## Wojciech Kwiatek

List of Publications by Year in descending order

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| #  | Article                                                                                                                                                                                            | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Biological applications of synchrotron radiation infrared spectromicroscopy. Biotechnology<br>Advances, 2012, 30, 1390-1404.                                                                       | 6.0 | 78        |
| 2  | Molecular Characterization of DNA Double Strand Breaks with Tipâ€Enhanced Raman Scattering.<br>Angewandte Chemie - International Edition, 2014, 53, 169-172.                                       | 7.2 | 77        |
| 3  | Analysis of human cancer prostate tissues using FTIR microspectroscopy and SRIXE techniques.<br>Journal of Molecular Structure, 2001, 565-566, 329-334.                                            | 1.8 | 55        |
| 4  | Comparative endothelial profiling of doxorubicin and daunorubicin in cultured endothelial cells.<br>Toxicology in Vitro, 2015, 29, 512-521.                                                        | 1.1 | 52        |
| 5  | Trace element measurements using white synchrotron radiation. Nuclear Instruments & Methods in<br>Physics Research B, 1987, 24-25, 400-404.                                                        | 0.6 | 38        |
| 6  | Composite structure of wood cells in petrified wood. Materials Science and Engineering C, 2005, 25, 119-130.                                                                                       | 3.8 | 38        |
| 7  | Trace Elements Distribution in Renal Cell Carcinoma Depending on Stage of Disease. European<br>Urology, 2002, 42, 475-480.                                                                         | 0.9 | 37        |
| 8  | Synchrotron FTIR shows evidence of DNA damage and lipid accumulation in prostate adenocarcinoma<br>PC-3 cells following proton irradiation. Journal of Molecular Structure, 2014, 1073, 134-141.   | 1.8 | 35        |
| 9  | Cancerous tissues analyzed by SRIXE. Journal of Alloys and Compounds, 2005, 401, 173-177.                                                                                                          | 2.8 | 31        |
| 10 | Lipid droplets in prostate cancer cells and effect of irradiation studied by Raman microspectroscopy.<br>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2020, 1865, 158753. | 1.2 | 31        |
| 11 | Application of SRIXE and XANES to the determination of the oxidation state of iron in prostate tissue sections. Journal of Alloys and Compounds, 2004, 362, 83-87.                                 | 2.8 | 30        |
| 12 | Correlation of concentrations of selected trace elements with Gleason grade of prostate tissues.<br>Journal of Biological Inorganic Chemistry, 2010, 15, 1147-1155.                                | 1.1 | 28        |
| 13 | Monitoring UVR induced damage in single cells and isolated nuclei using SR-FTIR microspectroscopy and 3D confocal Raman imaging. Analyst, The, 2014, 139, 4200-4209.                               | 1.7 | 28        |
| 14 | Differentiation of protein secondary structure in clear and opaque human lenses: AFM – IR studies.<br>Journal of Pharmaceutical and Biomedical Analysis, 2017, 139, 125-132.                       | 1.4 | 28        |
| 15 | Comparison of spectral and spatial denoising techniques in the context of High Definition FT-IR imaging hyperspectral data. Scientific Reports, 2018, 8, 14351.                                    | 1.6 | 28        |
| 16 | Renal stone studies using vibrational spectroscopy and trace element analysis. Biospectroscopy, 1997, 3, 403-407.                                                                                  | 0.7 | 27        |
| 17 | Sporicidal activity of ceragenin CSA-13 against Bacillus subtilis. Scientific Reports, 2017, 7, 44452.                                                                                             | 1.6 | 27        |
| 18 | Energy Dissipation in the AFM Elasticity Measurements. Acta Physica Polonica A, 2009, 115, 548-551.                                                                                                | 0.2 | 27        |

| #  | Article                                                                                                                                                                                                                                   | lF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Nonpolynomial approximation of background in X-ray spectra. Nuclear Instruments & Methods in<br>Physics Research B, 1987, 22, 78-81.                                                                                                      | 0.6 | 26        |
| 20 | Saliva as a first-line diagnostic tool: A spectral challenge for identification of cancer biomarkers.<br>Journal of Molecular Liquids, 2020, 307, 112961.                                                                                 | 2.3 | 26        |
| 21 | SR-FTIR spectroscopic preliminary findings of non-cancerous, cancerous, and hyperplastic human prostate tissues. Vibrational Spectroscopy, 2007, 43, 237-242.                                                                             | 1.2 | 24        |
| 22 | Taking a snapshot of the triplet excited state of an OLED organometallic luminophore using X-rays.<br>Nature Communications, 2020, 11, 2131.                                                                                              | 5.8 | 24        |
| 23 | Preliminary study on the distribution of selected elements in cancerous and non-cancerous kidney tissues. Journal of Trace Elements in Medicine and Biology, 2002, 16, 155-160.                                                           | 1.5 | 23        |
| 24 | Morphology and the chemical make-up of the inorganic components of black corals. Materials Science and Engineering C, 2009, 29, 1029-1038.                                                                                                | 3.8 | 23        |
| 25 | A new approach to studying the effects of ionising radiation on single cells using FTIR synchrotron microspectroscopy. Radiation Physics and Chemistry, 2013, 93, 135-141.                                                                | 1.4 | 23        |
| 26 | X-ray fluorescence with synchrotron radiation. Ultramicroscopy, 1988, 24, 313-328.                                                                                                                                                        | 0.8 | 21        |
| 27 | Direct Determination of Metal Complexes' Interaction with DNA by Atomic Telemetry and Multiscale<br>Molecular Dynamics. Journal of Physical Chemistry Letters, 2017, 8, 805-811.                                                          | 2.1 | 21        |
| 28 | Mid-infrared spectroscopy and microscopy of subcellular structures in eukaryotic cells with atomic force microscopy – infrared spectroscopy. RSC Advances, 2018, 8, 2786-2794.                                                            | 1.7 | 21        |
| 29 | Raman spectral signatures of urinary extracellular vesicles from diabetic patients and hyperglycemic<br>endothelial cells as potential biomarkers in diabetes. Nanomedicine: Nanotechnology, Biology, and<br>Medicine, 2019, 17, 137-149. | 1.7 | 21        |
| 30 | Development of a compact laser-produced plasma soft X-ray source for radiobiology experiments.<br>Nuclear Instruments & Methods in Physics Research B, 2015, 364, 27-32.                                                                  | 0.6 | 20        |
| 31 | Influence of denoising on classification results in the context of hyperspectral data: High Definition<br>FT-IR imaging. Analytica Chimica Acta, 2019, 1085, 39-47.                                                                       | 2.6 | 20        |
| 32 | FTIR Microspectroscopy in Studies of DNA Damage Induced by Proton Microbeam in Single PC-3 Cells.<br>Acta Physica Polonica A, 2012, 121, 506-509.                                                                                         | 0.2 | 20        |
| 33 | Trace element analysis by means of synchrotron radiation, XRF, and PIXE: selection of sample preparation procedure. Journal of Alloys and Compounds, 2001, 328, 283-288.                                                                  | 2.8 | 19        |
| 34 | Infrared nanospectroscopic mapping of a single metaphase chromosome. Nucleic Acids Research, 2019,<br>47, e108-e108.                                                                                                                      | 6.5 | 19        |
| 35 | Exploring subcellular responses of prostate cancer cells to X-ray exposure by Raman mapping.<br>Scientific Reports, 2019, 9, 8715.                                                                                                        | 1.6 | 19        |
| 36 | Novel in situ methodology to observe the interactions of chemotherapeutical Pt drugs with DNA under physiological conditions. Dalton Transactions, 2014, 43, 13839-13844.                                                                 | 1.6 | 18        |

| #  | Article                                                                                                                                                                                                                            | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Nanoscale image of the drug/metal mono-layer interaction: Tapping AFM-IR investigations. Nano<br>Research, 2020, 13, 1020-1028.                                                                                                    | 5.8 | 18        |
| 38 | Distribution of selected elements in calcific human aortic valves studied by microscopy combined with SR-μXRF: Influence of lipids on progression of calcification. Micron, 2014, 67, 141-148.                                     | 1.1 | 17        |
| 39 | Is it possible to find presence of lactose in pharmaceuticals? — Preliminary studies by ATR-FTIR spectroscopy and chemometrics. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 171, 280-286.         | 2.0 | 17        |
| 40 | Revealing Chemical Heterogeneity of CNT Fiber Nanocomposites via Nanoscale Chemical Imaging.<br>Chemistry of Materials, 2018, 30, 1856-1864.                                                                                       | 3.2 | 17        |
| 41 | Lead pollution in the Antarctic region. X-Ray Spectrometry, 1998, 27, 232-235.                                                                                                                                                     | 0.9 | 16        |
| 42 | Investigating DNA Radiation Damage Using X-Ray Absorption Spectroscopy. Biophysical Journal, 2016, 110, 1304-1311.                                                                                                                 | 0.2 | 16        |
| 43 | Vibrational microspectroscopy analysis of human lenses. Spectrochimica Acta - Part A: Molecular and<br>Biomolecular Spectroscopy, 2018, 188, 332-337.                                                                              | 2.0 | 16        |
| 44 | Application of ATR-FTIR mapping to identification and distribution of pigments, binders and degradation products in a 17th century painting. Vibrational Spectroscopy, 2019, 103, 102928.                                          | 1.2 | 16        |
| 45 | XANES as a tool for iron oxidation state determination in tissues. Journal of Alloys and Compounds, 2001, 328, 276-282.                                                                                                            | 2.8 | 15        |
| 46 | Trace element analysis of tissue section by means of synchrotron radiation: the use of GNUPLOT for SRIXE spectra analysis. Journal of Alloys and Compounds, 2001, 328, 135-138.                                                    | 2.8 | 15        |
| 47 | Double strand break formation as a response to X-ray and targeted proton-irradiation. Nuclear<br>Instruments & Methods in Physics Research B, 2007, 260, 159-163.                                                                  | 0.6 | 15        |
| 48 | Distribution of selected elements in atherosclerotic plaques of apoE/LDLRâ€double knockout mice<br>assessed by synchrotron radiationâ€induced microâ€XRF spectrometry. X-Ray Spectrometry, 2008, 37,<br>495-502.                   | 0.9 | 15        |
| 49 | Affinity of Alkylphosphocholines to Biological Membrane of Prostate Cancer: Studies in Natural and<br>Model Systems. Journal of Membrane Biology, 2014, 247, 581-589.                                                              | 1.0 | 15        |
| 50 | The pituitary gland under infrared light – in search of a representative spectrum for homogeneous regions. Analyst, The, 2015, 140, 2156-2163.                                                                                     | 1.7 | 15        |
| 51 | Potential drug – nanosensor conjugates: Raman, infrared absorption, surface – enhanced Raman, and<br>density functional theory investigations of indolic molecules. Applied Surface Science, 2017, 404,<br>168-179.                | 3.1 | 15        |
| 52 | Monitoring the Interfacial Behavior of Selective Y5 Receptor Antagonist on Colloidal Gold<br>Nanoparticle Surfaces: Surface-Enhanced Vibrational Spectroscopy Studies. Journal of Physical<br>Chemistry C, 2017, 121, 17276-17288. | 1.5 | 15        |
| 53 | Surface characterization of medieval silver coins minted by the early Piasts: <scp>FTâ€IR</scp> mapping and <scp>SEM/EDX</scp> studies. Surface and Interface Analysis, 2018, 50, 78-86.                                           | 0.8 | 15        |
| 54 | Investigation of trace elements in cancer kidney tissues by SRIXE and PIXE. Nuclear Instruments & Methods in Physics Research B, 1996, 109-110, 284-288.                                                                           | 0.6 | 14        |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Multianalytical approach for surface- and tip-enhanced infrared spectroscopy study of a<br>molecule–metal conjugate: deducing its adsorption geometry. Physical Chemistry Chemical Physics,<br>2018, 20, 27992-28000.                 | 1.3 | 14        |
| 56 | Nanoparticle stabilizer as a determining factor of the drug/gold surface interaction: SERS and AFM-SEIRA studies. Applied Surface Science, 2021, 537, 147897.                                                                         | 3.1 | 14        |
| 57 | SR-FTIR Coupled with Principal Component Analysis Shows Evidence for the Cellular Bystander Effect.<br>Radiation Research, 2015, 184, 73-82.                                                                                          | 0.7 | 13        |
| 58 | Polarization effect in tip-enhanced infrared nanospectroscopy studies of the selective Y5 receptor antagonist Lu AA33810. Nano Research, 2018, 11, 4401-4411.                                                                         | 5.8 | 13        |
| 59 | Macromolecular Orientation in Biological Tissues Using a Four-Polarization Method in FT-IR Imaging.<br>Analytical Chemistry, 2020, 92, 13313-13318.                                                                                   | 3.2 | 13        |
| 60 | FT-Raman, FT-IR spectroscopy and PIXE analysis applied to gallstones specimens. Cellular and Molecular<br>Biology, 1998, 44, 65-73.                                                                                                   | 0.3 | 13        |
| 61 | Iron and other elements studies in cancerous and non-cancerous prostate tissues. Journal of Alloys and Compounds, 2005, 401, 178-183.                                                                                                 | 2.8 | 12        |
| 62 | Zinc in native tissues and cultured cell lines of human prostate studied by SRâ€XRF and XANES. X-Ray Spectrometry, 2009, 38, 557-562.                                                                                                 | 0.9 | 12        |
| 63 | High-resolution label-free studies of molecular distribution and orientation in ultrathin,<br>multicomponent model membranes with infrared nano-spectroscopy AFM-IR. Journal of Colloid and<br>Interface Science, 2019, 542, 347-354. | 5.0 | 12        |
| 64 | Assessment of cellular response to drug/nanoparticles conjugates treatment through FTIR imaging and PLS regression study. Sensors and Actuators B: Chemical, 2020, 313, 128039.                                                       | 4.0 | 12        |
| 65 | Denoising influence on discrete frequency classification results for quantum cascade laser based infrared microscopy. Analytica Chimica Acta, 2019, 1051, 24-31.                                                                      | 2.6 | 11        |
| 66 | Saliva as a non-invasive material for early diagnosis. Acta Biochimica Polonica, 2019, 66, 383-388.                                                                                                                                   | 0.3 | 11        |
| 67 | Elemental concentrations in bones from an ancient egyptian mummy and from a contemporary man.<br>Nuclear Instruments & Methods in Physics Research B, 1987, 22, 423-425.                                                              | 0.6 | 10        |
| 68 | lron content (PIXE) in competent and incompetent veins is related to the vein wall morphology and tissue antioxidant enzymes. Bioelectrochemistry, 2012, 87, 114-123.                                                                 | 2.4 | 10        |
| 69 | Vibrational Fingerprint of Erlotinib: FTIR, RS, and DFT Studies. Journal of Spectroscopy, 2019, 2019, 1-10.                                                                                                                           | 0.6 | 10        |
| 70 | Development of continuous CNT fibre-reinforced PMMA filaments for additive manufacturing: A case study by AFM-IR nanoscale imaging. Materials Letters, 2020, 262, 127182.                                                             | 1.3 | 10        |
| 71 | Nanoscale infrared probing of amyloid formation within the pleomorphic adenoma tissue. Biochimica<br>Et Biophysica Acta - General Subjects, 2020, 1864, 129677.                                                                       | 1.1 | 10        |
| 72 | Micro-Spectrometric Investigations of Inorganic Components of the Black Corals for Biomedical Applications. Key Engineering Materials, 2005, 284-286, 297-300.                                                                        | 0.4 | 9         |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | DNA strand breaks induced by soft X-ray pulses from a compact laser plasma source. Radiation Physics and Chemistry, 2016, 120, 17-25.                                                                                           | 1.4 | 9         |
| 74 | ldentification of erlotinib adsorption pattern onto silver nanoparticles: SERS studies. Journal of Raman Spectroscopy, 2018, 49, 1265-1273.                                                                                     | 1.2 | 9         |
| 75 | Nanoscale Investigation into the Cellular Response of Glioblastoma Cells Exposed to Protons.<br>Analytical Chemistry, 2018, 90, 7644-7650.                                                                                      | 3.2 | 9         |
| 76 | PrP (58–93) peptide from unstructured N-terminal domain of human prion protein forms amyloid-like<br>fibrillar structures in the presence of Zn <sup>2+</sup> ions. RSC Advances, 2019, 9, 22211-22219.                         | 1.7 | 9         |
| 77 | Comparison between high definition FTâ€IR, Raman and AFMâ€IR for subcellular chemical imaging of cholesteryl esters in prostate cancer cells. Journal of Biophotonics, 2020, 13, e201960094.                                    | 1.1 | 9         |
| 78 | Application of Linear Discriminant Analysis in Prostate Cancer Research by Synchrotron Radiation-Induced X-Ray Emission. Analytical Chemistry, 2007, 79, 6670-6674.                                                             | 3.2 | 8         |
| 79 | Bioactivity of a Chitosan Based Nanocomposite. Journal of Biomimetics, Biomaterials, and Tissue<br>Engineering, 0, 10, 95-106.                                                                                                  | 0.7 | 8         |
| 80 | Changes in cellular response to the damage induced in PC-3 prostate cancer cells by proton microbeam irradiation. General Physiology and Biophysics, 2012, 31, 11-18.                                                           | 0.4 | 8         |
| 81 | Computed microtomography and numerical study of porous rock samples. Radiation Physics and Chemistry, 2013, 93, 59-66.                                                                                                          | 1.4 | 8         |
| 82 | Determination of oxidation state of iron in normal and pathologically altered human aortic valves.<br>Nuclear Instruments & Methods in Physics Research B, 2015, 364, 70-75.                                                    | 0.6 | 8         |
| 83 | Nanoscale AFM-IR spectroscopic imaging of lipid heterogeneity and effect of irradiation in prostate cancer cells. Nanotechnology, 2019, 30, 425502.                                                                             | 1.3 | 8         |
| 84 | Spectroscopic insights into the effect of pH, temperature, and stabilizer on erlotinib adsorption<br>behavior onto Ag nanosurface. Spectrochimica Acta - Part A: Molecular and Biomolecular<br>Spectroscopy, 2020, 228, 117737. | 2.0 | 8         |
| 85 | Stearoyl-CoA Desaturase 1 Activity Determines the Maintenance of DNMT1-Mediated DNA Methylation<br>Patterns in Pancreatic β-Cells. International Journal of Molecular Sciences, 2020, 21, 6844.                                 | 1.8 | 8         |
| 86 | In search of the correlation between nanomechanical and biomolecular properties of prostate cancer cells with different metastatic potential. Archives of Biochemistry and Biophysics, 2021, 697, 108718.                       | 1.4 | 8         |
| 87 | Zn(II) binding causes interdomain changes in the structure and flexibility of the human prion protein.<br>Scientific Reports, 2021, 11, 21703.                                                                                  | 1.6 | 8         |
| 88 | Spectral signature of multiple sclerosis. Preliminary studies of blood fraction by ATR FTIR technique.<br>Biochemical and Biophysical Research Communications, 2022, 593, 40-45.                                                | 1.0 | 8         |
| 89 | Determination of vanadium in animal tissues by PIXE and AAS. Journal of Radioanalytical and Nuclear Chemistry, 2001, 247, 175-178.                                                                                              | 0.7 | 7         |
| 90 | Mechanism of hydrolysis of a platinum(IV) complex discovered by atomic telemetry. Journal of Inorganic Biochemistry, 2018, 187, 56-61.                                                                                          | 1.5 | 7         |

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|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91  | Physico-chemical analysis of molecular binding to the colloidal metal nanostructure: Multiple micro-<br>and nanospectroscopy study. Applied Surface Science, 2020, 499, 143975.                                                                                          | 3.1 | 7         |
| 92  | Comparison of the new Mie Extinction Extended Multiplicative Scattering Correction and Resonant<br>Mie Extended Multiplicative Scattering Correction in transmission infrared tissue image scattering<br>correction. Infrared Physics and Technology, 2020, 107, 103291. | 1.3 | 7         |
| 93  | Exploring subcellular responses of prostate cancer cells to clinical doses of X-rays by Raman<br>microspectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 255,<br>119653.                                                         | 2.0 | 7         |
| 94  | Tracking of the biochemical changes upon pleomorphic adenoma progression using vibrational microspectroscopy. Scientific Reports, 2021, 11, 18010.                                                                                                                       | 1.6 | 7         |
| 95  | Distinguishing Prostate Cancer from Hyperplasia. Acta Physica Polonica A, 2006, 109, 377-381.                                                                                                                                                                            | 0.2 | 7         |
| 96  | Preliminary Study on Chemical Speciation of Sulphur in Cancerous Tissues. Acta Physica Polonica A, 2006, 109, 383-387.                                                                                                                                                   | 0.2 | 7         |
| 97  | Sulphur XANES Analysis of Cultured Human Prostate Cancer Cells. Acta Physica Polonica A, 2008, 114, 463-470.                                                                                                                                                             | 0.2 | 7         |
| 98  | Applications of the Cracow X-Ray Microprobe in Tomography. Acta Physica Polonica A, 2009, 115, 537-541.                                                                                                                                                                  | 0.2 | 7         |
| 99  | The new PIXE setup at the Institute of Nuclear Physics in Kraków. Nuclear Instruments & Methods in Physics Research B, 1996, 109-110, 109-112.                                                                                                                           | 0.6 | 6         |
| 100 | A comparison between the unfolding of fibronectin and contactin. Journal of Physics Condensed<br>Matter, 2006, 18, 10157-10164.                                                                                                                                          | 0.7 | 6         |
| 101 | Technical aspects of Zn microanalysis of human prostate cancer tissues and cells. Radiation Physics and Chemistry, 2009, 78, S53-S57.                                                                                                                                    | 1.4 | 6         |
| 102 | Micro- and Nanoscale Spectroscopic Investigations of Threonine Influence on the Corrosion Process of the Modified Fe Surface by Cu Nanoparticles. Materials, 2020, 13, 4482.                                                                                             | 1.3 | 6         |
| 103 | Biomedical Applications of Synchrotron X-Ray Fluorescence. Acta Physica Polonica A, 1994, 86, 695-703.                                                                                                                                                                   | 0.2 | 6         |
| 104 | Correlation of trace elements in hair of patients with colon cancer. Nuclear Instruments & Methods<br>in Physics Research B, 1987, 22, 166-171.                                                                                                                          | 0.6 | 5         |
| 105 | Trace element relations to renal stones phases. Nuclear Instruments & Methods in Physics Research B, 1990, 49, 234-237.                                                                                                                                                  | 0.6 | 5         |
| 106 | Trace element distribution in the rat cerebellum. Nuclear Instruments & Methods in Physics Research<br>B, 1990, 49, 561-565.                                                                                                                                             | 0.6 | 5         |
| 107 | Selection of the experimental conditions for white-light SRIXE measurements. Nuclear Instruments & Methods in Physics Research B, 1990, 50, 347-352.                                                                                                                     | 0.6 | 5         |
| 108 | Application of FTIR, PIXE, and EBS for trace element analysis in biological samples. Nuclear Instruments<br>& Methods in Physics Research B, 1992, 64, 512-516.                                                                                                          | 0.6 | 5         |

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|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Micro and bulk analysis of prostate tissues classified as hyperplasia. Spectrochimica Acta, Part B:<br>Atomic Spectroscopy, 2007, 62, 707-710.                                                                                    | 1.5 | 5         |
| 110 | Distribution of selected elements in atherosclerotic plaques of apoE/LDLR-double knockout mice subjected to dietary and pharmacological treatments. Radiation Physics and Chemistry, 2011, 80, 1072-1077.                         | 1.4 | 5         |
| 111 | Influence of Vanadium–organic Ligands Treatment on Selected Metal Levels in Kidneys of STZ Rats.<br>Biological Trace Element Research, 2013, 153, 319-328.                                                                        | 1.9 | 5         |
| 112 | Chemical species of sulfur in prostate cancer cells studied by XANES spectroscopy. Radiation Physics and Chemistry, 2013, 93, 154-159.                                                                                            | 1.4 | 5         |
| 113 | Analysis of synchrotron radiation induced X-ray emission spectra with R environment. Radiation Physics and Chemistry, 2013, 93, 82-86.                                                                                            | 1.4 | 5         |
| 114 | Physicochemical damage and earlyâ€stage biological response to Xâ€ray radiation studied in prostate<br>cancer cells by Raman spectroscopy. Journal of Biophotonics, 2020, 13, e202000252.                                         | 1.1 | 5         |
| 115 | Determination of Crystal-Field Splitting Induced by Thermal Oxidation of Titanium. Journal of Physical Chemistry A, 2021, 125, 50-56.                                                                                             | 1.1 | 5         |
| 116 | The Impact of Preprocessing Methods for a Successful Prostate Cell Lines Discrimination Using<br>Partial Least Squares Regression and Discriminant Analysis Based on Fourier Transform Infrared<br>Imaging. Cells, 2021, 10, 953. | 1.8 | 5         |
| 117 | Application of μ-FTIR-SR Spectroscopy to Prostate Tissue Analysis. Acta Physica Polonica A, 2009, 115, 602-605.                                                                                                                   | 0.2 | 5         |
| 118 | Preliminary Investigations of Elemental Content, Microporosity, and Specific Surface Area of Porous<br>Rocks Using PIXE and X-ray Microtomography Techniques. Acta Physica Polonica A, 2012, 121, 474-479.                        | 0.2 | 5         |
| 119 | Infrared Spectroscopy in Molecular Study of the Piezoelectric Effect in Pig's Shin Bone. Acta Physica<br>Polonica A, 2012, 121, 539-542.                                                                                          | 0.2 | 5         |
| 120 | The Study of Human Osteoblast-Like MG 63 Cells Proliferation on Resorbable Polymer-Based<br>Nanocomposites Modified with Ceramic and Carbon Nanoparticles. Acta Physica Polonica A, 2012, 121,<br>546-550.                        | 0.2 | 5         |
| 121 | Identification of Corrosion Products on Fe and Cu Metals using Spectroscopic Methods. Acta Physica<br>Polonica A, 2018, 133, 286-288.                                                                                             | 0.2 | 5         |
| 122 | X-ray microprobe – A new facility for cell irradiations in Kraków. Nuclear Instruments & Methods in<br>Physics Research B, 2009, 267, 2273-2276.                                                                                  | 0.6 | 4         |
| 123 | Investigating the Distribution of Chemical Forms of Sulfur in Prostate Cancer Tissue Using X-ray<br>Absorption Spectroscopy. Applied Spectroscopy, 2016, 70, 264-271.                                                             | 1.2 | 4         |
| 124 | Electronic structure of Fe, α-Fe 2 O 3 and Fe(NO 3 ) 3 × 9 H 2 O determined using RXES. Chemical Physics, 2017, 493, 49-55.                                                                                                       | 0.9 | 4         |
| 125 | Erythrocyte hemeâ€oxygenation status indicated as a risk factor in prehypertension by Raman<br>spectroscopy. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 3659-3663.<br>                               | 1.8 | 4         |
| 126 | Electronic properties of a PrPC–Cu( <scp>ii</scp> ) complex as a marker of 5-fold Cu( <scp>ii</scp> ) coordination. Metallomics, 2019, 11, 632-642.                                                                               | 1.0 | 4         |

| #   | Article                                                                                                                                                                                                                                                      | IF  | CITATIONS |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Noise-free simulation of an FT-IR imaging hyperspectral dataset of pancreatic biopsy core bound by experiment. Scientific Data, 2019, 6, 239.                                                                                                                | 2.4 | 4         |
| 128 | Influence of interference effects on the spectral quality and histological classification by FT-IR imaging in transflection geometry. Analyst, The, 2021, 146, 646-654.                                                                                      | 1.7 | 4         |
| 129 | Insights into the binding interactions at the nano-bio interface: Electrode potential and wavelength dependence study. Applied Surface Science, 2021, 562, 150228.                                                                                           | 3.1 | 4         |
| 130 | Elemental Mapping of Prostate Tissue by Micro-SRIXE. Acta Physica Polonica A, 2006, 109, 323-328.                                                                                                                                                            | 0.2 | 4         |
| 131 | X-Ray Absorption Near Edge Structure and Mössbauer Spectroscopy in Study of Iron Valence States in<br>Tissues. Acta Physica Polonica A, 2006, 109, 341-345.                                                                                                  | 0.2 | 4         |
| 132 | Surface Study of Selected Biomaterials Using Vibrational Spectroscopy. Acta Physica Polonica A, 2009, 115, 533-536.                                                                                                                                          | 0.2 | 4         |
| 133 | Determination of Changes in Sulphur Oxidation States in Prostate Cancer Cells. Acta Physica Polonica<br>A, 2012, 121, 497-501.                                                                                                                               | 0.2 | 4         |
| 134 | Analysis of Human Lenses by Raman Microspectroscopy. Acta Physica Polonica A, 2016, 129, 244-246.                                                                                                                                                            | 0.2 | 4         |
| 135 | The use of a SiTek position sensitive detector for synchrotron radiation beam monitoring and alignment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1987, 260, 529-533. | 0.7 | 3         |
| 136 | Importance of matrix changes in PIXE elemental analysis. Nuclear Instruments & Methods in Physics<br>Research B, 1996, 114, 345-349.                                                                                                                         | 0.6 | 3         |
| 137 | Using micro-synchrotron radiation induced X-ray emission distribution maps to determine correlation between elements in prostate tissue. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 957-961.                                                | 1.5 | 3         |
| 138 | First approach to studies of sulphur electron DOS in prostate cancer cell lines and tissues studied by XANES. Radiation Physics and Chemistry, 2011, 80, 1104-1108.                                                                                          | 1.4 | 3         |
| 139 | Utility of FT-IR imaging spectroscopy in estimating differences between the quality of bovine blastocysts. Journal of Molecular Structure, 2013, 1049, 227-232.                                                                                              | 1.8 | 3         |
| 140 | Cross-section determination for one- and two-photon absorption of cobalt at hard-x-ray energies.<br>Physical Review A, 2019, 99, .                                                                                                                           | 1.0 | 3         |
| 141 | FTIR Study of Multifunctional Coatings. Acta Physica Polonica A, 2012, 121, 551-554.                                                                                                                                                                         | 0.2 | 3         |
| 142 | Chemical Composition of Atherosclerotic Plaques أرام apoE/LDLR-Double Knockout Mice by Synchrotron<br>Radiation FTIR Microspectroscopy. Acta Physica Polonica A, 2012, 121, 555-560.                                                                         | 0.2 | 3         |
| 143 | Effect of Magnetite Composite on the Amount of Double Strand Breaks Induced with X-Rays. Acta Physica Polonica A, 2016, 129, 174-175.                                                                                                                        | 0.2 | 3         |
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