# Nektarios Kalyvas

List of Publications by Year
in descending order



| 105 | 1,234 | 361413 | 434195 |
|---|---|---|---|
| papers | citations | 20 h-index | 31 g-index |

| 105 | 105 | 105 | 722 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Cerium Bromide Single-Crystal X-Ray Detection and Spectral Compatibility Assessment with Various Optical Sensors. Material Design and Processing Communications, 2022, 2022, 1-7. | 0.9 | 2 |
| 2 | Efficiency Properties of Cerium-Doped Lanthanum Chloride (LaCl3:Ce) Single Crystal Scintillator under Radiographic X-ray Excitation. Crystals, 2022, 12, 655. | 2.2 | 6 |
| 3 | Study of UV interactions on PMMA based ZnCuInS/ZnS quantum dot films. Optical Materials, 2022, 129, 112493. | 3.6 | 1 |
| 4 | Temperature dependence of ZnSe:Te scintillator. Procedia Structural Integrity, 2022, 41, 82-86. | 0.8 | 1 |
| 5 | Luminescence Efficiency of Cerium Bromide Single Crystal under X-ray Radiation. Crystals, 2022, 12, 909. | 2.2 | 4 |
| 6 | RAD_IQ: A free software for characterization of digital X-ray imaging devices based on the novel IEC 62220-1-1:2015 International Standard. Journal of Physics: Conference Series, 2021, 2090, 012107. | 0.4 | 1 |
| 7 | On the thermal response of LuAG:Ce single crystals. Procedia Structural Integrity, 2021, 33, 287-294. | 0.8 | 3 |
| 8 | Spatial frequency domain analysis of a commercially available digital dental detector. Measurement: Journal of the International Measurement Confederation, 2020, 151, 107171. | 5.0 | 3 |
| 9 | MTF of columnar phosphors with a homogenous part: an analytical approach. Medical and Biological Engineering and Computing, 2020, 58, 2551-2565. | 2.8 | 0 |
| 10 | On the Optical Response of Tellurium Activated Zinc Selenide ZnSe:Te Single Crystal. Crystals, 2020, 10, 961. | 2.2 | 14 |
| 11 | Poly(Methyl Methacrylate) Structure Modification through Zn-Cu-In-S / ZnS Quantum Dot Nanocrystals Dispersion. Procedia Structural Integrity, 2020, 25, 47-54. | 0.8 | 1 |
| 12 | Luminescence efficiency of CaF2:Eu single crystals: Temperature dependence. Procedia Structural Integrity, 2020, 26, 3-10. | 0.8 | 9 |
| 13 | Spectral efficiency of lutetium aluminum garnet (Lu3Al5O12:Ce) with microelectronic optical sensors. Microelectronics Reliability, 2020, 109, 113658. | 1.7 | 5 |
| 14 | Luminescence Efficiency of Cadmium Tungstate (CdWO4) Single Crystal for Medical Imaging Applications. Crystals, 2020, 10, 429. | 2.2 | 26 |
| 15 | Temperature Dependence of the Luminescence output of CdWO4 Crystal. Comparison with CaF2:Eu. Procedia Structural Integrity, 2020, 28, 971-977. | 0.8 | 5 |
| 16 | Optical Characteristics of ZnCuInS/ZnS (Core/Shell) Nanocrystal Flexible Films Under X-Ray Excitation. Crystals, 2019, 9, 343. | 2.2 | 18 |
| 17 | Luminescence Efficiency of Zn-Cu-In-S / ZnS Quantum Dot films. , 2019, , . | | 3 |
| 18 | Information Content in Nuclear Medicine Imaging. Energy Procedia, 2019, 157, 1517-1524. | 1.8 | 2 |

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|---|---|---|---|
| 19 | Analytical and Monte Carlo comparisons on the optical transport mechanisms of powder phosphors. Optical Materials, 2019, 88, 396-405. | 3.6 | 2 |
| 20 | Fabrication and Luminescent Properties of Znâ€“Cuâ€“Inâ€“S/ZnS Quantum Dot Films under UV Excitation. Applied Sciences (Switzerland), 2019, 9, 2367. | 2.5 | 8 |
| 21 | Absolute Luminescence Efficiency of Europium-Doped Calcium Fluoride (CaF2:Eu) Single Crystals under X-ray Excitation. Crystals, 2019, 9, 234. | 2.2 | 25 |
| 22 | Luminescence efficiency of calcium tungstate (CaWO4) under X-ray radiation: Comparison with Gd2O2S:Tb. Measurement: Journal of the International Measurement Confederation, 2018, 120, 213-220. | 5.0 | 36 |
| 23 | Information Capacity of Positron Emission Tomography Scanners. Crystals, 2018, 8, 459. | 2.2 | 12 |
| 24 | Detective quantum efficiency (DQE) of high X-ray absorption Lu2O3:Eu thin screens: the role of shape and size of nano- and micro-grains. Applied Physics A: Materials Science and Processing, 2018, 124, 1. | 2.3 | 5 |
| 25 | Grains size and shape dependence of luminescence efficiency of Lu2O3:Eu thin screens. Results in Physics, 2017, 7, 980-981. | 4.1 | 8 |
| 26 | Detective quantum efficiency (DQE) in PET scanners: A simulation study. Applied Radiation and Isotopes, 2017, 125, 154-162. | 1.5 | 15 |
| 27 | An analytical approach to the light transport in columnar phosphors. Detector Optical Gain, angular distribution and the CsI:Tl paradigm. Physica Medica, 2017, 35, 39-49. | 0.7 | 3 |
| 28 | Dual energy subtraction method for breast calcification imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 848, 31-38. | 1.6 | 17 |
| 29 | Preliminary Study of ZnS:Mn<sup>2+</sup>Quantum Dots Response Under UV and X-Ray Irradiation. Journal of Physics: Conference Series, 2017, 931, 012030. | 0.4 | 4 |
| 30 | X-ray imaging resolution of phosphor screens prepared with different grains size and shape of granular Lu<sub>2</sub>O<sub>3</sub>:Eu. Journal of Physics: Conference Series, 2017, 931, 012032. | 0.4 | 1 |
| 31 | Infrared thermography quantitative image processing. Journal of Physics: Conference Series, 2017, 931, 012033. | 0.4 | 2 |
| 32 | Examining the Spatial Frequency Components of a Digital Dental Detector. Journal of Physics: Conference Series, 2017, 931, 012005. | 0.4 | 0 |
| 33 | 3D printing X-Ray Quality Control Phantoms. A Low Contrast Paradigm. Journal of Physics: Conference Series, 2017, 931, 012026. | 0.4 | 3 |
| 34 | Resolution Properties of a Calcium Tungstate (CaWO<sub>4</sub>) Screen Coupled to a CMOS Imaging Detector. Journal of Physics: Conference Series, 2017, 931, 012027. | 0.4 | 3 |
| 35 | X-ray response of a digital detector for dental radiographs. Physica Medica, 2016, 32, 286-287. | 0.7 | 1 |
| 36 | Detective quantum efficiency (DQE) of the Dexela 2923MAM detector according to IEC 62220-1-1:2015. Physica Medica, 2016, 32, 291-292. | 0.7 | 2 |

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| 37 | Determination of the detective quantum efficiency (DQE) of CMOS/CsI imaging detectors following the novel IEC 62220-1-1:2015 International Standard. Radiation Measurements, 2016, 94, 8-17. | 1.4 | 44 |
| 38 | Investigating the particle packing of powder phosphors for imaging instrumentation technology: an examination of Gd<sub>2</sub>O<sub>2</sub>S:Tb phosphor. Journal of Instrumentation, 2016, 11, P10001-P10001. | 1.2 | 8 |
| 39 | On the response of semitransparent nanoparticulated films of LuPO4:Eu in poly-energetic X-ray imaging applications. Applied Physics A: Materials Science and Processing, 2016, 122, 1. | 2.3 | 15 |
| 40 | Evaluation of Gd2O2S:Pr granular phosphor properties for X-ray mammography imaging. Journal of Luminescence, 2016, 169, 706-710. | 3.1 | 19 |
| 41 | A novel method for the optimization of positron emission tomography scanners imaging performance. Hellenic Journal of Nuclear Medicine, 2016, 19, 231-240. | 0.3 | 11 |
| 42 | A theoretical investigation of spectra utilization for a CMOS based indirect detector for dual energy applications. Journal of Physics: Conference Series, 2015, 633, 012095. | 0.4 | 0 |
| 43 | Optimum filter selection for Dual Energy X-ray Applications through Analytical Modeling. Journal of Physics: Conference Series, 2015, 633, 012093. | 0.4 | 0 |
| 44 | Modeling indirect detectors for performance optimization of a digital mammographic detector for dual energy applications. Journal of Physics: Conference Series, 2015, 574, 012075. | 0.4 | 2 |
| 45 | Modeling of the Calcium/Phosphorus Mass ratio for Breast Imaging. Journal of Physics: Conference Series, 2015, 633, 012094. | 0.4 | 4 |
| 46 | Medical Imaging Image Quality Assessment with Monte Carlo Methods. Journal of Physics: Conference Series, 2015, 633, 012096. | 0.4 | 1 |
| 47 | Pencil Beam Spectral Measurements of Ce, Ho, Yb, and Ba Powders for Potential Use in Medical Applications. Journal of Spectroscopy, 2015, 2015, 1-8. | 1.3 | 9 |
| 48 | Dual Energy Method for Breast Imaging: A Simulation Study. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-8. | 1.3 | 19 |
| 49 | Preparation and imaging performance of nanoparticulated LuPO4:Eu semitransparent films under x-ray radiation. , 2015, , . | | 0 |
| 50 | A theoretical study of CsI:Tl columnar scintillator image quality parameters by analytical modeling. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 779, 18-24. | 1.6 | 13 |
| 51 | Experimental measurement of a high resolution CMOS detector coupled to CsI scintillators under X-ray radiation. Radiation Measurements, 2015, 74, 39-46. | 1.4 | 36 |
| 52 | Luminescence efficiency of (Lu,Gd)2SiO5:Ce (LGSO:Ce) crystals under X-ray radiation. Radiation Measurements, 2015, 80, 1-9. | 1.4 | 8 |
| 53 | Optimization of breast cancer detection in Dual Energy X-ray Mammography using a CMOS imaging detector. Journal of Physics: Conference Series, 2015, 574, 012076. | 0.4 | 1 |
| 54 | Measuring scatter radiation in diagnostic X rays for radiation protection purposes. Radiation Protection Dosimetry, 2015, 165, 382-385. | 0.8 | 15 |

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| 55 | A Novel Method for the Image Quality assessment of PET Scanners by Monte Carlo simulations: Effect of the scintillator. Journal of Physics: Conference Series, 2014, 490, 012139. | 0.4 | 4 |
| 56 | Figure of Image Quality and Information Capacity in Digital Mammography. BioMed Research International, 2014, 2014, 1-11. | 1.9 | 14 |
| 57 | Comparing analytical and Monte Carlo optical diffusion models in phosphor-based X-ray detectors. Proceedings of SPIE, 2014, , . | 0.8 | 1 |
| 58 | Imaging performance of a thin Lu2O3:Eu nanophosphor scintillating screen coupled to a high resolution CMOS sensor under X-ray radiographic conditions: comparison with Gd2O2S:Eu conventional phosphor screen. , 2014, , . | | 1 |
| 59 | Measurement of the luminescence properties of Gd2O2S:Pr,Ce,F powder scintillators under X-ray radiation. Radiation Measurements, 2014, 70, 59-64. | 1.4 | 38 |
| 60 | Light emission efficiency and imaging performance of Lu2O3:Eu nanophosphor under X-ray radiography conditions: Comparison with Gd2O2S:Eu. Journal of Luminescence, 2014, 151, 229-234. | 3.1 | 41 |
| 61 | Studying the energy dependence of intrinsic conversion efficiency of single crystal scintillators under X-ray excitation. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2014, 116, 743-747. | 0.6 | 5 |
| 62 | Light Emission Efficiency of Gd3Al2Ga3O12:Ce (GAGG:Ce) Single Crystal Under X-ray Radiographic Conditions. IFMBE Proceedings, 2014, , 455-458. | 0.3 | 2 |
| 63 | On the response of a europium doped phosphor-coated CMOS digital imaging detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 729, 307-315. | 1.6 | 34 |
| 64 | Light emission efficiency of Lu<sub>2</sub>O<sub>3</sub>:Eu nanophosphor scintillating screen under x-ray radiographic conditions. Proceedings of SPIE, 2013, , . | 0.8 | 1 |
| 65 | On the response of GdAlO3:Ce powder scintillators. Journal of Luminescence, 2013, 144, 45-52. | 3.1 | 40 |
| 66 | Analysis of the imaging performance in indirect digital mammography detectors by linear systems and signal detection models. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 697, 87-98. | 1.6 | 8 |
| 67 | A semi-empirical Monte Carlo based model of the Detector Optical Gain of Nuclear Imaging scintillators. Journal of Instrumentation, 2012, 7, P11021-P11021. | 1.2 | 9 |
| 68 | Studying the luminescence efficiency of Lu2O3:Eu nanophosphor material for digital X-ray imaging applications. Applied Physics A: Materials Science and Processing, 2012, 106, 131-136. | 2.3 | 27 |
| 69 | Thin substrate powder scintillator screens for use in digital X-ray medical imaging applications. , 2011, , . | | 0 |
| 70 | Evaluation of the Red Emitting ${m Gd}_{2}{m O}_{2}{m S}!!:!!{m Eu}$ Powder Scintillator for Use in Indirect X-Ray Digital Mammography Detectors. IEEE Transactions on Nuclear Science, 2011, 58, 2503-2511. | 2.0 | 24 |
| 71 | Modeling noise properties of a high resolution CMOS detector for X-ray digital mammography. , 2011, , . | | 0 |
| 72 | Experimental and Theoretical Evaluation of a High Resolution CMOS Based Detector Under X-Ray Imaging Conditions. IEEE Transactions on Nuclear Science, 2011, 58, 314-322. | 2.0 | 58 |

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| 73 | Comparison of full field digital (FFD) and computed radiography (CR) mammography systems in Greece. Radiation Protection Dosimetry, 2011, 147, 202-205. | 0.8 | 2 |
| 74 | Light emission efficiency and imaging performance of powder scintillator under xâ€ray radiography conditions. Medical Physics, 2010, 37, 3694-3703. | 3.0 | 52 |
| 75 | Imaging performance of a high resolution CMOS sensor under Mammographic and Radiographic conditions. , 2010, , . | | 0 |
| 76 | A theoretical model describing the light emission efficiency of single-crystal scintillators in the diagnostic energy range. Journal of Instrumentation, 2009, 4, P06016-P06016. | 1.2 | 3 |
| 77 | The influence of software filtering in digital mammography image quality. Journal of Instrumentation, 2009, 4, P05018-P05018. | 1.2 | 3 |
| 78 | Modelling the imaging performance and low contrast detectability in digital mammography. Journal of Instrumentation, 2009, 4, P06004-P06004. | 1.2 | 2 |
| 79 | Imaging performance and light emission efficiency of Lu2 SiO5:Ce (LSO:Ce) powder scintillator under X-ray mammographic conditions. Applied Physics B: Lasers and Optics, 2009, 95, 131-139. | 2.2 | 18 |
| 80 | Investigation of two heavy element scintillators by Monte-Carlo methods. Journal of Instrumentation, 2009, 4, P05019-P05019. | 1.2 | 1 |
| 81 | Evaluating optical spectral matching of phosphor-photodetector combinations. Journal of Instrumentation, 2009, 4, P07003-P07003. | 1.2 | 1 |
| 82 | A comparative investigation of Lu<sub>2</sub>SiO<sub>5</sub>:Ce and Gd<sub>2</sub>O<sub>2</sub>S:Eu powder scintillators for use in x-ray mammography detectors. Measurement Science and Technology, 2009, 20, 104008. | 2.6 | 25 |
| 83 | A comparative investigation of Lu<inf>2</inf>SiO<inf>5</inf>:Ce and Gd<inf>2</inf>O<inf>2</inf>S:Eu phosphor scintillators for use in a medical imaging detectors. , 2008, , . | | 1 |
| 84 | Light Emission Efficiency of ${m Gd}_{2} {m O} _{2} {m S}!!!:!!!{m Eu}$ (GOS:Eu) Powder Screens Under X-Ray Mammography Conditions. IEEE Transactions on Nuclear Science, 2008, 55, 3703-3709. | 2.0 | 18 |
| 85 | Image quality evaluation and patient dose assessment of medical fluoroscopic X-ray systems: a national study. Radiation Protection Dosimetry, 2007, 129, 419-425. | 0.8 | 3 |
| 86 | Performance of medical radiographic X-ray systems in Greece for the time period 1998â€“2004. Physica Medica, 2007, 23, 107-114. | 0.7 | 10 |
| 87 | A systematic study of the performance of the CsI:Tl single-crystal scintillator under X-ray excitation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 571, 343-345. | 1.6 | 19 |
| 88 | Efficiency of Lu2SiO5:Ce (LSO) powder phosphor as X-ray to light converter under mammographic imaging conditions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 571, 346-349. | 1.6 | 12 |
| 89 | Evaluation of high packing density powder X-ray screens by Monte Carlo methods. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 580, 427-429. | 1.6 | 1 |
| 90 | Investigation of the effect of the scintillator material on the overall X-ray detection system performance by application of analytical models. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 571, 270-273. | 1.6 | 3 |

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| 91 | Light emission efficiency and imaging properties of YAP:Ce granular phosphor screens. Applied Physics A: Materials Science and Processing, 2007, 89, 443-449. | 2.3 | 20 |
| 92 | Evaluation of the imaging performance of LSO powder scintillator for use in X-ray mammography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 580, 558-561. | 1.6 | 22 |
| 93 | Luminescence efficiency of Lu2SiO5:Ce (LSO) powder scintillator for X-ray medical radiography applications. , 2006, , . | | 1 |
| 94 | A theoretical model evaluating the angular distribution of luminescence emission in X-ray scintillating screens. Applied Radiation and Isotopes, 2006, 64, 508-519. | 1.5 | 13 |
| 95 | The effect of energy weighting on the SNR under the influence of non-ideal detectors in mammographic applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 260-263. | 1.6 | 10 |
| 96 | Imaging properties of cerium doped Yttrium Aluminum Oxide (YAP:Ce) powder scintillating screens under X-ray excitation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 210-214. | 1.6 | 6 |
| 97 | Patient and staff radiation dosimetry during cardiac electrophysiology studies and catheter ablation procedures: a comprehensive analysis. Europace, 2006, 8, 443-448. | 1.7 | 70 |
| 98 | On the response of Y3Al5O12: Ce (YAG: Ce) powder scintillating screens to medical imaging X-rays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 538, 615-630. | 1.6 | 37 |
| 99 | Light emission efficiency and imaging performance of Y3Al5O12: Ce (YAG: Ce) powder screens under diagnostic radiology conditions. Applied Physics B: Lasers and Optics, 2005, 80, 923-933. | 2.2 | 19 |
| 100 | Evaluation of ZnS:Cu phosphor as X-ray to light converter under mammographic conditions. Radiation Measurements, 2005, 39, 263-275. | 1.4 | 31 |
| 101 | Optical gain signal-to-noise ratio transfer efficiency as an index for ranking of phosphor-photodetector combinations used in X-ray medical imaging. Applied Physics A: Materials Science and Processing, 2004, 78, 915-919. | 2.3 | 5 |
| 102 | Modeling quantum and structure noise of phosphors used in medical X-ray imaging detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 490, 614-629. | 1.6 | 33 |
| 103 | Modeling quantum noise of phosphors used in medical X-ray imaging detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 430, 559-569. | 1.6 | 16 |
| 104 | Effect of intrinsic-gain fluctuations on quantum noise of phosphor materials used in medical X-ray imaging. Applied Physics A: Materials Science and Processing, 1999, 69, 337-341. | 2.3 | 11 |
| 105 | Estimation of the information content of medical images produced by scintillators interacting with diagnostic X-ray beams. Nuclear Instruments & Methods in Physics Research B, 1999, 155, 199-205. | 1.4 | 3 |