



SESJA PLAKATOWA

POSTER SESSION

on-site and on-line

ON 1

1. Paweł Skupiński, K. Sobczak, K. Graszka, A. Reszka, A. Avdonin, Z. Adamus, M. Arciszewska, J. Sitnicka, A. Wołoś,
Growth mechanism of $MnBi_2Te_4/(Bi_2Te_3)_n$ self-assembling superlattices
2. Aneta Wardak, W. Chromiński, D. Kochanowska, A. Reszka, M. Szot, M. Lewandowska, A. Mycielski,
Morphology of Cd and Te inclusions and their effect on the internal electric field and stress distributions in CdMnTe crystals
3. Tomasz Andrearczyk, J. Sadowski, J. Wróbel, T. Figielski, T. Wosiński,
Tunable planar Hall effect in $(Ga,Mn)(Bi,As)$ epitaxial layers
4. Monika Zięba, B. Turowski, V.V. Volobuev, B. Kowalski, N. Olszowska, M. Rosmus, J. Kołodziej, A. Kazakov, T. Wojciechowski, M. Aleszkiewicz, K. Gas, M. Sawicki, A. Łusakowski, T. Wojtowicz, T. Story,
Electronic structure of $Sn_{1-x}Mn_xTe$ thin films studied by ARPES

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5. K. Karpińska, G. Karczewski, A. Witowski, J. Polaczyński, J. Korczak, S. Schreyeck, S. Chusnutdinow, T. Story, Michał Szot,
CdTe/PbTe periodic structures as photonic crystals

6. Andrei Avdonin,
Definition of effective energy and distance of hopping electron transport

7. Izabela Kuryliszyn-Kudelska, A. Grabias, W. Dobrowolski, M. Arciszewska, D. Sibera, J. Rosowska, J. Kaszewski, B. Witkowski, Ł. Wachnicki, M. Godlewski,
The effect of Fe doping on magnetic and structural properties of ZnO nanoparticles prepared by wet chemical methods

8. Abdul Khaliq, M. Arciszewska, A. Avdonin, B. Brodowska, V. Slynko, E. Slunko, L. Kilański,
Magnetic ordering and frustration in $Ge_{1-x-y}Sn_xMn_yTe$ multiferroic crystals

ON 2

1. Leonid Shirkov,
Potential energy surface and intermolecular dynamics of pyridine-lithium complex

2. Kwasi Nyandey, Daniel Jakubczyk,
Classification of fat content of milk based on speckle pattern using deep learning



3. Anastasiya Derkachova, Gennadiy Derkachov,
*Using digital in-line holography for optical characterization of particles
levitated in an acoustic trap*

4. Irina Zajcewa, R. Minikaev, M. Chrobak, E. Dobročka, Marta Z. Cieplak,
Transport properties of compressed $La_{1.952}Sr_{0.048}CuO_4$ thin films

5. Sameh Altanany, Irina Zajcewa, Marta Z. Cieplak,
Transport properties of ultrathin Nb films

6. Michał F. Rode, S. Brazevic, B. Gierczyk, G. Burdziński,
*Effect of methoxy group substitution on energetic landscape of 3H-
naphthopyrans and its spectroscopic implications on fading time and
photoisomerization reaction*

7. Małgorzata Białous, Afshin Akhshani, B. Dietz, Leszek Sirko,
A wave chaotic system with partially violated time-reversal-invariance

8. Jacek Szczepkowski, Anna Grochola, P. Kowalczyk, Włodzimierz Jastrzębski,
The $3^1\Pi_u$ state in caesium dimer



ON 3

1. Oleksandr M. Chumak, A. Pacewicz, A. Lynnyk, B. Salski, T. Yamamoto, T. Seki, J.Z. Domagała, H. Glowinski, K. Takanashi, L.T. Baczewski, H. Szymczak, A. Nabałek,
Magnetoelastic interactions and magnetic damping in $\text{Co}_2\text{Fe}_{0.4}\text{Mn}_{0.6}\text{Si}$ and $\text{Co}_2\text{FeGa}_{0.5}\text{Ge}_{0.5}$ Heusler alloys thin films
2. Jarosław Więckowski, M. Gutowska, A. Szewczyk, B. Dąbrowski,
Magnetic phase transition in multiferroic $\text{Sr}_{1-x}\text{Ba}_x\text{Mn}_{1-y}\text{Ti}_y\text{O}_3$ (with $x \geq 0.43$ and $y \geq 0$) system - specific heat studies
3. M. Wójcik, Ewa Jędryka, U. Wiedwald, R. Salikhov, M. Farle, J. Rosen,
Magnetic structure of the Mn_2GaC thin film (MAX phase) - ^{55}Mn Nuclear Magnetic Resonance study
4. Ł. Gładczuk, Leszek Gładczuk, P. Dłużewski, K. Lasek, P. Aleshkevych, D. M. Burn, G. van der Laan, T. Hesjedal,
Spin-current mediated coupling in MgO-based magnetic tunnel junctions
5. Amar Fakhredine, C. Autieri, A. Wawro,
Huge Dzyaloshinskii-Moriya interaction in Re/Co/Pt films
6. Anna Ciechan, P. Bogusławski,
Theory of the sp-d coupling of transition metal impurities with free carriers in ZnO

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7. A. Ciechan, Piotr Bogusławski,
s, p - d coupling in ZnO doped with 3d transition metal impurities
8. Yaroslav Konopelnyk, M. Pękała, I. Radelytskyi, P. Iwanowski,
Electric and magnetic properties of $Fe_{7-x}Ni_xSe_8$ single crystals

ON 4

1. Volodymyr Tsiurma, M. Baran, A. Kissabekova, A. Krasnikov, A. Lushchik, Ya. Zhydachevskyy, L. Vasylechko, S. Zazubovich,
Luminescence and energy transfer processes in $LuNbO_4:Bi,Eu$
2. Krzysztof Głowacki, J. Fink-Finowicki, V. Stasiv, Ya. Zhydachevskyy, R. Diduszko, M. Berkowski, A. Suchocki,
(Y,Gd)AlO₃ Perovskite solid solution single crystals doped with Mn and Hf grown by the Czochralski and floating zone methods
3. Sushma Mishra, E. Przeździecka, W. Woźniak, A. Adhikari, R. Jakieta, W. Paszkowicz, A. Sulich, M. Ożga, K. Kopalko, E. Guziewicz,
Structural properties of thin ZnO films grown by ALD under O-rich and Zn-rich conditions and their relationship to electrical properties
4. Mahwish Sarwar, B. S. Witkowski, A. Sulich, E. Guziewicz,
Low-temperature cathodoluminescence of nitrogen-doped ZnO films grown by Atomic Layer Deposition



5. Jarosław Kaszewski, B. S. Witkowski, A. Słońska-Zielonka, I. Serafińska, Ł. Wachnicki, A. Wolska, M. Klepka, H. Przybylińska, B. Kozankiewicz, E. Mijowska, Z. Gajewski, M. M. Godlewski, M. Godlewski,
Y³⁺ ions prevent Tb³⁺ ions from oxidation in luminescent biocompatible ZrO₂:Tb nanoparticles

6. Monika Ożga, P. Sybilski, A. Gruszecki, E. Zielony, B. S. Witkowski,
Memristive effect in CuO thin films grown by hydrothermal method

7. Julita Rosowska, J. Kaszewski, B. S. Witkowski, Ł. Wachnicki, I. Kuryliszyn-Kudelska, A. Gardias, M. Godlewski,
The effect of iron content on properties of ZnO: Fe nanoparticles prepared by microwave hydrothermal method

8. Anastasiia Lysak, E. Przeździecka, R. Jakięła, A. Reszka, B. S. Witkowski, Z. Khosravizadeh, A. Adhikari, J. M. Sajkowski, A. Kozanecki,
Effect of rapid thermal annealing on short period {CdO/ZnO}_m SLs grown on m-Al₂O₃

9. Abinash Adhikari, A. Lysak, A. Wierzbicka, P. Sybilski, B. S. Witkowski, E. Przeździecka,
Structural and optical investigations of CdMgO random alloys on sapphire substrates grown by plasma-assisted MBE technique



10. Bronisław A. Orłowski, K. Gwóźdź, K. Gościński, S. Chusnutdinow, E. Guziewicz, B. J. Kowalski,
Free carriers and extended defects exchange interaction in heterojunction region

ON 5

1. Mateusz Denys, P. Deuar, Zhizhao Che, P. E. Theodorakis,
How surfactants affect cloud droplet activation?
2. Panagiotis E. Theodorakis, Yongjie Wang, Aqiang Chen, Bin Liu,
Off-lattice Monte-Carlo approach for studying nucleation and evaporation phenomena at the molecular scale
3. Luis Henrique Carnevale da Cunha, P. Deuar, Zhizhao Che, P. E. Theodorakis,
MDPD Simulation of liquid thread break-up and formation of droplets
4. Soheil Arbabi, M. Denys, P. Deuar, Zhizhao Che, P. E. Theodorakis,
Coalescence of surfactant-laden droplets
5. Russell Kajouri, P. Deuar, J. Zidek, S. A. Egorov, A. Milchev, Panagiotis E. Theodorakis,
Durotaxis motion on brush substrates



6. Saeed Samadi, R. Rechciński, R. Buczko,
One-dimensional Dirac modes of a pentagonal topological crystalline insulator nanowires

7. Damian Włodzyński, T. Sowiński,
Mixture of a few strongly interacting fermions driven through a critical point

8. Hung Nguyen, Pham Dang Lan, D. A. Nissley, E. P. O'Brien, Mai Suan Li,
Electrostatic interactions explain the higher binding affinity of the CR3022 antibody for SARS-CoV-2 over the 4A8 antibody

9. Emilia Witkowska, S. Mirkhalaf, L. Lepori, D. Benedicto Orenes, M. W. Mitchell,
Criticality-enhanced quantum sensing with spin-1 BECs

10. Dillip Nandy, Tomasz Sowiński,
Dynamical resistivity of a few interacting fermions to the time-dependent potential barrier

11. Nguyen Truong Co, Mai Suan Li,
Effect of surface roughness on aggregation of polypeptide chains: a Monte Carlo study



12. Piotr Deuar, A. Ferrier, M. Matuszewski, G. Orso, M. H. Szymańska,
Scalable full quantum dynamics of dissipative Bose-Hubbard systems and multi-time correlations
13. Maciej Bartłomiej Kruk, K. Pawłowski, D. Hryniuk, K. Rzażewski,
Fock state sampling method for BEC Fluctuations

ON 6

1. Archana Mishra, P. Simon, T. Hyart, M. Trif,
A Yu-Shiba-Rusinov qubit
2. Tania Paul, V. F. Becerra, D. Pikulin, T. Hyart,
Interplay of excitonic correlation with quantum spin Hall effect and superconductivity
3. Wojciech Brzezicki, T. Hyart, Nguyen Minh,
Topological effects in SnTe-class multilayers and nanowires
4. Bartłomiej Turowski, R. Rudniewski, M. Rosmus, M. Aleszkiewicz, T. Wojciechowski, W. Zaleszczyk, Z. Muhammad, N. Olszowska, T. Wojtowicz, V. V. Volobuev,
Growth of Gray Tin epilayers on insulating (001)-CdTe/GaAs substrates and its Angular Resolved Photoemission Spectroscopy studies



5. Ghulam Hussain, G. Cuono, A. Lau, C. Autieri,
Structural Stability & Electronic properties of IV-VI thin Nanowires

6. Ashutosh S. Wadge, B. J. Kowalski, C. Autieri, P. Iwanowski, A. Hruban, N. Olszowska, M. Rosmus, J. Kołodziej, A. Wiśniewski,
ARPES study: metal-Weyl (Pb-NbP) semimetal interface

7. Jakub Polaczyński, A. Kazakov, R. Rudniewski, B. Turowski, Z. Adamus, T. Wojciechowski, T. Wojtowicz, V. V. Volobuev,
Signature of Chiral Anomaly and Magnetotransport in (001) Strained Grey Tin

8. Rajibul Islam, B. Ghosh, G. Cuono, A. Lau, W. Brzezicki, A. Agarwal, A. Bansil, B. Singh, T. Dietl, C. Autieri,
Robust Weyl and nodal line semimetal phases in 3D superlattice of Hg-based chalcogenides: ab initio studies

9. Sarath Prem, M. M. Wysokiński, M. Trif,
Non-Abelian Berry-phases of electrically driven hole-spin qubits in waveguide QED

10. Muhammad Shahin Alam, P. T. Kumar, K. Dybko, A. S. Wadge, P. Iwanowski, A. Wiśniewski, M. Matusiak,
Temperature driven spin-zero effect in TaAs₂



11. Nguyen Minh Nguyen, W. Brzezicki, T. Hyart,
Corner states, hinge states and Majorana modes in SnTe nanowires

SL 1

1. Wiktoria Zajkowska, B. Kurowska, J. Turczyński, J. Polaczyński, S. Kret,
Contacting ZnO nanowires with platinum paths
2. Jakub Turczyński, B. Kurowska, W. Zajkowska, R. Sobierajski, J. Antonowicz, S. Kret,
FIB preparation of thin metallic glassy films for in-situ thermal TEM examination
3. Roman Minikayev, A. Muñoz, P. Rodríguez-Hernández, H. Dąbkowska, C. Lathe, W. Paszkowicz,
Equation of state of $\text{Ca}_3\text{Ga}_2\text{Ge}_3\text{O}_{12}$ garnet: a combined experimental and theoretical study
4. Houri Sadat Rahimi Mosafer, W. Paszkowicz, R. Minikayev, M. Berkowski,
Modeling of site occupation for novel orthovanadates, $\text{Ca}_{10}\text{TM}_{0.5}(\text{VO}_4)_7$ (TM = Co, Ni, Cu)

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5. Adrian Sulich, E. Łusakowska, W. Wołkanowicz, P. Dziawa, T. Story, J. Z. Domagała,
Surface nanoripples formation in SnTe(001)/CdTe(001)/GaAs(001) topological crystalline insulator heterostructure: a brief review of selected possible models
6. Diana Kalinowska, M. T. Klepka, D. Szulczyk, M. Mielczarek, M. Struga,
Determination of the molecular structure of compounds with pharmacological potential using the methodology based on X-ray absorption spectroscopy
7. Aleksandra Drzewiecka-Antonik, A. Wolska, P. Rejmak, M. T. Klepka, W. Ferenc,
The geometry of Co(II), Ni(II) and Cu(II) complexes with chlorophenoxy herbicides determined by XAS and UV-Vis spectroscopies

SL 2

1. Katarzyna Gas, P. Wiśniewski, D. Sztenkiel, A. Grochot, M. Iwinska, T. Sochacki, H. Przybylinska, M. Bockowski, M. Sawicki,
Magnetization steps in dilute bulk GaN:Mn



SL 3

1. J. Plachta, Piotr Wojnar, T. Kazimierczuk, P. Kossacki, G. Karczewski T. Wojtowicz, J. Kossut,
Optical emission from ultra-thin CdTe nanowires
2. Maciej Wójcik, P. Wojnar, M. Muszyński, P. Baranowski, S. Kret, G. Karczewski, T. Wojtowicz,
Optical emission from highly strained CdTe/(Zn,Mg)Te nanowires
3. Oksana Volnianska, M. Szymura, J. Mikulski, Ł. Kłopotowski,
Surface effects on the electronic structure and optical properties of Cu in CdSe quantum dot
4. Magdalena Duda, K. Sobczak, R. Minikayev, B. Sikora, Ł. Kłopotowski,
Luminescent nanothermometers based on CuInS₂/ZnS colloidal nanocrystals
5. Piotr Baranowski, P. Wojnar, M. Szymura, J. Płachta, S. Chusnutdinow, G. Karczewski, T. Wojtowicz,
Carrier separation effects in type-II Cd(Se,Te)/ZnTe self-assembled Qds
6. Piotr Baranowski, P. Wojnar, M. Szymura, R. Georgiev, S. Chusnutdinow, G. Karczewski, T. Wojtowicz,
Growth and optical properties of type II ZnTe/ZnSe core/shell nanowire quantum dots

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SL 4

1. Mateusz Chwastyk, M. Cieplak,
Nascent folding of proteins across the three domains of life
2. Izabela Kamińska, A. Wosztyl, P. Kowalik, B. Sikora, T. Wojciechowski, K. Sobczak, R. Minikayev, K. Zajdel, M. Chojnacki, W. Zaleszczyk, K. Łysiak, W. Paszkowicz, J. Szczytko, M. Frontczak-Baniewicz, W. Stryczniewicz, K. Fronc,
Synthesis and characterization of $Gd_2O_3: Er^{3+}, Yb^{3+}$ doped with Mg^{2+}, Li^+ ions – effect on the photoluminescence and biological applications
3. Anna Borodziuk, M. Baranowski, T. Wojciechowski, R. Minikayev, B. Sikora, D. K. Maude, P. Płochocka, Ł. Kłopotowski,
Upconversion luminescence intensity of $\beta-NaYF_4:Er^{3+}, Yb^{3+}$ nanoparticles in magnetic fields up to 70 T
4. Barbara Klepka, A. Michaś, A. Niedźwiecka,
Diffusion of intrinsically disordered coral acid-rich proteins
5. Michał K. Białołbrowski, A. Michaś, M. K. Cieplak-Rotowska, M. Duszka, A. Niedźwiecka,
Hydrodynamic properties and interactions of proteins involved in gene expression by Fluorescence Correlation Spectroscopy (FCS)

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