

Scientific publications from the Journal Citation Reports database (JRC)

	MNiSW	IF	Finance from
1. <b>J. Dybas</b> , T. Chiura, <b>K.M. Marzec</b> , P.J. Mak, <i>Probing Heme Active Sites of Hemoglobin in Functional Red Blood Cells Using Resonance Raman Spectroscopy</i> , <b>J. Phys. Chem. B</b> <b>2021</b> , 125, 3556–3565.	140	2.857	Lider, NCBiR Preludium, NCN
2. <b>A. Zimna</b> , <b>M. Kaczmarska*</b> , <b>E. Szczesny-Malysiak</b> , <b>A. Wajda</b> , <b>K. Bulat</b> , <b>F. C. Alcicek</b> , M. Zygmunt, T. Sacha, <b>K.M. Marzec*</b> , <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(6), 2885.	140	4.556	Lider, NCBiR
3. <b>A. Blat</b> , <b>T. Stepanenko</b> , <b>K. Bulat</b> , <b>A. Wajda</b> , <b>J. Dybas</b> , T. Mohaissen, <b>F.C. Alcicek</b> , <b>E. Szczesny-Malysiak</b> , K. Malek, A. Fedorowicz, <b>K.M. Marzec*</b> , <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
4. <b>J. Dybas</b> , <b>K. Bulat</b> , <b>A. Blat</b> , T. Mohaissen, <b>A. Wajda</b> , M. Mardyla, <b>M. Kaczmarska</b> , M. Franczyk-Zarow, K. Malek, S. Chlopicki, <b>K.M. Marzec*</b> , <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
5. <b>E. Szczesny-Malysiak</b> , <b>J. Dybas</b> , <b>A. Blat</b> , <b>K. Bulat</b> , K. Kuś, <b>M. Kaczmarska</b> , <b>A. Wajda</b> , K. Malek, S. Chlopicki, <b>K.M. Marzec*</b> , <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
6. <b>J. Dybas</b> , M. J. Bokamper, <b>K.M. Marzec*</b> , 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 Etiuda, NCN
7. <b>K. Chrabaszczyk</b> , T. Meyer, H. Bae, M. Schmitt, A. Jaształ, M. Smeda, M. Stojak, J. Popp, <b>K. Malek</b> , <b>K.M. Marzec*</b> , <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, MNiSW
8. <b>M. Kaczmarska</b> , M. Grosicki, <b>K. Bulat</b> , <b>M. Mardyla</b> , <b>E. Szczesny-Malysiak</b> , <b>A. Blat</b> , <b>J. Dybas</b> , T. Sacha, <b>K.M. Marzec*</b> , <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
9. 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, <b>J. Dybas</b> , G. Eppe, G. Falgayrac, H. Gebavi, K. Faulds, H. Gebavi, F. Giorgis, R. Goodacre, D. Graham, P. La Manna, S.	140	6.785	

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. 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.			
10. E. Bik, M. Ishigaki, <b>A. Blat</b> , A. Jaształ, 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	
11. <b>K. Bulat</b> , <b>J. Dybas</b> , <b>M. Kaczmarek</b> , A. Rygula, A.Jaształ, <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
12. K. Chrabaszczyk, K. Kaminska, K. Augustyniak, M. Kujdowicz, M. Smeda, A. Jaształ, 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, MNiSW
13. <b>A. Blat</b> , <b>J. Dybas</b> , K. Chrabaszczyk, <b>K. Bulat</b> , A. Jaształ, <b>M. Kaczmarek</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
14. E. Wiercigroch, A. Kisielewska, <b>A. Blat</b> , A. Wislocka, I. Piwoński, K. Malek*, <i>Photocatalytic 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	
15. <b>A. Blat</b> , E. Wiercigroch, M. Smeda, A. Wislocka, S. Chłopicki, 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	
16. <b>A. Blat</b> , <b>J. Dybas</b> , <b>M. Kaczmarek</b> , K. Chrabaszczyk, <b>K. Bulat</b> , R.B. Kostogryś, 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
17. K. Augustyniak, K. Chrabaszczyk, A. Jaształ, 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, MNiSW

18. <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 gel-derived glasses from CaO-SiO<sub>2</sub> system</i> , <b>J. Non-Cryst. Solids</b> <b>2019</b> , 511, 86-99.	70	2.929	Etiuda, NCN
19. K. Chrabąszcz, K. Kochan, A. Fedorowicz, A. Jaształ, E. Buczek, L. S. Leslie, R. Bhargava, K. Malek, S. Chlopicki, <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</i> , <b>Analyst</b> <b>2018</b> , 143, 2042-2050.	40	3.976	Juventus Plus, MNiSW
20. <b>J. Dybas</b> , P. Berkowicz, B. Proniewski, K. Dziejczak-Kocurek, J. Stanek, M. Baranska, S. Chlopicki*, <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</i> , <b>Analyst</b> <b>2018</b> , 143, 4335-4346.	40	3.976	Lider, NCBiR
21. Chrabąszcz, A. Jaształ, M. Smeda, B. Zieliński, A. Blat, M. Diem, S. Chlopicki, 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</i> , <b>Biochim. Biophys. Acta- Mol. Basis Dis.</b> <b>2018</b> , 1864, 3574-3584.	40	4.328	Juventus Plus, MNiSW
22. 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</i> , <b>Chem. Rev.</b> <b>2018</b> , 118, 5330-5358.	50	54.301	Opus, NCN
23. <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</i> , <b>Analyst</b> <b>2018</b> , 143, 3489-3498.	40	3.976	Opus, NCN
24. 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</i> , <b>Sci. Rep.</b> <b>2018</b> , 8, 2691, 1-9.	40	4.011	-
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26. 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</i> , <b>J. Am. Ceram. Soc.</b> <b>2018</b> , 101(1), 440-449.	45	3.094	-
27. M. Gawęda, P. Jeleń, E. Długoń, <b>A. Wajda</b> , M. Leśniak, W. Simka, M. Sowa, R. Detsch, A. Boccaccini, M. Sitarz, <i>Bioactive</i>	45	3.094	-

<i>layers based on black glasses on titanium substrates</i> , <b>J. Am. Ceram. Soc.</b> <b>2018</b> , 101(2), 590-601.			
28. <b>A. Wajda*</b> , M. Sitarz, <i>Structural and microstructural comparison of bioactive melt-derived and gel-derived glasses from CaO-SiO<sub>2</sub> binary system</i> , <b>Ceram. Int.</b> <b>2018</b> , 44(8), 8856-8863.	40	3.450	Etiuda, NCN
29. 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</i> , <b>J. Am. Ceram. Soc.</b> <b>2018</b> , 101(7), 3246.	45	3.094	-
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31. <b>A. Wajda*</b> , W. Goldmann, R. Detsch, A. Grünewald, A.R. Boccaccini*, M. Sitarz, <i>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> , <b>Ceram. Int.</b> <b>2018</b> , 44(18), 22698-22709.	40	3.450	Etiuda, NCN
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34. <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</i> , <b>J. Biophot.</b> <b>2017</b> , 10(6), 928-938.	35	3.768	-
35. <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</i> , <b>Microscopy. Res. Tech.</b> <b>2017</b> , 80 (1), 131-143.	25	1.087	-
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37. <b>K.M. Marzec*</b> , <b>J. Dybas</b> , S. Chlopicki, M. Baranska, <i>Resonance Raman in vitro detection and differentiation of the nitrite-induced hemoglobin adducts in functional human red blood cells</i> , <b>J. Phys. Chem. B</b> <b>2016</b> , 120, 12249–12260.	30	3.177	Go8 Fellowship

38. K. Kochan, K. Chrabaszcz, B. Szczur, E. Maślak, <b>J. Dybas, K.M. Marzec*</b> , <i>IR and Raman imaging of murine brain from control and ApoE/LDLR<sup>-/-</sup> mice with advanced atherosclerosis</i> , <b>Analyst</b> <b>2016</b> , 141, 5329–5338.	40	3.885	Sonata, NCN
39. <b>J. Dybas, K.M. Marzec</b> , M. Z. Pacia, K. Kochan, K. Czamara, K. Chrabaszcz, E. Staniszevska–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
40. 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
41. <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
42. <b>A. Wajda*</b> , <b>K. Bulat</b> , M. Sitarz, <i>Structure and microstructure of the glasses from NaCaPO<sub>4</sub>–SiO<sub>2</sub> and NaCaPO<sub>4</sub>–SiO<sub>2</sub>–AlPO<sub>4</sub> systems</i> , <b>J. Mol. Struct.</b> <b>2016</b> , 1126, 47-62.	20	1.753	-
43. <b>A. Wajda</b> , M. Sitarz, <i>Structural and microstructural studies of zinc-doped glasses from NaCaPO<sub>4</sub>–SiO<sub>2</sub> system</i> , <b>J. Non-Cryst. Solids</b> <b>2016</b> , 441, 66-73.	30	2.124	
44. J. Suchanicz, V. Bovtun, E.M. Dutkiewicz, K. Konieczny, D. Sitko, K. Kluczevska, <b>A. Wajda</b> , A. Kalvane, A. Sternberg, <i>Dielectric, thermal and Raman spectroscopy studies of lead-free (Na<sub>0.5</sub>Bi<sub>0.5</sub>)<sub>1-x</sub>Sr<sub>x</sub>TiO<sub>3</sub> (x = 0, 0.04 and 0.06) ceramics</i> , <b>Phase Transit.</b> <b>2016</b> , 89(7-8), 856-862.	20	1.060	-
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47. T.P. Wrobel, <b>K.M. Marzec</b> , S. Chlopicki, E. Maślak, A. Jaształ, M. Franczyk–Żarów, I. Czyżyńska–Cichoń, T. Moszkowski, R.B. Kostogryś*, 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

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49. <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	-
50. K. Kochan, <b>K.M. Marzec</b> , E. Maślak, S. Chlopicki, 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
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54. <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; Go8 Fellowship
55. <b>K.M. Marzec</b> , T. P. Wrobel, A. Ryguła, E. Maślak, A. Jaształ, A. Fedorowicz, S. Chlopicki, 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	-
56. 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	-
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58. <b>K. Bulat*</b> , M. Sitarz, <b>A. Wajda</b> , <i>Influence of aluminium and boron ions on the crystallization of silicate-phosphate glasses</i>	30	1.766	Preludium, NCN

<i>from the NaCaPO<sub>4</sub>-SiO<sub>2</sub> system</i> , <b>J. Non-Cryst. Solids</b> <b>2014</b> , 401, 207-212.			
59. A. Ryguła, K. Majzner, <b>K.M. Marzec</b> , A. Kaczor, M. Pilarczyk, M. Baranska*, <i>Raman spectroscopy of proteins: a review</i> , <b>J. Raman Spectrosc.</b> <b>2013</b> , 44, 1061–1076.	30	2.519	-
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64. <b>M. Kaczmarska</b> , M. Fornal, F.H. Messerli, J. Korecki, T. Grodzicki, K. Burda*, <i>Erythrocyte membrane properties in patients with essential hypertension</i> , <b>Cell Biochem. Biophys.</b> <b>2013</b> , 67 (3), 1089-102.	25	2.380	NCN
65. 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, NCN
66. A. Jaworska, K. Malek, <b>K.M. Marzec</b> , M. Baranska*, <i>Nicotinamide and trigonelline studied with surface-enhanced FT–Raman spectroscopy</i> , <b>Vib. Spec.</b> <b>2012</b> , 66, 469–476.	25	1.747	-
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69. M. Sitarz*, <b>K. Bulat</b> , M. Szumera, <i>Influence of modifiers and glass-forming ions on the crystallization of glasses of the</i>	25	1.982	Preludium, NCN

<i>NaCaPO<sub>4</sub>-SiO<sub>2</sub> system</i> , <b>J. Therm. Anal. Calorim.</b> <b>2012</b> , 109(2), 577-584.			
70. M. Sitarz*, <b>K. Bulat</b> , Z. Olejniczak, <i>Structure and microstructure of glasses from a NaCaPO<sub>4</sub>-SiO<sub>2</sub>-BPO<sub>4</sub> system</i> , <b>Vib. Spectrosc.</b> <b>2012</b> , 61, 72-77.	25	1.747	Preludium, NCN
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72. <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 studies</i> , <b>Inorg. Chim. Act.</b> <b>2011</b> , 376, 581-589.	27	1.846	-
73. <b>K.M. Marzec</b> , I. Reva, R. Fausto*, L. M. Proniewicz*, <i>Comparative Matrix Isolation Infrared Spectroscopy Study of 1,3- and 1,4-Diene Monoterpenes</i> , <b>J. Phys. Chem. A</b> <b>2011</b> , 115 (17), 4342-4353.	35	2.946	Grant Promotorski MNiSW
74. 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	-
75. <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	
76. 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	-
77. <b>K.M. Marzec</b> , I. Reva, R. Fausto, K. Malek, L. M. Proniewicz*, <i>Conformational Space and Photochemistry of <math>\alpha</math>-Terpinene</i> , <b>J. Phys. Chem. A</b> <b>2010</b> , 114, 5526-5536.	32	2.732	Grant Promotorski MNiSW
78. 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	-
79. <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**

❖ **INTERNATIONAL:**

1. B.R. Wood, K. Kochan, **K.M. Marzec**, *Resonance Raman spectroscopy of hemoglobin in red blood cells*, Chapter 13 in *Vibrational Spectroscopy in Protein Research* Yukihiro Ozaki, Malgorzata Baranska, Igor Lednev, Bayden Wood (Eds.), **Elsevier 2020**, 375-414.
2. K. Majzner, K. Czamara, M. Z. Pacia, **J. Dybas**, E. Bik, K. Chrabaszcz, 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* Yukihiro Ozaki, Malgorzata 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–Guita, 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. Jaształ, S. Chlopicki, **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 Spektroskopia oscylacyjna. 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 molekuly i wpływ podstawienia izotopowego w widmach IR i ramanowskich chloropochodnych metanu* w *Spektroskopia oscylacyjna. 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).

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

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10. **A. Wajda\***, M. Sitarz, Charakterystyka szkieł pochodzenia żelowego z układu binarnego CaO-SiO<sub>2</sub> zawierających jony miedzi, **Materiały Ceramiczne (ang. Ceramic Materials)** 2016, 68 (3), 280.

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

12. **A. Wajda\***, **K. Bulat**, 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. Bulat\***, 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. Bulat**, 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  $NaMgPO_4-SiO_2$* , **Materiały Ceramiczne (ang. Ceramic Materials)** 2011, 63, 391–395.
17. **K. Bulat\***, M. Sitarz, M. Gajewicz, Z. Olejniczak, *Wpływ jonów  $B^{3+}$  na strukturę i teksturę szkieł krzemianowo-fosforanowych*, **Materiały Ceramiczne (ang. Ceramic Materials)** 2011, 63, 386–390.
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20. **K.M. Marzec**, K. Malek, L.M. Proniewicz\*, *Rodanina i jej pochodne – zastosowanie i kierunek badań, 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, Poznań, str. 97–104 (ISBN 978–83–232184–5–6).
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).

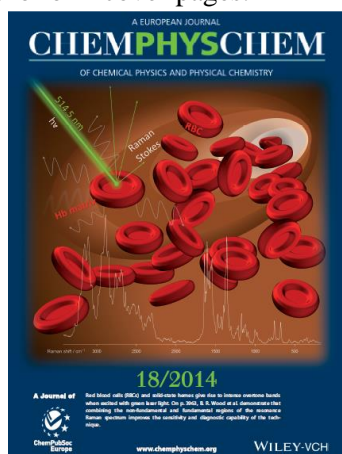
❖ **POST-CONFERENCE PUBLICATIONS:**

1. **K.M. Marzec**, B. Gawęł, W. Łasocha, L.M. Proniewicz\*, K. Malek\*, *Vibrational characterization of binding model of 4-thiazolidinone–2-thione with  $Pb_2^{2+}$  species*, Proceedings of XXII ICORS, AIP Conf. Proc. 2010, Vol. 1267 Issue 1, 586–587.

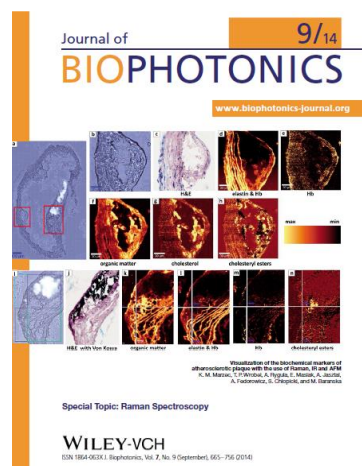
2. **K.M. Marzec**, I. Reva, R. Fausto, K. Malek, L. M. Proniewicz\*, *Vibrational studies on conformational preferences of terpinene isomers in the equilibrium gas and condensed phases*, Proceedings of XXII ICORS, AIP Conf. Proc. 2010, Vol. 1267 Issue 1, 1145–1146.
3. K. Malek\*, **K.M. Marzec**, K. Gebiski, 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. Cong. Glass 2010**

### C) Cover pages

1. The author of 2 cover pages:



**K.M. Marzec**, D. Perez–Guita, M. de Veij, 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. Jaształ, A. Fedorowicz, S.Chlopicki, 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.