

Scientific publications from the Journal Citation Reports database (JRC)

|  | MNiSW | IF    | Finance from             |
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|  |       |       |                          |
| 1. A. Zimna, M. Kaczmarśka*, E. Szczesny-Malysiak, A. Wajda, K. Bulat, F. C. Alcicek, M. Zygmunt, T. Sacha, K.M. Marzec*, <i>An insight into the stages of ion leakage during red blood cell storage</i> , <b>Int. J. Mol. Sci.</b> <b>2021</b> , 22(5), 2885.   | 140   | 4.556 | Lider, NCBiR             |
| 2. A. Blat, T. Stepanenko, K. Bulat, A. Wajda, J. Dybas, T. Mohaissen, F.C. Alcicek, E. Szczesny-Malysiak, K. Malek, A. Fedorowicz, K.M. Marzec*, <i>Spectroscopic Signature of Red Blood Cells in the D-galactose-Induced Accelerated Aging Model</i> , <b>Int. J. Mol. Sci.</b> <b>2021</b> , 22(5), 2660.   | 140   | 4.556 | Opus, NCN                |
| 3. J. Dybas, K. Bulat, A. Blat, T. Mohaissen, A. Wajda, M. Mardyla, M. Kaczmarśka, M. Franczyk-Zarow, K. Malek, S. Chłopicki, K.M. Marzec*, <i>Age-related and atherosclerosis-related erythropathy in ApoE/LDLR-/- mice</i> , <b>BBA - Molecular Basis of Disease</b> <b>2020</b> , 1866 (12), 165972.  | 140   | 4.352 | Opus, NCN                |
| 4. E. Szczęsny-Malysiak, J. Dybas, A. Blat, K. Bulat, K. Kuś, M. Kaczmarśka, A. Wajda, K. Malek, S. Chłopicki, K.M. Marzec*, <i>Irreversible alterations in the hemoglobin structure affect oxygen binding in human packed red blood cells</i> , <b>BBA - Molecular Cell Research</b> <b>2020</b> , 1867(11), 118803.  | 140   | 4.105 | Lider, NCBiR             |
| 5. J. Dybas, M. J. Bokamper, K.M. Marzec*, P. J. Mak*, <i>Probing the structure-function relationship of hemoglobin in living human red blood cells</i> , <b>Spectrochim. Acta A</b> <b>2020</b> , 239, 118530.  | 100   | 3.232 | Opus, NCN<br>Etiuda, NCN |
| 6. K. Chrabszcz, T. Meyer, H. Bae, M. Schmitt, A. Jasztal, M. Smeda, M. Stojak, J. Popp, K. Malek, K.M. Marzec*, <i>Comparison of standard and HD FT-IR with multimodal CARS/TPEF/SHG/FLIMS imaging in the detection of the early stage of pulmonary metastasis of murine breast cancer</i> , <b>Analyst</b> <b>2020</b> , 145, 4982-4990.   | 100   | 3.978 | Juventus Plus,<br>MNiSW  |
| 7. M. Kaczmarśka, M. Grosicki, K. Bulat, M. Mardyla, E. Szczesny-Malysiak, A. Blat, J. Dybas, T. Sacha, K.M. Marzec*, <i>Temporal sequence of the human RBCs' vesiculation observed in nano-scale with application of AFM and complementary techniques</i> , <b>Nanomedicine: NBM</b> <b>2020</b> , 28, 102221.  | 140   | 5.182 | Lider, NCBiR             |
| 8. S. Fornasaro, F. Alsamad, M. Baia, L.A.E. Batista de Carvalho, C. Beleites, H.J. Byrne, A. Chiadò, M. Chis, M. Chisanga, A. Daniel, J. Dybas, G. Eppe, G. Falgayrac, H. Gebavi, K. Faulds, H. Gebavi, F. Giorgis, R. Goodacre, D. Graham, P. La Manna, S. Laing, L. Litti, F.M. Lyng, K. Malek, C. Malherbe, M.P.M. Marques, M. Meneghetti, E. Mitri, V.M. Grosev, C. Morasso, H. Muhamadali, P. Musto, C. Novara, M. Pannico, G. Penel, O. Piot, T. Rindzevicius, E. Rusu, M.S. Schmidt, V. Sergo, G.D. Sockalingum, V. Untereiner, R. Vanna, E. Wiercigroch, A. | 140   | 6.785 |                          |

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| Bonifacio*, <i>Surface Enhanced Raman Spectroscopy for quantitative analysis: results of a large-scale European multi-instrument interlaboratory study</i> , <b>Anal. Chem.</b> <b>2020</b> , 92, 5, 4053–4064.  |     |       |                         |
| 9. E. Bik, M. Ishigaki, <b>A. Blat</b> , A. Jasztal, Y. Ozaki, K. Malek*, M. Baranska*, <i>Lipid droplets composition varies upon Medaka fish eggs development as revealed by NIR-, MIR- and Raman imaging</i> , <b>Molecules</b> <b>2020</b> , 25(4), 817.  | 100 | 3.267 |                         |
| 10. <b>K. Bulat, J. Dybas, M. Kaczmarska</b> , A. Rygula, A.Jasztal, <b>E. Szczesny-Malysiak</b> , M. Baranska, B. R. Wood, <b>K.M. Marzec*</b> , <i>Multimodal detection and analysis of a new type of advanced Heinz body-like aggregate (AHBA)and cytoskeleton deformation in human RBCs</i> , <b>Analyst</b> <b>2020</b> , 145, 1749-1758.               | 100 | 3.978 | Lider, NCBiR            |
| 11. K. Chrabaszcz, K. Kaminska, K. Augustyniak, M. Kujdowicz, M. Smeda, A. Jasztal, M. Stojak, <b>K.M. Marzec</b> , K. Malek*, <i>Tracking extracellular matrix remodeling in lungs induced by breast cancer metastasis. Fourier Transform Infrared spectroscopic studies</i> , <b>Molecules</b> <b>2020</b> , 25, 236.                                      | 100 | 3.267 | Juventus Plus,<br>MNiSW |
| 12. <b>A. Blat, J. Dybas</b> , K. Chrabaszcz, <b>K. Bulat</b> , A. Jasztal, <b>M. Kaczmarska</b> , T. Popiela, A. Slowik, K. Malek, M. G. Adamski, <b>K.M. Marzec*</b> , <i>FTIR, Raman and AFM characterization of the clinically valid biochemical parameters of the thrombi in acute ischemic stroke</i> , <b>Sci. Rep.</b> <b>2019</b> , 9, 15475.       | 140 | 4.011 | Opus, NCN               |
| 13. E. Wercigroch, A. Kisielewska, <b>A. Blat</b> , A. Wislocka, I. Piwoński, K. Malek*, <i>Photocatalytical decoration of thin titania coatings with silver nanostructures provides a robust and reproducible SERS signal</i> , <b>J. Raman Spectrosc.</b> <b>2019</b> , 50, 1649-1660.   | 70  | 2.000 |                         |
| 14. <b>A. Blat</b> , E. Wercigroch, M. Smeda, A. Wislocka, S. Chlopicki, K. Malek*, <i>FTIR spectroscopic signature of blood plasma in the progression of breast cancer with simultaneous metastasis to lungs</i> , <b>J. Biophot.</b> <b>2019</b> , 12, e201900067.   | 100 | 3.032 |                         |
| 15. <b>A. Blat, J. Dybas, M. Kaczmarska</b> , K. Chrabaszcz, <b>K. Bulat</b> , R.B. Kostogrys, A.Cernescu, K. Malek*, <b>K.M. Marzec*</b> , <i>An Analysis of Isolated and Intact RBC Membranes - a Comparison of a Semiquantitative Approach by Means of FTIR, Nano-FTIR and Raman Spectroscopies</i> , <b>Anal. Chem.</b> <b>2019</b> , 91(15), 9867-9874. | 140 | 6.785 | Opus, NCN               |
| 16. K. Augustyniak, K. Chrabaszcz, A. Jasztal, M. Smeda, G. Quintas, J. Kuligowski, <b>K.M. Marzec*</b> , K. Malek*, <i>High- and Ultra-High definition of IR spectral histopathology gives an insight into chemical environment of lung metastases in breast cancer</i> , <b>J. Biophot.</b> <b>2019</b> , 12(4), e201800345.                               | 100 | 3.032 | Juventus Plus,<br>MNiSW |
| 17. <b>A. Wajda*</b> , W.H. Goldmann, R. Detsch, A.R. Boccaccini, M. Sitarz, <i>Influence of zinc ions on structure, bioactivity, biocompatibility and antibacterial potential of melt-derived and</i>   | 70  | 2.929 | Etiuda, NCN             |

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| <i>gel-derived glasses from CaO-SiO<sub>2</sub> system, J. Non-Cryst. Solids</i> <b>2019</b> , 511, 86-99.  |    |        |                      |
| 18. K. Chrabąszcz, K. Kochan, A. Fedorowicz, A. Jasztal, E. Buczak, L. S. Leslie, R. Bhargava, K. Malek, S. Chłopicki, <b>K.M. Marzec*</b> , <i>FT-IR- and Raman-based biochemical profiling of the early stage of pulmonary metastasis of breast cancer in mice, Analyst</i> <b>2018</b> , 143, 2042–2050.   | 40 | 3.976  | Juventus Plus, MNiSW |
| 19. <b>J. Dybas</b> , P. Berkowicz, B. Proniewski, K. Dziedzic-Kocurek, J. Stanek, M. Baranska, S. Chłopicki*, <b>K.M. Marzec*</b> , <i>Spectroscopy-based characterization of Hb-NO adducts in human red blood cells exposed to NO-donor and endothelium-derived NO, Analyst</i> <b>2018</b> , 143, 4335–4346.   | 40 | 3.976  | Lider, NCBiR         |
| 20. Chrabąszcz, A. Jasztal, M. Smeda, B. Zieliński, A. Blat, M. Diem, S. Chłopicki, K. Malek*, <b>K.M. Marzec*</b> , <i>Label-free FTIR spectroscopy detects and visualizes the early stage of pulmonary micrometastasis seeded from breast carcinoma, Biochim. Biophys. Acta – Mol. Basis Dis.</i> <b>2018</b> , 1864, 3574–3584.                                    | 40 | 4.328  | Juventus Plus, MNiSW |
| 21. D. Perez-Guaita, <b>K.M. Marzec</b> , A. Hudson, C. Evans, T. Chernenko, C. Matthäus, M. Miljkovic, M. Diem, P. Heraud, J. Richards, D. Andrew, D. Anderson, C. Doerig, J. Garcia-Bustos, D. McNaughton, B.R. Wood*, <i>Parasites under the spotlight: Applications of vibrational spectroscopy to malaria research, Chem. Rev.</i> <b>2018</b> , 118, 5330–5358. | 50 | 54.301 | Opus, NCN            |
| 22. <b>J. Dybas</b> , M. Grosicki, M. Baranska*, <b>K.M. Marzec*</b> , <i>Raman imaging of haem metabolism in situ in macrophages and Kupffer cells, Analyst</i> <b>2018</b> , 143, 3489–3498.  | 40 | 3.976  | Opus, NCN            |
| 23. P. Heraud, M.F. Cowan, <b>K.M. Marzec</b> , B.L. Moller, C.K. Blomstedt, R. Gleadow*, <i>Label-free Raman hyperspectral imaging analysis localizes the cyanogenic glucoside dhurrin to the cytoplasm in sorghum cells, Sci. Rep.</i> <b>2018</b> , 8, 2691, 1–9.  | 40 | 4.011  | -                    |
| 24. E. Szafraniec, E. Wiercigroch, K. Czamara, K. Majzner, E. Staniszewska-Slezak, <b>K.M. Marzec</b> , K. Malek, A. Kaczor, M. Baranska*, <i>Diversity among endothelial cell lines revealed by Raman and Fourier-transform infrared spectroscopic imaging, Analyst</i> <b>2018</b> , 143, 4323–4334.  | 40 | 3.976  | -                    |
| 25. M. Acosta, R. Detsch, A. Grünwald, V. Rojas, J. Schultheiß, <b>A. Wajda</b> , R. Stark, S. Narayan, M. Sitarz, J. Koruza, A. Boccaccini, <i>Cytotoxicity, chemical stability, and surface properties of ferroelectric ceramics for biomaterials, J. Am. Ceram. Soc.</i> <b>2018</b> , 101(1), 440-449.  | 45 | 3.094  | -                    |
| 26. M. Gawęda, P. Jeleń, E. Długoń, <b>A. Wajda</b> , M. Leśniak, W. Simka, M. Sowa, R. Detsch, A. Boccaccini, M. Sitarz, <i>Bioactive layers based on black glasses on titanium substrates, J. Am. Ceram. Soc.</i> <b>2018</b> , 101(2), 590-601.  | 45 | 3.094  | -                    |
| 27. <b>A. Wajda*</b> , M. Sitarz, <i>Structural and microstructural comparison of bioactive melt-derived and gel-derived glasses</i>  | 40 | 3.450  | Etiuda, NCN          |

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| <i>from CaO-SiO<sub>2</sub> binary system, Ceram. Int. 2018, 44(8), 8856-8863.</i>  |    |       |                |
| 28. M. Gawęda, P. Jeleń, E. Długoń, <b>A. Wajda</b> , M. Leśniak, W. Simka, M. Sowa, R. Detsch, A.R. Boccaccini, M. Sitarz, <i>Erratum to: Bioactive layers based on black glasses on titanium substrates, J. Am. Ceram. Soc. 2018, 101(7), 3246.</i>   | 45 | 3.094 | -              |
| 29. M. Gawęda, E. Długoń, P. Jeleń, R. Jadach, <b>A. Wajda</b> , M. Nocuń, M. Szymańska, M. Sitarz, <i>Examination of doped zirconia-based layers deposited on metallic substrates, J. Mol. Struct. 2018, 1166, 321-325.</i>  | 20 | 2.120 | -              |
| 30. <b>A. Wajda*</b> , W. Goldmann, R. Detsch, A. Grünewald, A.R. Boccaccini*, M. Sitarz, Structural characterization and evaluation of antibacterial and angiogenic potential of gallium-containing melt-derived and gel-derived glasses from CaO-SiO <sub>2</sub> system, <i>Ceram. Int. 2018, 44(18), 22698-22709.</i> | 40 | 3.450 | Etiuda, NCN    |
| 31. P. Heraud, <b>K.M. Marzec</b> , Q.H. Zhang, W. S. Yuen, J. Carroll, B.R. Wood*, <i>Label-free in vivo Raman microspectroscopic imaging of the macromolecular architecture of oocytes, Sci. Rep. 2017, 7, 8945, 1-10.</i>  | 40 | 4.122 | -              |
| 32. M. Dulski*, <b>K.M. Marzec</b> , J. Kusz, I. Galuskin, K. Majzner, E. Galuskin, <i>Different route of hydroxide incorporation and thermal stability of new type of water clathrate: X-ray single crystal and Raman investigation, Sci. Rep. 2017, 7, 9046, 1-9.</i>   | 40 | 4.122 | -              |
| 33. <b>K. Bulat</b> , A. Rygula, E. Szafraniec, Y. Ozaki, M. Baranska*, <i>Live endothelial cells imaged by Scanning Near-field Optical Microscopy (SNOM): capabilities and challenges, J. Biophot. 2017, 10(6), 928-938.</i>   | 35 | 3.768 | -              |
| 34. <b>M. Kaczmarska</b> , D. Zydek, J. Wiklacz-Potoczny, M. Fornal, T. Gordzicki, E. Kochowska, K. Kozak, L. Gocal, W. Pohorecki, K. Matlak, J. Korecki, K. Burda, <i>Influence of very small doses of alpha radiation on the stability of erythrocytes, Microscopy. Res. Tech. 2017, 80 (1), 131-143.</i>               | 25 | 1.087 | -              |
| 35. E. Długoń, K. Pach, M. Gawęda, R. Jadach, <b>A. Wajda</b> , M. Leśniak, A. Benko, M. Dziadek, M. Sowa, W. Simka, M. Sitarz, <i>Anticorrosive ZrO<sub>2</sub> and ZrO<sub>2</sub>-SiO<sub>2</sub> layers on titanium substrates for biomedical applications, Surf. Coat. Tech. 2017, 331, 221-229.</i>                 | 35 | 2.906 | -              |
| 36. <b>K.M. Marzec*</b> , <b>J. Dybas</b> , S. Chłopicki, M. Baranska, <i>Resonance Raman in vitro detection and differentiation of the nitrite-induced hemoglobin adducts in functional human red blood cells, J. Phys. Chem. B 2016, 120, 12249–12260.</i>  | 30 | 3.177 | Go8 Fellowship |
| 37. K. Kochan, K. Chrząszcz, B. Szczur, E. Maślak, <b>J. Dybas</b> , <b>K.M. Marzec*</b> , <i>IR and Raman imaging of murine brain from control and ApoE/LDLR-/- mice with advanced atherosclerosis, Analyst 2016, 141, 5329–5338.</i>  | 40 | 3.885 | Sonata, NCN    |

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| 38. <b>J. Dybas, K.M. Marzec</b> , M. Z. Pacia, K. Kochan, K. Czamara, K. Chrabąszcz, E. Staniszewska-Slezak, K. Malek, M. Baranska, A. Kaczor*, <i>Raman spectroscopy as a sensitive probe of soft tissue composition – imaging of cross-sections of various organs vs. single spectra of tissue homogenates</i> , <b>Trends Anal. Chem.</b> <b>2016</b> , 85, 117–127.  | 50 | 7.487 | Sonata, NCN                       |
| 39. S. Talu, S. Stach, <b>M. Kaczmarska</b> , M. Fornal, T. Grodzicki, W. Pohorecki, K. Burda*, <i>Multifractal characterization of morphology of human red blood cells membrane skeleton</i> , <b>J. Microsc.</b> <b>2016</b> , 262(1), 59-72.   | 35 | 1.692 | NCN                               |
| 40. <b>M. Kaczmarska</b> , I. Habina, A. Orzechowska, K. Niemiec-Murzyn, M. Fornal, W. Pohorecki, K. Matlak, J. Korecki, T. Grodzicki, K. Burda*, <i>Influence of neutron radiation on the stability of the erythrocyte membrane and oxyhemoglobin formation – Petkau effect studies</i> , <b>Acta Phys. Pol. B</b> <b>2016</b> , 47 (2), 425-440.                        | 20 | 0.904 | NCN                               |
| 41. <b>A. Wajda*</b> , <b>K. Bulat</b> , M. Sitarz, <i>Structure and microstructure of the glasses from <math>NaCaPO_4-SiO_2</math> and <math>NaCaPO_4-SiO_2-AlPO_4</math> systems</i> , <b>J. Mol. Struct.</b> <b>2016</b> , 1126, 47-62.  | 20 | 1.753 | -                                 |
| 42. <b>A. Wajda</b> , M. Sitarz, <i>Structural and microstructural studies of zinc-doped glasses from <math>NaCaPO_4-SiO_2</math> system</i> , <b>J. Non-Cryst. Solids</b> <b>2016</b> , 441, 66-73.  | 30 | 2.124 |                                   |
| 43. J. Suchanicz, V. Bovtun, E.M. Dutkiewicz, K. Konieczny, D. Sitko, K. Kluczecka, <b>A. Wajda</b> , A. Kalvane, A. Sternberg, <i>Dielectric, thermal and Raman spectroscopy studies of lead-free (<math>Na_{0.5}Bi_{0.5})_{1-x}Sr_xTiO_3</math> (<math>x = 0, 0.04</math> and <math>0.06</math>) ceramics</i> , <b>Phase Transit.</b> <b>2016</b> , 89(7-8), 856-862.   | 20 | 1.060 | -                                 |
| 44. M. Sitarz, M. Drajewicz, R. Jadach, E. Długoń, M. Lesniak, M. Reben, <b>A. Wajda</b> , M. Gawęda, B. Burtan-Gwizdała, <i>Optical and Mechanical Characterization of Zirconium Based Sol-Gel Coatings on Glass</i> , <b>Arch. Metall. Mater.</b> <b>2016</b> , 61(4), 1747-1752.   | 30 | 0.571 | -                                 |
| 45. <b>K.M. Marzec*</b> , A. Rygula, B.R. Wood, S. Chlopicki, M. Baranska, <i>High-resolution Raman imaging reveals spatial location of heme oxidation sites in single RBCs of dried smears</i> , <b>J. Raman Spectrosc.</b> <b>2015</b> , 46, 76–83.   | 30 | 2.395 | Sonata, NCN;<br>Go8<br>Fellowship |
| 46. T.P. Wrobel, <b>K.M. Marzec</b> , S. Chlopicki, E. Maślak, A. Jasztal, M. Franczyk-Żarów, I. Czyżyńska-Cichoń, T. Moszkowski, R.B. Kostogrys*, M. Baranska*, <i>Effects of low carbohydrate high protein (LCHP) diet on atherosclerotic plaque phenotype in ApoE/LDLR<sup>-/-</sup> mice: FT-IR and raman imaging</i> , <b>Sci. Rep.</b> <b>2015</b> , 5, 14002, 1–9. | 40 | 5.228 | Sonata, NCN                       |
| 47. <b>K.M. Marzec*</b> , K. Kochan, A. Fedorowicz, A. Jasztal, K. Chruszcz-Lipska, J.C. Dobrowolski, S. Chlopicki, M. Baranska, <i>Raman microimaging of murine lungs: insight into the vitamin A content</i> , <b>Analyst</b> <b>2015</b> , 140, 2171–2177.   | 40 | 4.033 | Sonata, NCN                       |

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| 48. <b>K.M. Marzec</b> , A. Ryguła, M. Gąsior-Głogowska, K. Kochan, K. Czamara, <b>K. Bulat</b> , K. Malek, A. Kaczor, M. Baranska*, <i>Vascular diseases investigated ex vivo by using Raman, FT-IR and other methods</i> , <b>Pharm. Rep.</b> <b>2015</b> , 67, 744–750.                             | 25 | 2.096 | -                                 |
| 49. K. Kochan, <b>K.M. Marzec</b> , E. Maślak, S. Chłopicki, M. Baranska*, <i>Raman spectroscopic studies of vitamin A content in the liver: a biomarker of healthy liver</i> , <b>Analyst</b> <b>2015</b> , 140, 2074–2079.   | 40 | 4.033 | Sonata, NCN                       |
| 50. A.B. Andrews*, D. Wang, <b>K.M. Marzec</b> , O.C. Mullins, K.B. Crozier, <i>Surface enhanced Raman spectroscopy of polycyclic aromatic hydrocarbons and molecular asphaltenes</i> , <b>Chem. Phys. Lett.</b> <b>2015</b> , 620, 139–143.   | 25 | 1.897 | -                                 |
| 51. D. Perez-Guaita, P. Héraud, <b>K.M. Marzec</b> , M. Guardia, M. Kiupel, B. R. Wood*, <i>Comparison of transfection and transmission FTIR imaging measurements performed on differentially fixed tissue sections</i> , <b>Analyst</b> <b>2015</b> , 140, 2376–2382.                                 | 40 | 4.033 | -                                 |
| 52. M. Roman, <b>K.M. Marzec</b> , E. Grzebelus, P.W. Simon, M. Baranska, R. Baranski*, <i>Composition and (in)homogeneity of carotenoid crystals in carrot cells revealed by high resolution Raman imaging</i> , <b>Spectrochim. Acta A: Mol. Biomol. Spectrosc.</b> <b>2015</b> , 136(C), 1395–1400. | 30 | 2.653 | -                                 |
| 53. <b>K.M. Marzec</b> , D. Perez-Guaita, M. de Veij, D. McNaughton, M. Baranska, M.W.A. Dixon, L. Tilley, B.R. Wood*, <i>Red blood cells polarize green laser light revealing hemoglobin's enhanced non-fundamental Raman modes</i> , <b>Chem. Phys. Chem.</b> <b>2014</b> , 15, 3963–3968.           | 35 | 3.419 | Sonata, NCN;<br>Go8<br>Fellowship |
| 54. <b>K.M. Marzec</b> , T. P. Wrobel, A. Ryguła, E. Maślak, A. Jasztal, A. Fedorowicz, S. Chłopicki, M. Baranska*, <i>Visualization of the biochemical markers of atherosclerotic plaque with the use of Raman, IR and AFM</i> , <b>J. Biophot.</b> <b>2014</b> , 7, 744–756.                         | 35 | 4.447 | -                                 |
| 55. A. Jaworska, K. Malek, <b>K.M. Marzec</b> , M. Baranska*, <i>An impact of the ring substitution in nicorandil on its adsorption on silver nanoparticles. SERS studies</i> , <b>Spectrochim. Acta A: Mol. Biomol. Spectrosc.</b> <b>2014</b> , 129, 624–631.  | 30 | 2.353 | -                                 |
| 56. E.V. Galuskin*, I.O. Galuskina, J. Kusz, T. Armbruster, <b>K.M. Marzec</b> , P. Dzierżanowski, M. Muraszko, <i>Vapnikite <math>Ca_3UO_6</math> – a new double perovskite mineral from pyrometamorphic larnite rocks</i> , <b>Mineral. Mag.</b> <b>2014</b> , 78, 571–581.                          | 25 | 2.026 | -                                 |
| 57. <b>K. Bulat</b> *, M. Sitarz, <b>A. Wajda</b> , <i>Influence of aluminium and boron ions on the crystallization of silicate-phosphate glasses from the <math>NaCaPO_4</math>-<math>SiO_2</math> system</i> , <b>J. Non-Cryst. Solids</b> <b>2014</b> , 401, 207–212.                               | 30 | 1.766 | Preludium,<br>NCN                 |

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| 59. K. Kochan, <b>K.M. Marzec</b> , K. Chruszcz-Lipska, A. Jasztal, E. Maślak, H. Musiolik, S. Chłopicki, M. Baranska*, <i>Pathological changes in the biochemical profile of the liver in atherosclerosis and diabetes assessed by RS</i> , <b>Analyst</b> <b>2013</b> , 138, 3885–3890.   | 40 | 3.906 | -                 |
| 60. <b>K.M. Marzec</b> , A. Jaworska, K. Malek, A. Kaczor, M. Baranska*, <i>Substituent effect on structure and surface activity of N-methylpyridinium salts (FT-IR, FT-RS, SERS and DFT)</i> , <b>J. Raman Spectrosc.</b> <b>2013</b> , 44, 155–165.   | 30 | 2.519 | -                 |
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| 64. M. Sitarz*, <b>K. Bulat</b> , <b>A. Wajda</b> , M. Szumera, <i>Direct crystallization of silicate-phosphate glasses of NaCaPO<sub>4</sub>–SiO<sub>2</sub> system</i> , <b>J. Therm. Anal. Calorim.</b> <b>2013</b> , 113(3), 1363–1368  | 20 | 2.206 | Preludium,<br>NCN |
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| 67. T. Armbruster*, B. Lazic, I.O. Galuskina, E.V. Galuskin, E. Gnos, <b>K.M. Marzec</b> , V.M. Gazeev, <i>Trabzonite Ca<sub>4</sub>[Si<sub>3</sub>O<sub>9</sub>(OH)]OH : Crystal structure, revised formula, new occurrence, and relation to killalaite</i> , <b>Mineral. Mag.</b> <b>2012</b> , 76, 455–472.  | 20 | 2.219 | -                 |
| 68. M. Sitarz*, <b>K. Bulat</b> , M. Szumera, <i>Influence of modifiers and glass-forming ions on the crystallization of glasses of the NaCaPO<sub>4</sub>–SiO<sub>2</sub> system</i> , <b>J. Therm. Anal. Calorim.</b> <b>2012</b> , 109(2), 577–584.  | 25 | 1.982 | Preludium,<br>NCN |

|   |    |       |                               |
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| 71. <b>K.M. Marzec</b> , B. Gawel, K.K. Zborowski, W. Lasocha, L.M. Proniewicz*, K. Malek*, <i>Insight into coordination of dilead unit by molecules of 4-thiazolidinone-2-thione. Structural and computational studis</i> , <b>Inorg. Chim. Act.</b> <b>2011</b> , 376, 581–589. | 27 | 1.846 | -                             |
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| 73. W. Jastrzebski*, M. Sitarz, M. Rokita, <b>K. Bulat</b> , <i>Infrared spectroscopy of different phosphates structures</i> , <b>Spectrochim. Acta A: Molecular and Biomolecular Spectroscopy</b> <b>2011</b> , 79(4), 722-727.  | 27 | 2.098 | -                             |
| 74. <b>M. Kaczmarska</b> , Z. Kopyscinska, M. Fornal, T. Gordzicki, K. Matlak, J. Korecki, K. Burda*, <i>Effects of low doses of gamma rays on the stability of normal and diabetic erythrocytes</i> , <b>Acta Biochim. Pol.</b> <b>2011</b> , 58 (4), 489-96.                    | 15 | 1.491 |                               |
| 75. M. Sitarz*, <b>K. Bulat</b> , D. Suka, <i>Influence of modifiers and glass forming ions on the bioactivity of glasses in the NaCaPO<sub>4</sub>–SiO<sub>2</sub> system</i> , <b>Phys. Chem. Glasses - B</b> <b>2011</b> , 52(3), 115-132.                                     | 27 | 0.628 | -                             |
| 76. <b>K.M. Marzec</b> , I. Reva, R. Fausto, K. Malek, L. M. Proniewicz*, <i>Conformational Space and Photochemistry of α-Terpinene</i> , <b>J. Phys. Chem. A</b> <b>2010</b> , 114, 5526–5536.   | 32 | 2.732 | Grant<br>Promotorski<br>MNiSW |
| 77. M. Sitarz*, <b>K. Bulat</b> , M. Szumera, <i>Aluminium influence on the crystallization and bioactivity of silico-phosphate glasses from NaCaPO<sub>4</sub>-SiO<sub>2</sub> system</i> , <b>J. Non-Cryst. Solids</b> <b>2010</b> , 356(4-5), 224-231.                         | 32 | 1.483 | -                             |
| 78. <b>K.M. Marzec</b> , B. Gawel, W. Lasocha, L.M. Proniewicz, K. Malek*, <i>Interaction model between rhodanine and silver species on a nanocolloidal surface and in the solid state</i> , <b>J. Raman Spectrosc.</b> <b>2009</b> , 41, 543–552.                                | 32 | 3.137 | -                             |

**B) Monographs, scientific publications in international and national journals other than those from the JRC database, listed in IIA**

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2. K. Majzner, K. Czamara, M. Z. Pacia, **J. Dybas**, E. Bik, K. Chrabaszcza, E. Wiercigroch, A. Dorosz, A. Wislocka, **K. M. Marzec**, K. Malek, M. Baranska, *Vibrational imaging of proteins: changes in the tissues and cells in the lifestyle disease studies*, Chapter 7 in *Vibrational Spectroscopy in Protein Research* Yukihiko Ozaki, Małgorzata Baranska, Igor Lednev, Bayden Wood (Eds.), **Elsevier 2020**, 177-218.
3. A. Kaczor, **K.M. Marzec**, K. Majzner, K. Kochan, M.Z. Pacia, M. Baranska\*, *Raman Imaging of Biomedical Samples*, chapter 14 w *Confocal Raman Microscopy*, J. Toporski, T. Dieing, O. Hollricher (Eds.), **Springer Series in Surface Sciences 2018**, 307–346.
4. D. Perez-Guaita, M. de Veij, **K.M. Marzec**, A.R.D. Almohammed, D. McNaughton, A.J. Hudson\*, B.R. Wood\*, *Resonance Raman and UV–Visible Microscopy Reveals that Conditioning Red Blood Cells with Repeated Doses of Sodium Dithionite Increases Haemoglobin Oxygen Uptake*, **Chemistry Select 2017**, 2 (11), 3342–3346 (Go8 Fellowship).
5. T.P. Wrobel, A. Fedorowicz, L. Mateuszuk, E. Maślak, A. Jasztal, S. Chłopicki, **K.M. Marzec\***, *Vibrational microspectroscopy for analysis of atherosclerotic arteries*, rozdział 17 w *Optical Spectroscopy and Computational Methods in Biology and Medicine*, M. Baranska (Ed.), **Springer Series: Challenges and Advances in Computational Chemistry and Physics 2013**, 505–536 (ISBN 978–94–007–7831–3).

❖ NATIONAL:

6. English version:  
**K.M. Marzec\***, J. Dybas, *Resonance Raman scattering spectroscopy in Vibrational spectroscopy. From theory to practice*. red. K. Malek, **Polish Scientific Publisher (PWN SA)**, 2016, Warszawa, str. 46–52 (ISBN: 978–83–01–18885–6).  
Polish version:  
**K.M. Marzec\***, J. Dybas, *Spektroskopia rezonansowego rozpraszania ramanowskiego w Spektroskopii oscylacyjnej. Od teorii do praktyki*. red. K. Malek, **Polish Scientific Publisher (PWN SA)**, 2016, Warszawa, str. 47–53 (ISBN: 978–83–01–18826–9).
7. English version:  
K. Malek\*, **K.M. Marzec**, *An effect of molecular symmetry and isotopic substitution on IR and Raman spectra of chloromethane derivatives* in *Vibrational spectroscopy. From theory to practice*. red. K. Malek, **Polish Scientific Publisher (PWN SA)**, 2016, Warszawa, str. 85–88 (ISBN: 978–83–01–18885–6).  
Polish version:

K. Malek\*, **K.M. Marzec**, *Symetria molekuły i wpływ podstawienia izotopowego w widmach IR i ramanowskich chloropochodnych metanu w Spektroskopii oscylacyjnej. Od teorii do praktyki.* red. K. Malek, **Polish Scientific Publisher (PWN SA)**, 2016, Warszawa, str. 86–90 (ISBN: 978–83–01–18826–9).

My contribution to this work includes formulating of the research goals, cooperation during the data analysis and preparation of the manuscript. I estimate my percentage share at 40%.

8. English version:

J. Dybas, A. Chmura–Skirlińska, **K.M. Marzec\***, *Resonance Raman scattering spectroscopy in hemoglobin structure studies in Vibrational spectroscopy. From theory to practice.* red. K. Malek, **Polish Scientific Publisher (PWN SA)**, 2016, Warszawa, str. 185–192 (ISBN: 978–83–01–18885–6).

Polish version:

J. Dybas, A. Chmura–Skirlińska, **K.M. Marzec\***, *Spektroskopia rezonansowego rozpraszania ramanowskiego w badaniu struktury hemoglobiny w Spektroskopii oscylacyjnej. Od teorii do praktyki.* red. K. Malek, **Polish Scientific Publisher (PWN SA)** 2016, str. 191–198 (ISBN: 978–83–01–18826–9).

9. **A. Wajda\***, E. Długoń, M. Sitarz, *Direct crystallization of silicate-phosphate glass from NaMgPO<sub>4</sub>-SiO<sub>2</sub> system*, **Inżynieria Biomateriałów (ang. Engineering of Biomaterials)** 2016, 19 (138), 121.

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11. **A. Wajda\***, M. Sitarz, Wpływ jonów antybakterijnych na właściwości termiczne szkieł krzemianowo-fosforanowych, **Materiały Ceramiczne (ang. Ceramic Materials)** 2016, 68 (3), 280.

12. **A. Wajda\***, **K. Bułat**, M. Sitarz, *Wpływ procesu kierowanej krystalizacji na bioaktywność szkieł krzemianowo-fosforanowych z układu NaCaPO<sub>4</sub>-SiO<sub>2</sub>*, **Materiały Ceramiczne (ang. Ceramic Materials)** 2015, 67 (2), 127–131.

13. **K. Bułat\***, M. Sitarz, J. Pszczoła, **A. Wajda**, *Krystalizacja szkieł krzemianowo-fosforanowych z układu NaCaPO<sub>4</sub>-SiO<sub>2</sub>-BPO<sub>4</sub>*, **Materiały Ceramiczne (ang. Ceramic Materials)** 2014, 66, 165–169.

14. M. Sitarz\*, **K. Bułat**, J. Pszczoła, *Krystalizacja szkieł krzemianowo-fosforanowych z układu NaCaPO<sub>4</sub>-SiO<sub>2</sub>*, **Materiały Ceramiczne (ang. Ceramic Materials)** 2012, 3, 364.

15. A. Jaworska, K. Malek, **K.M. Marzec**, M. Baranska\*, *Analiza amidu kwasu 3-pirydylokarboksylowego (nikotynamidu) i jego pochodnych za pomocą spektroskopii Ramana w Na pograniczu chemii i biologii (ang. At the threshold of chemistry and biology)*, T. XXVII, red. H. Koroniak, J. Barciszewski, **Scientific Publisher of the Adam Mickiewicz University**, 2011, Poznań, str. 19–28 (ISBN 978–83–232–2368–9).

16. **K. Bulat\***, M. Sitarz, M. Gajewicz, *Mikrostruktura szkieł krzemianowo-fosforanowych z układu NaMgPO<sub>4</sub>-SiO<sub>2</sub>*, **Materiały Ceramiczne (ang. Ceramic Materials)** 2011, 63, 391-395.
17. **K. Bulat\***, M. Sitarz, M. Gajewicz, Z. Olejniczak, *Wpływ jonów B<sup>3+</sup> na strukturę i teksturę szkieł krzemianowo-fosforanowych*, **Materiały Ceramiczne (ang. Ceramic Materials)** 2011, 63, 386-390.
18. **K.M. Marzec**, M. Murowana, K. Turnau, L.M. Proniewicz\*, M. Baranska\*, *Analiza zarodników arbuskularnych grzybów mikoryzowych z rodzaju Glomus za pomocą spektroskopii Ramana*, w *Na pograniczu Biologii i Chemii (ang. At the threshold of chemistry and biology)*, T. XXIII, red. H. Koroniak, J. Barciszewski, **Scientific Publisher of the Adam Mickiewicz University , 2009**, Poznań, str. 99–105 (ISBN 978–83–232–2114–2).
19. **K.M. Marzec**, L.M. Proniewicz\*, *Charakterystyka wybranych monoterpenoidów – spektroskopia oscylacyjna i DFT*, *Na pograniczu Biologii i Chemii (ang. At the threshold of chemistry and biology)*, T. XXI, red. H. Koroniak, J. Barciszewski, **Scientific Publisher of the Adam Mickiewicz University, 2008**, Poznań, str. 161– 172 (ISBN 978–83–232–1968–2).
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21. **K.M. Marzec**, K. Malek, G. Schroeder, L.M. Proniewicz\*, *Structural studies of rhodanine and its derivatives in means of vibrational, NMR spectroscopies and DFT*, w *Na pograniczu chemii i biologii (ang. At the threshold of chemistry and biology)*, T. XIX, red. H. Koroniak, J. Barciszewski, **Scientific Publisher of the Adam Mickiewicz University, 2007**, str. 105–116 (ISBN 978–83–232184–5–6).

❖ POST–CONFERENCE PUBLICATIONS:

1. **K.M. Marzec**, B. Gaweł, W. Łasocha, L.M. Proniewicz\*, K. Malek\*, *Vibrational characterization of binding model of 4-thiazolidinone–2-thione with Pb<sub>2</sub><sup>2+</sup> species*, Proceedings of XXII ICORS, AIP Conf. Proc. 2010, Vol. 1267 Issue 1, 586–587.
2. **K.M. Marzec**, I. Reva, R. Fausto, K. Malek, L. M. Proniewicz\*, *Vibrational studies on conformational preferences of terpinene isomers in the equilibrium gas and condensed phases*, Proceedings of XXII ICORS, AIP Conf. Proc. 2010, Vol. 1267 Issue 1, 1145–1146.
3. K. Malek\*, **K.M. Marzec**, K. Gebski, A. Kaczor, *Adsorption of rhodanine derivatives on silver and gold nanoparticle surfaces*, Proceedings of XXII ICORS, AIP Conf. Proc. 2010, Vol. 1267 Issue 1, 1025–1026.

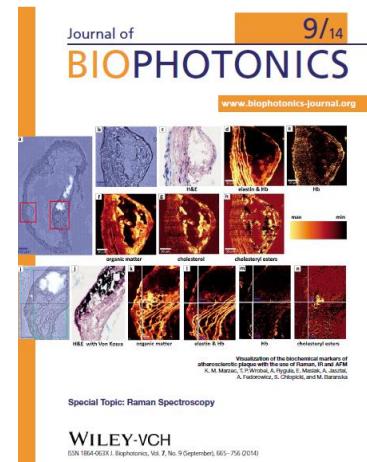
4. **K.M. Marzec**, M. Murowana, K. Turnau, L.M. Proniewicz\*, M. Baranska\*, *Identification of Arbuscular Mycorrhizal Fungal (AMF) spore components*, **2010**, *AIP Conf. Proc.* 1267, 340–341.
5. E. Podstawka\*, G. Niaura, **K.M. Marzec**, Y. Kim, L.M. Proniewicz, *Potential-dependent characterization of bombesin adsorbed on roughened Ag, Au, and Cu electrode surfaces*, **2010**, *AIP Conf. Proc.* 1267, 1029–1030.
6. **K. Bulat**, M. Sitarz\*, *Structure of silicate-phosphate glasses studied by FTIR methods*, **Proc. XXII Int. Congr. Glass 2010**

### C) Cover pages

1. The author of 2 cover pages:



**K.M. Marzec**, D. Perez-Guaita, M. de Veijj, D. McNaughton, M. Baranska, M.W.A. Dixon, L. Tilley, B.R. Wood, *Red blood cells polarize green laser light revealing hemoglobin's enhanced non-fundamental Raman modes*, *Chem. Phys. Chem.*, 2014, 15(18):3963–8.



**K.M. Marzec**, T.P. Wrobel, A. Ryguła, E. Maślak, A. Jasztal, A. Fedorowicz, S. Chłopicki, M. Baranska, *Visualization of the biochemical markers of atherosclerotic plaque with the use of Raman, IR and AFM*, *J. Biophotonics*, 2014, 7(9), 744–756.