Leonid Oster

List of Publications by Year
in descending order

74	902	471061 17	610482 24
papers	citations	h-index	g-index

74	74	74	355
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Localized transitions in the thermoluminescence of LiF : Mg,Ti: potential for nanoscale dosimetry. Journal Physics D: Applied Physics, 2003, 36, 446-459.	1.3	47
2	Photoluminescence and surface photovoltage spectroscopy studies of hydroxyapatite nano-Bio-ceramics. Journal of Luminescence, 2007, 122-123, 936-938.	1.5	44
3	The thermoluminescence dose response and other characteristics of the high-temperature TL in LiF:Mg,Ti (TLD-100). Radiation Protection Dosimetry, 2007, 124, 191-205.	0.4	41
4	Investigation of the composite structure of peak 5 in the thermoluminescent glow curve of LiF:Mg,Ti (TLD-100) using optical bleaching. Journal Physics D: Applied Physics, 1999, 32, 2118-2127.	1.3	38
5	On the use of LiF:Mg,Ti TLDs in space - A critical review. Radiation Protection Dosimetry, 2003, 106, 7-24.	0.4	31
6	The Unified Interaction Model Applied to the Gamma-Induced Supralinearity and Sensitisation of Peaks 4 and 5 in LiF:Mg,Ti (TLD-100). Radiation Protection Dosimetry, 1998, 78, 169-194.	0.4	30
7	The Composite Structure of Peak 5 in the Glow Curve of LiF:Mg,Ti (TLD-100): Confirmation of Peak 5a Arising from a Locally Trapped Electron-hole Configuration. Radiation Protection Dosimetry, 2002, 100, 123-126.	0.4	24
8	The saga of the thermoluminescence (TL) mechanisms and dosimetric characteristics of LiF:Mg,Ti (TLD-100). Journal of Luminescence, 2019, 214, 116527.	1.5	24
9	Mixed-order kinetic analysis of the glow curve characteristics of single crystal LiF:Mg,Ti as a function of Ti concentration. Radiation Measurements, 1998, 29, 517-525.	0.7	23
10	Thermoluminescence characteristics of Israeli household salts for retrospective dosimetry in radiological events. Nuclear Instruments & Methods in Physics Research B, 2016, 377, 67-76.	0.6	23
11	A kinetic model incorporating both localized and delocalized recombination: Application to the dependence of the TL dose response on photon energy. Journal of Luminescence, 2014, 145, 600-607.	1.5	22
12	Investigation of the Emission Spectra of LiF:Mg,Ti (TLD-100) during Thermoluminescence. Radiation Protection Dosimetry, 2002, 100, 369-372.	0.4	20
13	Optically stimulated luminescence in LiF:Mg,Ti: Application to solid-state radiation dosimetry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 648, 261-265.	0.7	19
14	Alpha particle and proton relative thermoluminescence efficiencies in LiF:Mg,Cu,P:is track structure theory up to the task?. Radiation Protection Dosimetry, 2012, 150, 359-374.	0.4	19
15	REVIEW OF DOSE-RATE EFFECTS IN THE THERMOLUMINESCENCE OF Lif:mg,ti (HARSHAW). Radiation Protection Dosimetry, 2018, 179, 184-188.	0.4	19
16	The Unified Interaction Model Applied to LiF:Mg,Ti (TLD-100): Properties of the Luminescent and Competitive Centers during Sensitisation. Radiation Protection Dosimetry, 2002, 102, 295-304.	0.4	18
17	Thermoluminescence solid-state nanodosimetry--the peak 5A/5 dosemeter. Radiation Protection Dosimetry, 2011, 143, 416-426.	0.4	18
18	Optical absorption in and its relationship to thermoluminescence and thermoluminescence dose response. Radiation Measurements, 2001, 33, 491-496.	0.7	17

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19	Search for ionisation density effects in the radiation absorption stage in LiF:Mg,Ti. Radiation Protection Dosimetry, 2006, 119, 180-183.	0.4	15
20	Kinetic modeling of Fluorine vacancy/F center creation in LiF:Mg,Ti including vacancy-interstitial recombination: Evaluating the factors leading to the lack of supralinearity in the optical absorption F center concentration dose response. Nuclear Instruments & Methods in Physics Research B, 2015, 343, 15-25.	0.6	15
21	OSL and TL in LiF:Mg,Ti following alpha particle and beta ray irradiation: application to mixed-field radiation dosimetry. Radiation Protection Dosimetry, 2007, 128, 261-265.	0.4	14
22	Advanced multistage deconvolution applied to composite glow peak 5 in LiF:Mg,Ti (TLD-100). Radiation Protection Dosimetry, 2007, 126, 322-325.	0.4	14
23	The modified unified interaction model: incorporation of dose-dependent localised recombination. Radiation Protection Dosimetry, 2015, 163, 362-372.	0.4	14
24	Investigation of the optical absorption dose response of LiF:Mg,Ti (TLD-100) and the role of V centers in F center (5.08ÂeV) bleaching. Radiation Measurements, 2016, 90, 113-116.	0.7	14
25	The Experimental Criteria for Distinguishing Different Types of Exoelectron Emission Mechanisms. Physica Status Solidi A, 2001, 187, 481-485.	1.7	12
26	Investigation of the ionisation density dependence of the glow curve characteristics of LIF:MG,TI (TLD-100). Radiation Protection Dosimetry, 2008, 131, 406-413.	0.4	12
27	OSL and TL in TLD-100 following alpha and beta irradiation: Application to mixed-field radiation dosimetry. Radiation Measurements, 2010, 45, 1130-1133.	0.7	12
28	Dose response of F center optical absorption in LiF:Mg,Ti (TLD-100). Radiation Measurements, 2014, 71, 237-241.	0.7	12
29	KINETIC SIMULATIONS OF THERMOLUMINESCENCE DOSE RESPONSE: LONG OVERDUE CONFRONTATION WITH THE EFFECTS OF IONISATION DENSITY. Radiation Protection Dosimetry, 2016, 172, 524-540.	0.4	12
30	Optical Absorption and Sensitisation Dose Response in LiF:Mg,Ti: Application to the Unified Interaction Model Prediction of Thermoluminescence Dose Response. Radiation Protection Dosimetry, 2002, 100, 107-110.	0.4	11
31	Mysteries of LiF TLD response following high ionisation density irradiation: nanodosimetry and track structure theory, dose response and glow curve shapes. Radiation Protection Dosimetry, 2011, 145, 356-372.	0.4	11
32	Nanodosimetric kinetic model incorporating localized and delocalized recombination: Application to the prediction of the electron dose response of the peak 5a/5 ratio in the glow curve of LiF:Mg,Ti (TLD-100). Radiation Measurements, 2014, 71, 226-231.	0.7	11
33	Probing the defect nanostructure of helium and proton tracks in LiF:Mg,Ti using optical absorption: Implications to track structure theory calculations of heavy charged particle relative efficiency. Nuclear Instruments & Methods in Physics Research B, 2015, 349, 209-220.	0.6	11
34	STUDY OF THE SUITABILITY OF ISRAELI HOUSEHOLD SALT FOR RETROSPECTIVE DOSIMETRY. Radiation Protection Dosimetry, 2016, 170, 407-411.	0.4	11
35	Optical Absorption and Thermoluminescence Studies in Irradiated Dosimetric LiF:Mg,Ti (TLD-100). Radiation Protection Dosimetry, 1999, 84, 17-20.	0.4	10
36	Localised and Delocalised Optically Induced Conversion of Composite Glow Peak 5 in LiF:Mg,Ti (TLD-100) to Glow Peak 4 as a Function of Post-irradiation Annealing Temperature. Radiation Protection Dosimetry, 2002, 100, 135-138.	0.4	10

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37	Glow Curve Analysis of Composite Peak 5 in LiF:Mg,Ti (TLD-100) Using Optical Bleaching, Thermal Annealing and Computerised Glow Curve Deconvolution. Radiation Protection Dosimetry, 2002, 101, 69-72.	0.4	10
38	Kinetic modeling of the photo-stimulated exoelectron emission. Physica Status Solidi A, 2003, 196, 471-476.	1.7	10
39	Mysteries of LiF TLD response following high ionization density irradiation: Glow curve shapes, dose response, the unified interaction model and modified track structure theory. Radiation Measurements, 2011, 46, 1342-1348.	0.7	10
40	Study of combinations of TL/OSL single dosimeters for mixed high/low ionization density radiation fields. Radiation Measurements, 2013, 56, 320-323.	0.7	10
41	Kinetic simulation of charge transfer following 5.08ÂeV (F band) optical excitation of irradiated LiF:Mg,Ti (TLD-100): Participation of holes released via V3-VK transformation. Radiation Measurements, 2016, 90, 27-32.	0.7	10
42	Investigation of the energy spectrum and dose response of optical absorption bands in 4N single crystal LiF and LiF:Mg,Ti (TLD-100). Radiation Measurements, 2017, 106, 30-34.	0.7	10
43	Investigation of the properties of composite glow peak 5 in slow-cooled TLD-100. Radiation Measurements, 2008, 43, 249-253.	0.7	9
44	Characteristics of the high temperature thermoluminescence in LiF:Mg,Ti (TLD-100): The effects of batch history. Radiation Measurements, 2010, 45, 710-712.	0.7	9
45	MANIPULATION OF THE DOSEâ€“RESPONSE OF COMPOSITE GLOW PEAK 5 IN THE THERMOLUMINESCENCE OF LiF:Mg,Ti (TLD-100) VIA OPTICAL EXCITATION POST-IRRADIATION: POTENTIAL FOR IMPROVED DOSEâ€“RESPONSE LINEARITY BEYOND 1 Gy. Radiation Protection Dosimetry, 2019, 184, 248-255.	0.4	9
46	The effects of ionisation density on the glow curve structure of LiF:Mg,Ti (TLD-100): the behaviour of composite glow peak 5 in 'slow-cooled' material. Radiation Protection Dosimetry, 2007, 126, 194-197.	0.4	8
47	Thermoluminescence dose response of photon irradiated NaCl: Unified interaction model analysis of the dependence of the supralinearity on photon energy. Radiation Measurements, 2017, 106, 455-458.	0.7	8
48	Some dosimetric characteristics of the high temperature TL in LiF:Mg,Ti (TLD-100). Radiation Measurements, 2008, 43, 203-207.	0.7	7
49	Ionization density effects following F-centre optical excitation in LiFâ€‰:â€‰Mg, Ti (TLD-100): analysis via track structure theory. Journal Physics D: Applied Physics, 2009, 42, 085113.	1.3	7
50	Energy dependence of the supralinearity (f(D)max) of peaks 7 and 8 in the high temperature thermoluminescence of LiF:Mg,Ti (TLD-100) : Interpretation using the Unified Interaction Model. Radiation Measurements, 2011, 46, 1436-1439.	0.7	7
51	Combined measurement of dose and Î±/Î³ radiation-field-components using the shape of composite peak 5 in the glow curve of LiF:Mg,Ti. Radiation Measurements, 2014, 71, 86-89.	0.7	7
52	Comparison of optical absorption and thermoluminescence in LiF:Mg, Tl (TLD-100) following irradiation by high energy protons and 90Sr/90Y beta rays. Radiation Measurements, 2020, 132, 106249.	0.7	7
53	Conduction band/valence band kinetic modeling of the LiF:Mg,Ti system incorporating creation of defects in the irradiation stage. Nuclear Instruments & Methods in Physics Research B, 2012, 293, 26-34.	0.6	6
54	The effect of sample/planchet geometry and temperature resolution on the reproducibility of glow curve shapes and precision of dose measurement in LiF-TLD-100 thermoluminescent dosimetry. Radiation Measurements, 2014, 71, 205-207.	0.7	6

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55	Kinetic Modelling of the Optically Stimulated Conversion of Peaks 5a and 5 to Peak 4 in LiF:Mg,Ti (TLD-100). Radiation Protection Dosimetry, 2002, 100, 131-134.	0.4	5
56	Kinetic simulation of the effect of 3.6â€¯eV and 4.2â€¯eV photon excitation on the optical absorption energy spectrum of 137 Cs gamma irradiated LiF:Mg,Ti (TLD-100). Nuclear Instruments & Methods in Physics Research B, 2018, 431, 6-11.	0.6	5
57	Thermally and optically stimulated luminescence in LiF:Mg,Ti: Application to mixed high/low ionization density radiation dosimetry. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 9-13.	0.1	4
58	Kinetic simulations of optical absorption in LiF:Mg,Ti (TLD-100) following irradiation by 137 Cs gamma rays and bleaching at photon energies of 3.1 eV, 4.0 eV and 5.08 eV. Journal of Luminescence, 2017, 187, 313-321.	1.5	4
59	Thermoluminescence Theory and Analysis: Advances and Impact on Applications. , 2017, , 444-451.		4
60	DEMONSTRATION OF THE POTENTIAL AND DIFFICULTIES OF COMBINED TL AND OSL MEASUREMENTS OF TLD-600 AND TLD-700 FOR THE DETERMINATION OF THE DOSE COMPONENTS IN COMPLEX NEUTRON-GAMMA RADIATION FIELDS. Radiation Protection Dosimetry, 2020, 188, 383-388.	0.4	4
61	RECENT DEVELOPMENTS IN COMPUTERISED ANALYSIS OF THERMOLUMINESCENCE GLOW CURVES: SOFTWARE CODES, MECHANISMS AND DOSIMETRIC APPLICATIONS. Radiation Protection Dosimetry, 2022, 198, 821-842.	0.4	4
62	The concept of quasi-tissue-equivalent nanodosimeter based on the Glow Peak 5a/5 in LiF:Mg, Ti (TLD-100). Australasian Physical and Engineering Sciences in Medicine, 2003, 26, 173-178.	1.4	3
63	Localized and delocalized transitions and optical excitation of LiF:Mg,Ti following alpha and beta irradiation. Journal of Luminescence, 2007, 122-123, 146-148.	1.5	3
64	Investigation of the optical absorption characteristics of slow-cooled LiF:Mg,Ti (TLD-100). Radiation Measurements, 2010, 45, 347-349.	0.7	3
65	Study of the effect of optical bleaching at selected photon energies on the optical absorption and thermoluminescence of LiF: Mg, Ti (TLD-100). Radiation Measurements, 2017, 106, 26-29.	0.7	3
66	DOSE DEPENDENCE OF RADIATION INDUCED DAMAGE IN THE THERMOLUMINESCENT RESPONSE OF LIF:Mg,Ti (TLD-100). Radiation Protection Dosimetry, 2020, 188, 232-237.	0.4	3
67	INVESTIGATION OF THE TL CHARACTERISTICS OF COMPOSITE PEAK 5 IN THE GLOW CURVE OF LIF:MG,TI (TLD-100) USING NATURALLY AND FURNACE-COOLED SAMPLES FOLLOWING THE 400Â°C PRE-IRRADIATION ANNEAL. Radiation Protection Dosimetry, 2021, 196, 53-59.	0.4	3
68	THE UNIFIED INTERACTION MODEL: SIMULATIONS OF TL DOSE RESPONSE AND EXPERIMENTAL VERIFICATION OF INTENDED DOSE RESPONSE LINEARITY BY POSTIRRADIATION PHOTON EXCITATION. Radiation Protection Dosimetry, 2020, 192, 152-164.	0.4	3
69	Experimental measurements confirm decreased supralinearity in the thermoluminescence of beta/gamma irradiated LiF:Mg,Ti (TLD-100) following 3.6 eV and 5 eV optical excitation. Journal of Physics: Conference Series, 2020, 1662, 012011.	0.3	2
70	Modeling the Effects of Ionization Density in Thermoluminescence Mechanisms and Dosimetry. , 2019, , 83-129.		1
71	Kinetic modeling of thermoluminescence, optical absorption and bleaching in LiF:Mg,Ti. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 1041-1047.	0.1	0
72	RELATIVE HCP THERMOLUMINESCENCE AND OPTICAL ABSORPTION EFFICIENCIES: THE DEMISE OF TRACK STRUCTURE THEORY. Radiation Protection Dosimetry, 2020, 192, 253-265.	0.4	0

#	Article	IF	Citations
73	KINETIC SIMULATIONS OF THE THERMOLUMINESCENCE CHARACTERISTICS OF LIF:MG, TI INCORPORATING LOCALISED AND DELOCALISED RECOMBINATION. Radiation Protection Dosimetry, 2020, 192, 196-204.	0.4	0
74	SEARCH FOR EXPERIMENTAL EVIDENCE OF DOSE-RATE AND WALL SCATTERING EFFECTS IN THE THERMOLUMINESCENCE RESPONSE OF LIF:MG,TI (TLD-100). Radiation Protection Dosimetry, 2022, 198, 222-228.	0.4	0