

**Lista publikacji studentów fizyki  
Uniwersytetu Pedagogicznego w Krakowie  
w latach 2014-2019 (do trzech lat po ukończeniu studiów)**

**Rok 2019**

K. Bąk, M. Bąk, **J. Gatlik**, A. Błachowski

*Oscillating redox conditions in the Middle–Late Jurassic Alpine Tethys: Insights from selected geochemical indices and  $^{57}\text{Fe}$  Mössbauer spectroscopy*  
Palaeogeography, Palaeoclimatology, Palaeoecology, accepted (2019)

**J. Gatlik**, K. Komędera, A. Błachowski, M. Rakociński,

*Spektroskopia Mössbauera  $^{57}\text{Fe}$  w analizie paleośrodowiskowych warunków redox dewońskiego kryzysu Hangenberg,*  
45. Zjazd Fizyków Polskich, Kraków, 2019

A. Błachowski, K. Komędera, **J. Gatlik**, J. Żukrowski, Z. Bukowski,

*Magnetyzm i nadprzewodnictwo w związkach na bazie  $\text{EuFe}_2\text{As}_2$  - badania metodą spektroskopii Mössbauera,*  
45. Zjazd Fizyków Polskich, Kraków, 2019

K. Komędera, **J. Gatlik**, A. Błachowski, J. Żukrowski, T.J. Sato, M. Babij, Z. Bukowski,  
*Interplay of magnetism, nematicity and superconductivity in '122' iron-pnictides studied by Mössbauer spectroscopy*

XIX Krajowa Konferencja Nadprzewodnictwa, Bronisławów, 2019

K. Komędera, **J. Gatlik**, A. Błachowski, J. Żukrowski, D. Rybicki, M. Babij, Z. Bukowski,  
*Why is  $\text{Eu}(\text{Fe}_{1-x}\text{Ni}_x)_2\text{As}_2$  not a superconductor? -  $^{57}\text{Fe}$  and  $^{151}\text{Eu}$  Mössbauer study,* XIX

Krajowa Konferencja Nadprzewodnictwa, Bronisławów 2019

K. Komędera, **J. Gatlik**, A. Błachowski, J. Żukrowski, Z. Bukowski, *Mössbauer study of  $\text{YFe}_2\text{Ge}_2$*

XIX Krajowa Konferencja Nadprzewodnictwa, Bronisławów, 2019

**Rok 2018**

**M. Podgórna**, M. Ptak, M. Chronik, I. Jankowska-Sumara, J. Piecha, and D. Zasada *The investigations of Phase Transitions in the  $(1-x)\text{PbZrO}_{3-x}\text{BiFeO}_3$  nanocrystals using differential scanning calorimetry and Raman spectroscopy*

Journal Of Applied Physics 124, 054102 (2018)

R. Radwański, D. Nałęcz, **S. Fedyk**, Z. Ropka

*Localized f Electron Aspect in Heavy-Fermion Intermetallic  $\text{YbRh}_2\text{Si}_2$*  Acta Physica Polonica A 133, 387-390 (2018)

N.-T.H. Kim-Ngan, Z. Tarnawski, M. Chrobak, S. Sowa, **A. Duda**, M. Paukov, V. Buturlim, L. Havela

*Superconducting Phase Transitions in mK temperature range in splat-cooled  $U_{0.85}Pt_{0.15}$  alloys.*

Physica B-Condensed Matter 536, 708-712 (2018)

N.-T.H. Kim-Ngan, L. Havela, M. Paukov, D. Drozdenko, P. Minarik, M. Chrobak, Z. Tarnawski, S. Sowa, M. Krupska, **A. Duda**

*Superconductivity in U-Pt system with low Pt concentrations ( $\leq 15$  at.%)* Physica C-Superconductivity and its Applications 546, 76-83 (2018)

Jung-Taek Hong, Byoung Wan Lee, Jae-Hyeon Ko, Irena Jankowska-Sumara, **Maria Podgórna**, Andrzej Majchrowski

*Effect of Sn substitution on the elastic anomalies and phase transition behaviors of antiferroelectric  $PbHfO_3$  single crystals studied by Brillouin scattering* Current Applied Physics 18, 642-647 (2018)

**J. Gatlik**, A. Błachowski, K. Komędera, M. Bąk, K. Bąk,

*$^{57}Fe$  Mössbauer spectroscopy of Jurassic silica-carbonate sedimentary rocks XII*

Ogólnopolskie Seminarium Spektroskopii Mössbauerowskiej OSSM-2018, Goniądz, 2018

**J. Gatlik**, A. Błachowski, K. Komędera, M. Bąk, K. Bąk,

*Analiza jurajskich skał krzemionkowo-węglanowych jednostki krizniańskiej w Tatrach metodą spektroskopii mössbauerowskiej  $^{57}Fe$*

Polska Konferencja Sedymentologiczna POKOS7, Góra Św. Anny, 2018

**J. Gatlik**, A. Błachowski, K. Komędera, M. Bąk, K. Bąk,

*Spektroskopia mössbauerowska  $^{57}Fe$  w badaniach skał osadowych*

Polska Konferencja Sedymentologiczna POKOS7, Góra Św. Anny, 2018

## **Rok 2017**

I. Jankowska-Sumara, **M. Podgórna**, A. Majchrowski, J. Żukrowski *Thermal analysis of phase transitions in  $PbZr_{1-x}Sn_xO_3$  antiferroelectric single crystals.* Journal of Thermal Analysis and Calorimetry 128, 713-719 (2017)

**Maria Podgórna**, Jan Żukrowski, Irena Jankowska-Sumara, Andrzej Majchrowski, Katarzyna Berent

*Peculiarities of antiferroelectric phase transitions in  $PbZr_{0.71}Sn_{0.29}O_3$  crystal by Mössbauer effect.*

Physica Status Solidi (B) 254, 1700137 (2017)

I. Jankowska-Sumara, D. Sitko, **M. Podgórna**, M. Pilch

*The electromechanical behavior of europium doped  $BaTiO_3$*

Journal of Alloys and Compounds 724, 703-710 (2017)

Irena Jankowska-Sumara, Jae-Hyeon Ko, **Maria Podgórna**, Soo Han Oh, Andrzej Majchrowski  
*Micro-Raman scattering and dielectric investigations of phase transitions behavior in the PbHf<sub>0.7</sub>Sn<sub>0.3</sub>O<sub>3</sub> single crystal*  
Journal of Applied Physics 122, 104104 (2017)

R. J. Radwanski, D. M. Nalecz, **S. S. Fedyk**, Z. Ropka  
*EuTiO<sub>3</sub>: the low-energy electronic structure of Eu<sup>2+</sup> from the specific heat* Materials Chemistry and Physics 186, 426–429 (2017)

T.V. Kruzina, **A.Yu. Tuluk**, V.M. Sidak, M.P. Trubitsyn, S.A. Popov, J. Suchanicz  
*Impedance spectra of the Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub> single crystals and ceramics* XXXXVI International Symposium DyProSo, Kraków 27-31 Aug. 2017. Book of Abstracts, p. 78 , 2017

**A. Gurgul**; W. Ogłóza; M. Żejmo  
*A preliminary results of allskypolarisation survey*  
KOŁOS Conference, 30.11 - 2.12.2017, Vihorlat Observatory Humenne, Słowacja

## Rok 2016

**S. Bachulski**, A. Baran, et al.  
*Mode identification in a pulsating subdwarf B star EPIC212707862 observed with K2* Acta Astronomica 66, 455 (2016)

W. Stawiński, O. Freitas, L. Chmielarz, A. Węgrzyn, **K. Komędera**, A. Błachowski, S. Figueiredo  
*The influence of acid treatments over vermiculite based material as adsorbent for cationic textile dyestuffs*  
Chemosphere 153, 115 – 129 (2016)

A. Błachowski, **K. Komędera**, K. Ruebenbauer, G. Cios, J. Żukrowski, R. Górnicki *Electric quadrupole interaction in cubic BCC  $\alpha$ -Fe*  
Journal of Alloys and Compounds 673, 420 – 425 (2016)

A.K. Jasek, **K. Komędera**, A. Błachowski, K. Ruebenbauer, H. Lochmajer, N.D. Zhigadlo, K. Rogacki  
*Change of the charge modulation during superconducting transition in SmFeAsO<sub>0.91</sub>F<sub>0.09</sub> seen by <sup>57</sup>Fe Mössbauer spectroscopy*  
Journal of Alloys and Compounds 658, 520 – 524 (2016)

**K. Komędera**, A.K. Jasek, A. Błachowski, K. Ruebenbauer, J. Żukrowski, A. Krztoń Maziopa, K. Conder  
*Structural disorder in Lix(C<sub>5</sub>H<sub>5</sub>N)<sub>y</sub>Fe<sub>2</sub>-zSe<sub>2</sub> and Cs<sub>x</sub>Fe<sub>2</sub>-zSe<sub>2</sub> superconductors studied by Mössbauer spectroscopy*  
Journal of Magnetism and Magnetic Materials 406, 244 – 250 (2016)

**K. Komędera**, A.K. Jasek, A. Błachowski, K. Ruebenbauer, A. Krztoń-Maziopa  
*Magnetic anisotropy in FeSb studied by  $^{57}\text{Fe}$  Mössbauer spectroscopy* Journal of Magnetism and Magnetic Materials 399, 221 – 227 (2016)

R.J. Radwanski, D.M. Nalecz, **S.S. Fedyk**, Z. Ropka  
*EuTiO<sub>3</sub>: the low-energy electronic structure of Eu<sup>2+</sup> from the specific heat* Materials Chemistry and Physics 186, 426-429 (2016)

Hanus, J. et al. (169 autorów , w tym **E. Kosturkiewicz**)  
*New and updated convex shape models of asteroids based on optical data from a large collaboration network*  
Astronomy & Astrophysics 586, id.A108, 24 pp.

Krupska, S. Sowa, **A. Duda**, N.-T. H. Kim-Ngan  
Characterization and Modification of Fe Thin Film Deposited on SiO<sub>2</sub>/Si(001) Proceedings of the International Conference Nanomaterials: Applications and Properties Vol. 5 No 1, 01PCSI12(2pp), 2016

**S. Bachulski**, A.S. Baran, M. Curyło  
*Searching for planets around sdB stars*  
Proceedings IAU Astronomy in Focus, XXIX General Assembly, 2015, vol. 29B, 497, 2016

## **Rok 2015**

Radwanski R. J., **Nalecz D. M.**, Krupska M., Piwowarczyk T., Ropka Z. *Really first principles calculations for CoF<sub>3</sub>*,  
Acta Physica Polonica A, 127, 391-393 (2015)

A.S. Baran, S., Zola, **A. Blokesz**, R.H. Ostensen, R. Silvotti  
*Detection of a planet in the sdB+M dwarf binary system 2M1938+4603*, Astronomy & Astrophysics, 577, 6 (2015) 35

Renata Bujakiewicz-Koronska, Ewa Markiewicz, **Dawid M. Nalecz**, Leonid Vasylechko, Maria Balanda, Magdalena Fitta, Ewa Juszyńska-Galazka, Anna Kalvane *Physical properties of (1-x)Ba<sub>0.95</sub>Pb<sub>0.05</sub>TiO<sub>3</sub>+xCo<sub>2</sub>O<sub>3</sub> (x=0, 0.1, 0.3, 0.5, 1.0, 2.0wt%) ceramics*  
Ceramics International, 41, 3983-3991 (2015)

A. Molak, Renata Bujakiewicz-Koronska, Z. Ujma, A. Leonarska, A. Szeremeta, I. Gruszka, **D.M. Nalecz**  
*Electric features of PZT 70/30 - BiMnO<sub>3</sub> solid solution ceramics*  
Journal of the European Ceramic Society, 35, 2513–2522 (2015)

**Karpierz M.**, Suchanicz J., Bujakiewicz-Koronska R., Sitko D., Niewiadomski A., Sokolowski M.  
*Dielectric and ferroelectric properties of 0.82K<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub>-0.18PbTiO<sub>3</sub> ceramic: effect of uniaxial pressure*  
Phase Transitions, 88, 5 (2015)

**M. Karpierz**, J. Suchanicz, K. Konieczny, D. Sitko, P. Marchet, **U. Lewczuk** *Thermal, Raman and dielectric study of 0.5K0.5Bi0.5TiO3–0.5PbTiO3 ceramics* Phase Transitions, 88, 9 (2015)

**K. Komędera**, A.K. Jasek, A. Błachowski, K. Ruebenbauer, M. Piskorz, J. Żukrowski, A. Krztoń-Maziopa, E. Pomjakushina, K. Conder  
*Magnetism of BaFe2Se3 studied by Mössbauer spectroscopy*  
Solid State Communications, 270, 5-8 (2015)

R. Bujakiewicz – Koronska, **D. M. Nalecz**, E. Markiewicz, A.Kalvane *Electronic Properties of 6H Hexagonal SrMnO3*  
Ferroelectrics, 483, 153-160 (2015)

**D.M. Nalecz**, R. Bujakiewicz-Koronska, R.J. Radwanski  
*Magnetic phase transition in antiferromagnetic SrMnO3 perovskites*  
Ferroelectrics, 483, 86–94 (2015)

**A.K. Jasek**, **K. Komędera**, A. Błachowski, K. Ruebenbauer, J. Żukrowski, Z. Bukowski, J. Karpinski,  
*Mössbauer studies of the peculiar magnetism in parent compounds of the iron-based superconductors*  
Philosophical Magazine, 95, 493-502 (2015)

A.S. Baran, J.H. Telting, P. Németh, **S. Bachulski**, J. Krzesiński  
*KIC 8302197: a non-rotating or low-inclination pulsating subdwarf B star observed with the Kepler spacecraft*  
Astronomy & Astrophysics 573A, 52 (2015)

A. Marciniak et al. (24 autorów, w tym **E. Kosturkiewicz**)  
*Against the biases in spins and shapes of asteroids*  
Planetary and Space Science 118, 256-266 (2015)

**D. M. Nalecz**, R. J. Radwanski, R. Bujakiewicz-Koronska  
*Magnetic phase transition in antiferromagnetic SrMnO3 and K2CoF4 perovskites*, Cracow Colloquium on f-electron systems (CCFES2015), 24-27.06.2015, Kraków, Polska

R. J. Radwanski, **D. M. Nalecz**, Z. Ropka  
*Really first principles calculations - Quantum Atomistic Solid State Theory (QUASST) for UPd2Al3, UGa2 and UO2*  
Cracow Colloquium on f-electron systems (CCFES2015), 24-27.06.2015, Kraków, Polska

**K.Komędera**, A.K.Jasek, A.Błachowski, K.Ruebenbauer, J.Żukrowski, A.Krztoń Maziopa,  
*Structural disorder in AxFe2-zSe2 superconductors studied by Mössbauer spectroscopy*, XVII Krajowa Konferencja Nadprzewodnictwa, Karpacz (2015)

P. Sowicka, **S. Bachulski**, A. Baran  
*A search for pulsating blue stars in the vicinity of NGC 6791 using Kepler LC data* EPJ Web Conf.10106061, 2015

## Rok 2014

J. Krzesinski, **A. Blokesz**, A.S. Baran, **S. Bachulski**

*Constraining the Hydrogen Envelope Mass of a Pulsating sdB Star KIC 10670103 Through Asteroseismology*

Acta Astronomica 64, 151-165 (2014)

**U. Lewczuk**, J. Suchanicz, D. Sitko, T. Maslanka, M. Sokolowski

*Pressure Effect on Dielectric Properties of 0.2Na(0.5)Bi(0.5)TiO(3)0.8BaTiO(3) Ceramics*

Ferroelectrics 464, 1, 21-26 (2014)

G. Klimkowski, J. Suchanicz, **M. Karpierz**, **U. Lewczuk**, I. Faszczowy, K.Konieczny, D. Sitko, M. Antonova, A. Sternberg

*Uniaxial Pressure Effect on Dielectric Properties of 0.7Na(0.5)Bi(0.5)TiO(3)-0.3SrTiO(3) Ceramics*

Ferroelectrics 464, 1, 94-100 (2014)

R. J. Radwanski, **D. M. Nalecz**, Z. Ropka, R. Bujakiewicz-Koronska *Spin-orbit origin of anomalous temperature dependence of the magnetic susceptibility of PbVO3*

Ferroelectrics 461, 1, 68-75 (2014)

R. Bujakiewicz-Koronska, **D. M. Nalecz**, A. Molak, A. Budziak

*DOS calculation for stoichiometric and oxygen defected (Bi1/2Na1/2)(Mn1/2Nb1/2)O3*

Ferroelectrics 463, 1, 48-56 (2014)

**M. Karpierz**, J. Suchanicz, R. Bujakiewicz-Koronska, T. Maslanka, N.-T. H.Kim-Ngan

*Effect of Uniaxial Compressive Stress on Dielectric Properties of 0.2K0.5Bi0.5TiO3-0.8PbTiO3 Ceramics*

Ferroelectrics 464, 1, 88-93 (2014)

Krzysztof Konieczny, Jan Suchanicz, Dorota Sitko, Włodzimierz Smiga, Beata Urban, **Monika Karpierz**, **Urszula Lewczuk**, Tomasz Maslanka, Mariusz Sokolowski *Dielectric, thermal and ferroelectric properties of Na0.997Li0.003NbO3 ceramics* Phase Transitions 87, 973-981 (2014)

R.J.Radwanski, **D.M. Nalecz**, Z.Ropka

*Crystal-Field Interactions in RPd2Al3 Intermetallics (R = Pr, Nd, Sm, and U)* Acta Physica Polonica A 126, A32 (2014)

A. K. Jasek, **K. Komędera**, A. Błachowski, K. Ruebenbauer, Z. Bukowski, J. G. Storey, and J. Karpinski

*Electric field gradient wave (EFGW) in iron-based superconductor Ba0.6K0.4Fe2As2 studied by Mössbauer spectroscopy*

Journal of Alloys and Compounds 609, 150-155 (2014)

E. Markiewicz, R. Bujakiewicz-Koronska, A. Budziak, A. Kalvane & **D. M. Nalecz**

*Impedance spectroscopy studies of SrMnO3, BaMnO3 and Ba0.5Sr0.5MnO3 ceramics* Phase Transitions 87 (10-11), 1060-1072 (2014)

R. Bujakiewicz-Koronska, **D.M. Nalecz**, M. Bałanda, A. Molak, Z. Ujma, *Electronic and magnetic properties of  $(\text{Bi}_{0.5}\text{Na}_{0.5})(\text{Mn}_{0.5}\text{Nb}_{0.5})\text{O}_3$*   
Phase Transitions 87 (10-11), 1096-1104 (2014)

J. Krzesinski, **S. Bachulski**  
*Being rich helps - the case of the sdBV KIC 10670103* IAUS 301, 309, 2014