

# Makaiko Chithambo

## List of Publications by Year in descending order

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108  
papers

1,411  
citations

361045

20  
h-index

454577

30  
g-index

108  
all docs

108  
docs citations

108  
times ranked

503  
citing authors

#	ARTICLE	IF	CITATIONS
1	The analysis of time-resolved optically stimulated luminescence: II. Computer simulations and experimental results. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 1880-1889.	1.3	79
2	A pulsed light-emitting-diode system for stimulation of luminescence. <i>Measurement Science and Technology</i> , 2000, 11, 418-424.	1.4	67
3	On the slow component of luminescence stimulated from quartz by pulsed blue light-emitting diodes. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2001, 183, 358-368.	0.6	48
4	Thermoluminescence of $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C,Mg}$ : Kinetic analysis of the main glow peak. <i>Journal of Luminescence</i> , 2017, 182, 177-182.	1.5	44
5	Dependence of the thermal influence on luminescence lifetimes from quartz on the duration of optical stimulation. <i>Radiation Measurements</i> , 2003, 37, 167-175.	0.7	40
6	The analysis of time-resolved optically stimulated luminescence: I. Theoretical considerations. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 1874-1879.	1.3	40
7	Comprehensive kinetic analysis of thermoluminescence peaks of $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C,Mg}$ . <i>Journal of Luminescence</i> , 2017, 185, 72-82.	1.5	34
8	Thermoluminescence of $\text{SrAl}_2\text{O}_4\text{:Eu}^{2+}, \text{Dy}^{3+}$ : Kinetic analysis of a composite-peak. <i>Radiation Measurements</i> , 2017, 97, 1-13.	0.7	33
9	Thermal dependence of luminescence lifetimes and radioluminescence in quartz. <i>Journal of Luminescence</i> , 2014, 145, 38-48.	1.5	32
10	Time-resolved optically stimulated luminescence and spectral emission features of $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C}$ . <i>Physica B: Condensed Matter</i> , 2015, 473, 62-71.	1.3	32
11	The influence of dose on the kinetic parameters and dosimetric features of the main thermoluminescence glow peak in $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C,Mg}$ . <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2017, 394, 12-19.	0.6	32
12	Time-resolved luminescence of low sensitivity quartz from crystalline rocks. <i>Radiation Measurements</i> , 2007, 42, 205-212.	0.7	31
13	Kinetic analysis of high temperature secondary thermoluminescence glow peaks in $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C}$ . <i>Radiation Measurements</i> , 2014, 66, 21-30.	0.7	28
14	Thermoluminescence characteristics of the main glow peak in $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C}$ exposed to low environmental-like radiation doses. <i>Journal of Luminescence</i> , 2013, 139, 143-148.	1.5	26
15	Phototransferred thermoluminescence of $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C}$ : Experimental results and empirical models. <i>Radiation Measurements</i> , 2017, 105, 7-16.	0.7	26
16	Spectral and kinetic analysis of thermoluminescence from manganiferous carbonatite. <i>Journal of Luminescence</i> , 2014, 145, 180-187.	1.5	25
17	On the sensitivity of thermally and optically stimulated luminescence of $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C}$ and $\hat{I}\pm\text{-Al}_2\text{O}_3\text{:C,Mg}$ . <i>Radiation Measurements</i> , 2017, 99, 18-24.	0.7	23
18	Temperature dependence of luminescence time-resolved spectra from quartz. <i>Radiation Measurements</i> , 2000, 32, 627-632.	0.7	20

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19	On luminescence lifetimes in quartz. <i>Radiation Measurements</i> , 2000, 32, 621-626.	0.7	20
20	Time-resolved luminescence from quartz: An overview of contemporary developments and applications. <i>Physica B: Condensed Matter</i> , 2016, 481, 8-18.	1.3	20
21	The influence of annealing and partial bleaching on luminescence lifetimes in quartz. <i>Radiation Measurements</i> , 2003, 37, 467-472.	0.7	19
22	Anomalous behaviour of thermoluminescence from quartz: A case of glow peaks from a Nigerian quartz. <i>Radiation Measurements</i> , 2006, 41, 549-553.	0.7	19
23	Thermoluminescence of monoclinic ZrO <sub>2</sub> : Kinetic analysis and dosimetric features. <i>Journal of Luminescence</i> , 2020, 218, 116864.	1.5	19
24	Low temperature luminescence of transition metal-doped beryls. <i>Journal of African Earth Sciences</i> , 1995, 20, 53-60.	0.9	18
25	Luminescence lifetime components in quartz: Influence of irradiation and annealing. <i>Radiation Measurements</i> , 2009, 44, 453-457.	0.7	18
26	A method for kinetic analysis and study of thermal quenching in thermoluminescence based on use of the area under an isothermal decay-curve. <i>Journal of Luminescence</i> , 2014, 151, 235-243.	1.5	18
27	Thermoluminescence of calcium phosphate co-doped with gadolinium and praseodymium. <i>Radiation Measurements</i> , 2015, 77, 26-33.	0.7	18
28	Phototransferred thermoluminescence of synthetic quartz: Analysis of illumination-time response curves. <i>Journal of Luminescence</i> , 2018, 198, 146-154.	1.5	18
29	Temperature dependence of persistent luminescence in CaAl <sub>2</sub> O <sub>4</sub> :Eu <sup>2+</sup> ,Nd <sup>3+</sup> related to beta irradiation and optical excitation. <i>Journal of Luminescence</i> , 2019, 206, 27-32.	1.5	18
30	Principal and secondary luminescence lifetime components in annealed natural quartz. <i>Radiation Measurements</i> , 2008, 43, 1-4.	0.7	17
31	Analytical expressions for time-resolved optically stimulated luminescence experiments in quartz. <i>Journal of Luminescence</i> , 2011, 131, 1827-1835.	1.5	17
32	The effect of annealing and beta irradiation on thermoluminescence spectra of $\hat{I}\pm$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg. <i>Journal of Luminescence</i> , 2018, 196, 195-200.	1.5	17
33	Experimental and modelling study of pulsed optically stimulated luminescence in quartz, marble and beta irradiated salt. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 055407.	1.3	16
34	Temperature-dependence of time-resolved optically stimulated luminescence and composition heterogeneity of synthetic $\hat{I}\pm$ -Al <sub>2</sub> O <sub>3</sub> :C. <i>Journal of Luminescence</i> , 2017, 182, 252-262.	1.5	16
35	A COMPARATIVE STUDY OF THE DOSIMETRIC FEATURES OF $\hat{I}\pm$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg AND $\hat{I}\pm$ -Al <sub>2</sub> O <sub>3</sub> :C. <i>Radiation Protection Dosimetry</i> , 2017, 177, 261-271.	0.4	16
36	Phototransferred thermoluminescence from natural quartz annealed at 1000 $\hat{I}\pm$ °C: Analysis of time-dependent evolution of intensity and competition effects. <i>Journal of Luminescence</i> , 2019, 216, 116730.	1.5	16

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37	On the correlation between annealing and variabilities in pulsed-luminescence from quartz. Radiation Measurements, 2006, 41, 862-865.	0.7	15
38	On isothermal heating as a method of separating closely collocated thermoluminescence peaks for kinetic analysis. Journal of Luminescence, 2014, 155, 70-78.	1.5	14
39	Thermally-assisted optically stimulated luminescence from deep electron traps in $\hat{1}\pm\text{-Al}_2\text{O}_3\text{:C,Mg}$ . Nuclear Instruments & Methods in Physics Research B, 2017, 403, 28-32.	0.6	14
40	Phototransferred thermoluminescence of annealed synthetic quartz: Analysis of illumination-time profiles, kinetics and competition effects. Radiation Measurements, 2020, 131, 106236.	0.7	14
41	Positron and luminescence lifetimes in annealed synthetic quartz. Radiation Measurements, 2011, 46, 310-318.	0.7	13
42	A time-correlated photon counting system for measurement of pulsed optically stimulated luminescence. Journal of Luminescence, 2011, 131, 92-98.	1.5	12
43	Kinetics and dosimetric features of secondary thermoluminescence in carbon-doped aluminium oxide. Physica B: Condensed Matter, 2014, 439, 165-168.	1.3	12
44	Thermoluminescence of K-Mg-Al-Zn fluorophosphate glass. Optical Materials, 2017, 64, 302-309.	1.7	12
45	Thermoluminescence of the persistent-luminescence phosphor, BaAl <sub>2</sub> O <sub>4</sub> ; A stuffed tridymite. Radiation Measurements, 2018, 120, 73-77.	0.7	12
46	Thermal assistance in the optically stimulated luminescence of superluminous Sr <sub>4</sub> Al <sub>14</sub> O <sub>25</sub> : Eu <sup>2+</sup> , Dy <sup>3+</sup> . Physica B: Condensed Matter, 2021, 603, 412722.	1.3	12
47	On luminescence stimulated from deep traps using thermally-assisted time-resolved optical stimulation in $\hat{1}\pm\text{-Al}_2\text{O}_3\text{:C}$ . Radiation Measurements, 2016, 90, 109-112.	0.7	11
48	Phototransferred thermoluminescence in $\hat{1}\pm\text{-Al}_2\text{O}_3\text{:C,Mg}$ under 470 nm blue light stimulation. Journal of Luminescence, 2017, 188, 371-377.	1.5	11
49	Thermoluminescence of the main peak in SrAl <sub>2</sub> O <sub>4</sub> :Eu <sup>2+</sup> , Dy <sup>3+</sup> : Spectral and kinetics features of secondary emission detected in the ultra-violet region. Radiation Measurements, 2017, 96, 29-41.	0.7	11
50	Thermoluminescence and infrared light stimulated luminescence of limestone (CaCO <sub>3</sub> ) and its dosimetric features. Applied Radiation and Isotopes, 2019, 154, 108888.	0.7	11
51	A combined study of the thermoluminescence and electron paramagnetic resonance of point defects in ZrO <sub>2</sub> :Er <sup>3+</sup> . Radiation Physics and Chemistry, 2020, 172, 108767.	1.4	11
52	Time-resolved luminescence from annealed synthetic quartz under 525nm pulsed green light stimulation. Radiation Measurements, 2004, 38, 553-555.	0.7	10
53	Time resolved luminescence of quartz from Nigeria. Optical Materials, 2007, 29, 1844-1851.	1.7	10
54	Time-resolved Luminescence from Annealed Quartz. Radiation Protection Dosimetry, 2002, 100, 273-276.	0.4	9

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55	Thermoluminescence of annealed synthetic quartz: The influence of annealing on kinetic parameters and thermal quenching. <i>Radiation Measurements</i> , 2018, 120, 47-52.	0.7	9
56	The influence of dopants on thermoluminescence of Sr <sub>2</sub> MgSi <sub>2</sub> O <sub>7</sub> . <i>Journal of Luminescence</i> , 2019, 208, 104-107.	1.5	9
57	Structural, compositional and thermoluminescence properties of microcline (KAlSi <sub>3</sub> O <sub>8</sub> ). <i>Journal of Luminescence</i> , 2020, 224, 117320.	1.5	9
58	Thermoluminescence of $\hat{I}\pm$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg annealed at 1200 $\hat{A}$ °C. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2018, 422, 78-84.	0.6	8
59	Radioluminescence of annealed synthetic quartz. <i>Radiation Measurements</i> , 2017, 106, 35-39.	0.7	7
60	Features of an annealing-induced thermoluminescence peak in $\hat{I}\pm$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg. <i>Optical Materials</i> , 2017, 70, 158-164.	1.7	7
61	F- and F <sup>+</sup> -band radioluminescence and the influence of annealing on its emission spectra in Al <sub>2</sub> O <sub>3</sub> :C,Mg. <i>Radiation Measurements</i> , 2020, 134, 106306.	0.7	7
62	Phototransferred thermoluminescence of tanzanite: A matrix-based analysis of time-response profiles and competition effects. <i>Journal of Luminescence</i> , 2021, 234, 117969.	1.5	7
63	Phototransferred thermoluminescence of BeO: Time-response profiles and mechanisms. <i>Journal of Applied Physics</i> , 2021, 130, 195101.	1.1	7
64	Dosimetric features and kinetic analysis of thermoluminescence from ultra-high molecular weight polyethylene. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 345301.	1.3	6
65	General features and kinetic analysis of thermoluminescence from annealed natural quartz. <i>Journal of Luminescence</i> , 2018, 197, 406-411.	1.5	6
66	Characteristics of the thermoluminescence of Sm <sup>3+</sup> -doped P <sub>2</sub> O <sub>5</sub> -K <sub>2</sub> O-MgO-Al <sub>2</sub> O <sub>3</sub> -ZnF <sub>2</sub> glass. <i>Radiation Measurements</i> , 2018, 120, 83-88.	0.7	6
67	Phototransferred thermoluminescence and thermally-assisted optically stimulated luminescence dosimetry using $\hat{I}\pm$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg annealed at 1200 $\hat{A}$ °C. <i>Journal of Luminescence</i> , 2019, 205, 1-6.	1.5	6
68	Thermoluminescence properties of potassium fluoride. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2020, 482, 53-57.	0.6	6
69	Analysis of illumination-time-dependent profiles of phototransferred thermoluminescence of Al <sub>2</sub> O <sub>3</sub> :C,Mg. <i>Journal of Luminescence</i> , 2021, 230, 117721.	1.5	6
70	Accuracy of the activation energy calculated from a thermoluminescence glow-peak using a method that uses three points on the peak. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 355-361.	0.8	5
71	Influence of nitrogen implantation on thermoluminescence of synthetic quartz. <i>Radiation Effects and Defects in Solids</i> , 2014, 169, 919-930.	0.4	5
72	Thermoluminescence of kunzite: A study of kinetic processes and dosimetry characteristics. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2016, 373, 44-51.	0.6	5

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73	Dose response and kinetic analysis of thermoluminescence of Li <sup>+</sup> Zn fluoroborate glass. Radiation Effects and Defects in Solids, 2017, 172, 323-336.	0.4	5
74	The effect of pre-dose on thermally and optically stimulated luminescence from $\hat{\pm}$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg and $\hat{\pm}$ -Al <sub>2</sub> O <sub>3</sub> :C. Applied Radiation and Isotopes, 2018, 140, 69-75.	0.7	5
75	Two-point method for kinetic analysis of a thermoluminescence glow peak. Radiation Effects and Defects in Solids, 2006, 161, 289-296.	0.4	4
76	Relative features of the principal and secondary luminescence lifetimes in quartz. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 914-917.	0.8	4
77	The dependence of luminescence lifetimes on additive irradiation in natural sedimentary quartz: sands from Santa Elina, Brazil. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 630-633.	0.8	4
78	On the dose-dependence of luminescence lifetimes in natural quartz. Radiation Effects and Defects in Solids, 2008, 163, 945-953.	0.4	4
79	Luminescence lifetimes in natural quartz annealed beyond its second phase inversion temperature. Radiation Measurements, 2015, 81, 198-204.	0.7	4
80	Kinetic analysis and general features of thermoluminescence of B <sub>2</sub> O <sub>3</sub> -Li <sub>2</sub> O-ZnF <sub>2</sub> glass. Radiation Measurements, 2017, 100, 1-8.	0.7	4
81	Influence of annealing on thermoluminescence of natural quartz: Kinetic analysis and experimental study of apparent inverse thermal quenching. Radiation Measurements, 2018, 120, 53-58.	0.7	4
82	A study of the kinetics of a high temperature thermoluminescence peak in annealed natural quartz. Journal of Luminescence, 2018, 204, 603-608.	1.5	4
83	Dosimetric features, kinetics and mechanisms of thermoluminescence of tanzanite. Physica B: Condensed Matter, 2020, 598, 412435.	1.3	4
84	Analysis of thermoluminescence and phosphorescence related to phototransfer in natural quartz. Journal of Luminescence, 2021, 238, 118217.	1.5	4
85	Phototransferred thermoluminescence characteristics of microcline (KAlSi <sub>3</sub> O <sub>8</sub> ) under 470Ånm blue- and 870Ånm infrared-light illumination. Applied Radiation and Isotopes, 2022, 181, 110070.	0.7	4
86	Towards models for analysis of time-resolved luminescence spectra from quartz. Applied Radiation and Isotopes, 2005, 62, 941-942.	0.7	3
87	Orthopaedic grade ultra-high molecular weight polyethylene: some features of the main thermoluminescence glow curve. Radiation Protection Dosimetry, 2006, 119, 157-160.	0.4	3
88	Influence of argon-implantation on conventional and phototransferred thermoluminescence of synthetic quartz. Radiation Effects and Defects in Solids, 2016, 171, 328-339.	0.4	3
89	Temperature dependence of optically stimulated luminescence of $\hat{\pm}$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg. Nuclear Instruments & Methods in Physics Research B, 2017, 410, 16-20.	0.6	3
90	Spectral study of radioluminescence in carbon-doped aluminium oxide. Radiation Measurements, 2018, 120, 89-95.	0.7	3

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91	Thermally and optically stimulated luminescence of natural red and blue corundum (Al <sub>2</sub> O <sub>3</sub> ). Journal of Luminescence, 2019, 205, 417-422.	1.5	3
92	Blue- and infrared-light stimulated luminescence of microcline and the effect of optical bleaching on its thermoluminescence. Journal of Luminescence, 2021, 229, 117712.	1.5	3
93	The kinetic parameters of the main thermoluminescence glow peak of Al <sub>2</sub> O <sub>3</sub> :C,Mg: A critical evaluation of different analytical methods. Journal of Luminescence, 2022, 247, 118848.	1.5	3
94	Temperature dependence of luminescence lifetimes in quartz under pulsed blue light stimulation. Radiation Effects and Defects in Solids, 2001, 154, 355-359.	0.4	2
95	Some properties of luminescence lifetimes from quartz stimulated by blue light. Radiation Effects and Defects in Solids, 2001, 154, 361-365.	0.4	2
96	Phosphorescence of orthopaedicâ€ grade ultra high molecular weight polyethylene. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 871-874.	0.8	2
97	Optically stimulated luminescence of ultra-high molecular weight polyethylene: A study of dosimetric features. Radiation Measurements, 2018, 120, 78-82.	0.7	2
98	Thermoluminescence and fluorescence studies of argon-implanted aluminium oxide. Radiation Effects and Defects in Solids, 2019, 174, 708-720.	0.4	2
99	Light-induced inter-electron-trap charge movement in annealed Al <sub>2</sub> O <sub>3</sub> :C,Mg. Physica B: Condensed Matter, 2022, 624, 413438.	1.3	2
100	Processes related to phototransfer under blue- and green-light illumination in annealed Al <sub>2</sub> O <sub>3</sub> :C,Mg. Journal of Applied Physics, 2022, 131, 245101.	1.1	2
101	On extending the applicability of the initial rise method for thermoluminescence glow peak analysis. Radiation Effects and Defects in Solids, 2007, 162, 803-807.	0.4	1
102	Influence of nitrogen implantation on thermoluminescence of synthetic quartz. Radiation Effects and Defects in Solids, 2015, 170, 18-29.	0.4	1
103	Factors influencing the shape of CW-OSL signal obtained by stimulation of very deep traps in carbon-doped aluminium oxide: An experimental study. Journal of Luminescence, 2017, 192, 436-442.	1.5	1
104	Concerning a hole trap in $\hat{\pm}$ -Al <sub>2</sub> O <sub>3</sub> :C,Mg. Journal of Applied Physics, 2022, 132, 015103.	1.1	1
105	The influence of optical bleaching on lifetimes and luminescence intensity in the slow component of optically stimulated luminescence of natural quartz from Nigeria. Journal of Luminescence, 2008, 128, 1561-1569.	1.5	0
106	Characteristics of luminescence lifetimes in natural quartz from Brazil and South Korea. Radiation Effects and Defects in Solids, 2013, 168, 460-467.	0.4	0
107	Optically stimulated luminescence and spectral emission features of radioluminescence and thermoluminescence of natural kunzite. Radiation Measurements, 2020, 138, 106457.	0.7	0
108	Optically stimulated luminescence of cowrie shells. Applied Radiation and Isotopes, 2021, 167, 109463.	0.7	0