radiation Measurements 67 (2014) 67-76

88. Kinetic analysis of thermoluminescence glow curves in feldspar: evidence of a continuous distribution of energies

Vasilis Pagonis, P. Mortheikai and George Kitis
GEOCHRONOMETRIA 41(2) 2014: 168–177

87. On the shape of continuous wave infrared stimulated luminescence signals from feldspars: A case study

Vasilis Pagonis, M.Jain, K.J.Thomsen , A.S.Murray
Journal of Luminescence 153 (2014) 96–103

86. Properties of thermoluminescence glow curves from tunneling recombination processes in random distributions of defects

George Kitis and Vasilis Pagonis
Journal of Luminescence 153 (2014) 118–124

85. The role of simulations in the study of thermoluminescence (TL)

Reuven Chen, Vasilis Pagonis
Radiation Measurements (2014), <http://dx.doi.org/10.1016/j.radmeas.2013.12.011>

84. Prompt isothermal decay of thermoluminescence in an apatite exhibiting strong anomalous fading

I.K. Sfampa, G.S. Polymeris, N.C. Tsirliganis, V. Pagonis, G. Kitis
Nuclear Instruments and Methods in Physics Research B 320 (2014) 57–63

83. Further investigations of tunneling recombination processes in random distributions of defects

Vasilis Pagonis, Huy Phan, David Ruth, George Kitis
Radiation Measurements (2013), <http://dx.doi.org/10.1016/j.radmeas.2013.08.006>

82. Modeling TL-like thermally assisted optically stimulated luminescence (TA-OSL)

R. Chen, V. Pagonis
Radiation Measurements 56 (2013) 6-12

81. On the expected order of kinetics in a series of thermoluminescence (TL) peaks

R. Chen and V. Pagonis
Nuclear Instruments and Methods in Physics Research B 312 (2013) 60–69

80. THERMAL DEPENDENCE OF LUMINESCENCE LIFETIMES AND RADIOLUMINESCENCE IN QUARTZ

V. Pagonis, M.L. Chithambo, R. Chen, A. Chruścińska, M. Fasoli, S.H. Li, M. Martini, K. Ramseyer
Journal of Luminescence 145(2014)38–48

79. Anomalous heating rate effect in thermoluminescence intensity using a simplified semi-localized transition (SLT) model

Vasilis Pagonis, Leigh Blohm, Mark Brengle, Gina Mayonado, Patrick Woglam
Radiation Measurements 51-52 (2013) 40-47

78. Analytical solutions for stimulated luminescence emission from tunneling recombination in random distributions of defects

George Kitis and Vasilis Pagonis
Journal of Luminescence 137 (2013) 109–115

77. Anomalous fading of OSL signals originating from very deep traps in Durango apatite

G. Kitis , G.S. Polymeris, V. Pagonis , N.C. Tsirliganis
Radiation Measurements 49 (2013) 73-81

76. Thermal dependence of time-resolved blue light stimulated luminescence in a-Al₂O₃:C

Vasilis Pagonis, Christina Ankjærgaard, Mayank Jain, Reuven Chen
Journal of Luminescence 136 (2013) 270–277

75. On the quasi-equilibrium assumptions in the theory of thermoluminescence(TL)

R. Chen and V.Pagonis
Journal of Luminescence 143 (2013) 734–740

74. Time-resolved infrared stimulated luminescence signals in feldspars: Analysis based on exponential and stretched exponential functions

V. Pagonis, P.Morthekai, A.K.Singhvi, J.Thomas, V.Balaram, G.Kitis, R.Chen
Journal of Luminescence 132 (2012) 2330–2340

73. Reconstruction of thermally quenched glow curves in quartz

Bhagawan Subedi, George S. Polymeris, Nestor C. Tsirliganis, Vasilis Pagonis and George Kitis
Radiation Measurements 47 (2012) 250-257

72. Modeling of the shape of infrared stimulated luminescence signals in feldspars

Vasilis Pagonis, Mayank Jain, Andrew S. Murray, Christina Ankjærgaard and Reuven Chen
Radiation Measurements (2012), doi:10.1016/j.radmeas.2012.02.012

71. Superlinear dose response of thermoluminescence (TL) and optically stimulated luminescence (OSL) signals in luminescence materials: An analytical approach

Vasilis Pagonis, Reuven Chen and John L. Lawless
Journal of Luminescence 132 (2012) 1446–1455

70. A model for explaining the concentration quenching of thermoluminescence

R. Chen , J.L. Lawless, V. Pagonis
Radiation Measurements 46 (2011) 1380-1384

69. Two-stage thermal stimulation of thermoluminescence

R. Chen, J.L. Lawless, V. Pagonis
Radiation Measurements 47 (2012) 809-813

68. Prevalence of first order kinetics in thermoluminescence materials: An explanation based on multiple competition processes

Vasilis Pagonis and George Kitis Phys. Status Solidi B, 1–12 (2012) / DOI 10.1002/pssb.201248082

67. Preliminary results towards the equivalence of transformed continuous wave OSL (CW-OSL) and LM-OSL signals in quartz

G. Kitis, G. Polymeris, N. Kiyak and V.Pagonis
GEOCHRONOMETRIA (2011), DOI 10.2478/s13386-011-0031-8

66. Analytical expressions for time-resolved optically stimulated luminescence experiments in quartz

V. Pagonis, J. Lawles, R. Chen, M.L. Chithambo

Journal of Luminescence 131 (2011) 1827–1835

65. Simulations of thermally transferred OSL signals in quartz: Accuracy and precision of the protocols for equivalent dose evaluation

Vasilis Pagonis, Grzegorz Adamiec, C. Athanassas, Reuven Chen, Atlee Baker, Meredith Larsen, Zachary Thompson
Nuclear Instruments and Methods in Physics Research B 269 (2011) 1431–1443

64. On the intrinsic accuracy and precision of luminescence dating techniques for fired ceramics

Vasilis Pagonis, Reuven Chen, George Kitis
Journal of Archaeological Science 38 (2011) 1591–1602

63. Dissolution and subsequent re-crystallization as zeroing mechanism, thermal properties and dose response of salt (NaCl) for retrospective dosimetry

G. Polymeris, G. Kitis, N. Kiyak, I. Sfamba, B. Subedi, V. Pagonis
Applied Radiation and Isotopes 69 (2011) 1255–1262

62. Precision and accuracy of two luminescence dating techniques for retrospective dosimetry: SAR-OSL and SAR-ITL

Vasilis Pagonis, Atlee Baker, Meredith Larsen, Zachary Thompson
Nuclear Instruments and Methods in Physics Research B 269 (2011) 653–663

61. Simulations of time-resolved photoluminescence experiments in a-Al₂O₃:C

Vasilis Pagonis, Reuven Chen, John W. Maddrey, Benjamin Sapp
Journal of Luminescence 131 (2011) 1086–1094

60. Simulation of the Nonlinear Dose Dependence of Stabilized Point Defects

R Chen, V Pagonis and J L Lawless
IOP Conf. Series: Materials Science and Engineering 15 (2010) 012071
doi:10.1088/1757-899X/15/1/012071

59. Simulation of the influence of thermal quenching on thermoluminescence glow-peaks

B. Subedi, G. Kitis and V. Pagonis
Phys. Status Solidi A 207, No. 5, 1216–1226 (2010)

58. Simulations of isothermal processes in the semilocalized transition (SLT) model of thermoluminescence (TL)

V. Pagonis and C. Kulp
J. Phys. D: Appl. Phys. 43 (2010) 175403 (8pp)

57. On the initial-occupancy dependence of some luminescence phenomena under the one-trap-one-recombination-center (OTOR) model

R.Chen, V. Pagonis, J. Lawless, 2010
Radiation Measurements 45 (2010) 147–150

56. Nonlinear dose dependence of TL and LM-OSL within the one trap-one center model

R.Chen, V. Pagonis, J. Lawless
Radiation Measurements 45 (2010) 277–280

55. Investigation of OSL signals from very deep traps in unfired and fired quartz samples

G. Kitis, N.G. Kiyak, G.S. Polymeris, V. Pagonis

Nuclear Instruments and Methods in Physics Research B 268 (2010) 592–598

54. Mixed-order kinetics model for optically stimulated luminescence

G. Kitis, C. Furetta and V. Pagonis

Modern Physics Letters B, Vol. 23, No. 27 (2009) 3191–3207

53. Modelling the thermal quenching mechanism in quartz based on time-resolved optically stimulated luminescence

V. Pagonis, C. Ankjærgaard, A.S. Murray, M. Jain, R. Chen, J. Lawless, S. Greilich

Journal of Luminescence 130 (2010) 902–909

52. Sublinear dose dependence of thermoluminescence and optically stimulated luminescence prior to the approach to saturation level

J.L. Lawless, R. Chen, V. Pagonis

Radiation Measurements (2009), doi:10.1016/j.radmeas.2009.03.003

51. Simulations of thermally transferred OSL experiments and of the ReSAR dating protocol for quartz

Vasilis Pagonis, Ann G. Wintle, Reuven Chen, X.L. Wang

Radiation Measurements (2009), doi:10.1016/j.radmeas.2009.02.009

50. Radioluminescence in Al₂O₃ : C – analytical and numerical simulation results

V Pagonis, J Lawless, R Chen and C Andersen

J. Phys. D: Appl. Phys. 42 (2009) 175107 (9pp)

49. On the theoretical basis for the duplicitous thermoluminescence peak

J L Lawless, R Chen and V Pagonis

J. Phys. D: Appl. Phys. 42 (2009) 155409 (8pp)

48. A new look at the linear-modulated optically stimulated luminescence (LM-OSL) as a tool for dating and dosimetry

Reuven Chen, Vasilis Pagonis, John L. Lawless

Radiation Measurements 44 (2009) 344–350

47. Optically stimulated exoelectron emission processes in quartz: comparison of experiment and theory

V. Pagonis, C. Ankjærgaard, A.S. Murray, R. Chen

Journal of Luminescence 129 (2009) 1003–1009

46. Simulations of the predose technique for retrospective dosimetry and authenticity testing

V. Pagonis, E. Balsamo, C. Barnold, K. Duling, S. McCole

Radiation Measurements 43 (2008) 1343–1353

45. Thermoluminescence kinetic study of binary lead-silicate glasses

V. Pagonis, S. Mian, R. Mellinger, K. Chapman

Journal of Luminescence 129 (2009) 570–577

44. Experimental and modelling study of pulsed optically stimulated luminescence in quartz, marble and beta irradiated salt

V Pagonis, S M Mian, M L Chithambo, E Christensen and C Barnold

J. Phys. D: Appl. Phys. 42 (2009) 055407 (12pp)

43. A simulation of OSL pulse annealing at different heating rates: Conclusions concerning the evaluated trapping parameters and lifetimes

V. Pagonis, R. Chen

GEOCHRONOMETRIA, 30 (2008), pp xx-xx: DOI 10.2478/v10003-008

42. A theoretical model for a new dating protocol for quartz based on thermally transferred OSL (TT-OSL)

V. Pagonis, A.G. Wintle, R. Chen, X.L. Wang

Radiat. Meas. (2008), doi: 10.1016/j.radmeas.2008.01.025

41. Computerized curve deconvolution analysis for LM-OSL

G. Kitis, V. Pagonis

Radiat. Meas. (2008), doi: 10.1016/j.radmeas.2007.12.05

40. Duplicitous thermoluminescence peak associated with a thermal release of electrons and holes from trapping states

R. Chen, V. Pagonis, J.L. Lawless

Radiat. Meas. (2007), doi: 10.1016/j.radmeas.2007.09.021

39. Dependence of the anomalous fading of the TL and blue-OSL of fluorapatite on the occupancy of the tunnelling recombination sites

N.C. Tsirliganis, G.S. Polymeris, G. Kitis, V. Pagonis

Journal of Luminescence 126 (2007) 303–308

38. A quantitative kinetic model for Al₂O₃:C: TL response to UV-illumination

Pagonis, V., Chen, R. and Lawless, J.L.

Radiation Measurements (2007), doi:10.1016/j.radmeas.2007.10.046

37. Simulations of the effect of pulse annealing on optically-stimulated luminescence of quartz

V. Pagonis, A.G. Wintle, R. Chen

Radiation Measurements 42 (2007) 1587 – 1599

36. Thermoluminescence glow-peak shape methods based on mixed order kinetics

George Kitis, Reuven Chen, and Vasilis Pagonis

phys. stat. sol. (a), 1– 9 (2008) / DOI 10.1002/pssa.200723470

35. A unified presentation of thermoluminescence (TL), phosphorescence and linear-modulated optically stimulated luminescence (LM-OSL)

Reuven Chen and Vasilis Pagonis

J. Phys. D: Appl. Phys. 41 (2008) 035102

34. Peak shape methods for general order TL glow-peaks: A reappraisal

G. Kitis and V Pagonis

Nuclear Instruments and Methods in Physics Research B 262 (2007) 313–322s

33. Modelling thermal transfer in optically stimulated luminescence of quartz

V Pagonis, R Chen and AG Wintle

J. Phys. D: Appl. Phys. 40 (2007) 998–1006

32. Thermoluminescence response and apparent anomalous fading factor of Durango fluorapatite as a function of the heating rate

G. Kitis, G. Polymeris, V. Pagonis, and N. Tsirliganis
phys. stat. sol. (a) 203, No. 15, 3816-3823 (2006)

31. The effects of annealing and irradiation on the sensitivity and superlinearity properties of the 110 0C thermoluminescence peak of quartz

G. Polymeris, G. Kitis, V. Pagonis
Radiation Measurements 41 (2006) 554 – 564

30. Thermoluminescence under exponential heating function I: Theory

G. Kitis, R. Chen, V. Pagonis, E. Carinou and V. Kamenopoulou
J. Phys. D: Appl. Phys. 39, 1500-1507 (2006).

29. Thermoluminescence under exponential heating function II: Deconvolution of experimental glow-curves

G. Kitis, R. Chen, V. Pagonis, E. Carinou, P. Ascounis and V. Kamenopoulou
J. Phys. D: Appl. Phys. 39, 1508-1514 (2006).

28. A comprehensive study of the predose effect for three quartz crystals of different origin.

G. Kitis, V. Pagonis, R. Chen and G. Polymeris
Radiation Protection Dosimetry (2006), Vol. 119, No. 1–4, pp. 438–441

27. Theoretical modeling of experimental diagnostic procedures employed during predose dosimetry of quartz

V. Pagonis, R. Chen and G. Kitis
Radiation Protection Dosimetry (2006), Vol. 119, No. 1–4, pp. 111–114

26. Non-monotonic dose dependence of OSL intensity due to competition during irradiation and read-out

V. Pagonis, R. Chen and J.L. Lawless
Radiation Measurements 41 (2006) 903– 909

25. Comparison of experimental and modelled quartz thermal-activation curves obtained using multiple- and single-aliquot procedures

G. Kitis, V. Pagonis and R. Chen
Radiation Measurements 41 (2006) 910 – 916

24. A quantitative kinetic model for Al₂O₃:C: TL response to ionization radiation

V. Pagonis, R. Chen and J.L. Lawless
Radiation Measurements (In press)

23. ABSORBED DOSE MEASUREMENTS OF A HANDHELD 50 kV X-RAY SOURCE IN WATER WITH THERMOLUMINESCENCE DOSEMETERS

Christopher Soares, Chris Drupieski, Brian Wingert, Garey Pritchett, Vasilis Pagonis, Michelle O'Brien, Alan Słiski, Paweł Bilski and Paweł Olko
RADIATION PROTECTION DOSIMETRY (2006), Vol. 120, No. 1–4, pp. 78–82

22. The nonmonotonic dose dependence of optically stimulated luminescence in Al₂O₃ :C: Analytical and numerical simulation results

R. Chen, V. Pagonis and J. L. Lawless
JOURNAL OF APPLIED PHYSICS 99, 033511,2006

21. Evaluation of activation energies in the semi-localized transition model of thermoluminescence
V Pagonis
J. Phys. D: Appl. Phys. 38 (2005) 2179-2183

20. A model for non-monotonic dose dependence of thermoluminescence
J L Lawless, R Chen, D Lo and V Pagonis
J. Phys.: Condens. Matter 17 (2005) 737-753

19. Modelling thermal activation characteristics of the sensitization of thermoluminescence in quartz
Reuven Chen and Vasilis Pagonis
J. Phys. D: Appl. Phys. 37 (2004) 159-164

18. SIMULATION OF THE EXPERIMENTAL PRE-DOSE TECHNIQUE FOR RETROSPECTIVE DOSIMETRY IN QUARTZ
Vasilis Pagonis and Hezekiah Carty
Radiation Protection Dosimetry (2004), Vol. 109, No. 3, pp. 225-234

17. Applicability of the Zimmerman predose model in the thermoluminescence of predosed and annealed synthetic quartz samples
Vasilis Pagonis, George Kitis, Reuven Chen
Radiation Measurements, 37, (2003), 267-274.

16. Cooling rate effects on the thermoluminescence glow curves of Arkansas quartz
G. Kitis, V. Pagonis, and C. Drupieski
Phys. stat. sol. (a) 198, No. 2, 312? 321 (2003)

15. SEARCH FOR COMMON CHARACTERISTICS IN THE GLOW CURVES OF QUARTZ OF VARIOUS ORIGINS
V. Pagonis, E. Tatsis, G. Kitis and C. Drupieski
Radiation Protection Dosimetry (2002), Vol. 100, Nos. 1-4, pp. 373-376

14. DETAILED KINETIC STUDY OF THE THERMOLUMINESCENCE GLOW CURVE OF SYNTHETIC QUARTZ
G. Kitis, V. Pagonis, H. Carty and E. Tatsis
Radiation Protection Dosimetry (2002), Vol. 100, Nos. 1-4, pp. 225-228

13. An improved experimental procedure of separating a composite thermoluminescence glow curve into its components
V. Pagonis and C. Shannon
Radiation Measurements, 32, 805-812 (2000).

12. FIT OF SECOND ORDER THERMOLUMINESCENCE GLOW PEAKS USING THE LOGISTIC DISTRIBUTION FUNCTION
V. Pagonis and G. Kitis
Radiation Protection Dosimetry, 93, No.3, 225-229 (2001).

11. FIT OF FIRST ORDER THERMOLUMINESCENCE GLOW PEAKS USING THE WEIBULL DISTRIBUTION FUNCTION
V. Pagonis, S.M. Mian and G. Kitis
Radiation Protection Dosimetry, 93, 11-17 (2001).

10. Modeling forces on the human body

V. Pagonis, R. Drake, M. Morgan, T. Peters, C. Riddle, and K. Rollins
Physics Teacher, 37, 469-474 (1999).

9. The effect of annealing atmosphere on the thermoluminescence of synthetic calcite

V. Pagonis
Radiation Measurements, 29, 45-52 (1998).

8. Video Measurements: Effects of Air resistance

Vasilis Pagonis, Sean Chauduri, Brian Hornbecker, and Nathan Smith
The Physics Teacher 35, 364-369 (1997).

7. Spurious and regenerated thermoluminescence in calcite powder samples

V. Pagonis, Y. Maniatis, C. Michael and Y. Bassiakos
Radiation Measurements, 27:1, 37-42 (1997).

6. Thermoluminescence from a distribution of trapping levels in UV irradiated calcite

Vasilis Pagonis, Eric Allman, and Albert Wooten Jr.
International Journal of Radiation Measurements, 26, 265-280 (1996).

5. Annealing effects on the thermoluminescence of synthetic calcite

V. Pagonis and C. Michael
Radiation Measurements, 23:1, 131-142 (1994).

4. Thermoluminescence study of annealing a geological calcite

Franklin, A.D., Hornyak, W.F., Pagonis, V., and Kristianpoller, N.
Nucl. Tracks, 17: 4, 517-523 (1990).

3. Forbidden magnon scattering in the weak ferromagnet MnSi

JB Sokoloff., W. H Li, V Pagonis and CH Perry
Solid State Communications, 52 (1984) p.693.

2. Spiral magnetic correlation in cubic MnSi

G. Shirane, R. Cowley*, and C. Majkrzak , J. B. Sokoloff, V. Pagonis, and C. H. Perry
Phys. Rev. B 28, 6251–6255 (1983)

1. A polarized neutron scattering demonstration of deviations from Stoner-theory behavior in nickel

RD Lowde, RM Moon, V Pagonis, CH Perry, JB Sokoloff
Journal of Physics F: Metal Physics, 13, (1983) 249-279.