

Curriculum Vitae of Marko Kralj

PERSONAL INFORMATION

Name and surname **Marko Kralj**
Academic title Dr.sc.
Year and institution of PhD obtained 2003.
University of Zagreb
Phone +385 1 4698815
Fax +385 1 4698890
E-mail mkralj@ifs.hr
Personal web page <http://marko-kralj.from.hr/>

WORK EXPERIENCE

Date (from – until) 06/2017 –
Institution *Institute of Physics, Zagreb*
Position Director
Work field *Strategic and operative development of the Institute of Physics.*

Date (from – until) 06/2013 – 05/2017
Institution *Institute of Physics, Zagreb*
Position Assistant Director
Work field *Managing technical services, HRS action plan, web and information. Strategic projects.*

Date (from – until) 12/2016 –
Institution *Institute of Physics, Zagreb*
Position Senior scientist
Work field *Experimental surface physics / graphene and 2D materials beyond graphene*

Date (from – until) 12/2009 – 12/2016
Institution *Institute of Physics, Zagreb*
Position Senior research associate
Work field *Experimental surface physics / graphene and 2D materials beyond graphene*

Date (from – until) 10/2006 – 12/2009
Institution *Institute of Physics, Zagreb*
Position Research associate
Work field *Experimental surface physics / nanoscience*

Date (from – until) 05/2003 – 09/2006
Institution *Institute of Physics, Zagreb*
Position Higher assistant / Scientific novice
Work field *Experimental surface physics / nanoscience*

Date (from – until) 09/2003 – 07/2006
Institution *Universität Bonn; Institut für Physikalische und Theoretische Chemie, Bonn*
Position PostDoc (Humboldt Fellow and Wissenschaftlichen Mitarbeiter)
Work field *Physics and Chemistry at Surfaces*

Date (from – until) 05/2001 – 04/2003
Institution *Institute of Physics, Zagreb*
Position Higher Assistant / Scientific novice
Work field *Experimental surface physics / 2D metallic films*

Date (from – until) 09/1997 – 04/2001
Institution *Institute of Physics, Zagreb*
Position Assistant / Scientific novice

EDUCATION

Date *04/2003*
 Place *Zagreb*
 Institution *University of Zagreb, Faculty of Science*
 Qualification awarded *Dr.sc. | PhD*

Date *04/2001*
 Place *Zagreb*
 Institution *University of Zagreb, Faculty of Science*
 Qualification awarded *Mr.sc.*

Date *03/1997*
 Place *Zagreb*
 Institution *University of Zagreb, Faculty of Science*
 Qualification awarded *Dipl.ing.*

TRAINING / GUEST AT OTHER INSTITUTIONS

Year *2015–2016, multiple visits*
 Place *Beijing*
 Institution *Institute of Chemistry, Chinese Academy of Sciences*
 Subject and skills covered *Synthesis of 2D materials*

Year *2012, one month*
 Place *Kyoto*
 Institution *Kyoto University*
 Subject and skills covered *Surface optical characterization methods*

Year *2011, three months*
 Place *Erlangen*
 Institution *Universität Erlangen-Nürnberg*
 Subject and skills covered *Two-photon photoemission method*

Year *2006–2012, multiple visits*
 Place *New York*
 Institution *Columbia University*
 Subject and skills covered *Two-photon photoemission and non-linear optical imaging*

Year *2010–, multiple visits*
 Place *Köln*
 Institution *Universität zu Köln*
 Subject and skills covered *Low-temperature scanning tunneling microscopy*

LANGUAGES

MOTHER TONGUE **Croatian**

OTHER LANGUAGE(S)	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
German	C1	B2	B2	B1	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

AWARDS AND RECOGNITIONS

- 2017, **Award of the Croatian Academy of Sciences for Highest Scientific and Artistic Accomplishments in the Republic of Croatia** for year 2016
- 2014, **Croatian state award for science** for year 2013
- 2005–2006, **Humboldt Research Fellowship**
- 1994–1995, **Student scholar** of the Institute of Physics

Principal investigator on 4 running projects,

- 11/2014–11/2024, **Center of Excellence for Advanced Materials and Sensing Devices**, CEMS; PI for the research unit Science of Graphene and related 2D Structures [MZO + EU structural funds (KK.01.1.1.01.0001, 11/2017-10/2022) ~1.5 M€]
- 03/2017–09/2021, **Optical Properties of Transition Metal Dichalcogenide Heterostructures** (HrZZ funding, IP-2016-06-3211, 130.000 EUR)
- 01/2020–12/2022, **Organic semiconductor nanostructures on 2D TMD substrates** (MZO-OEAD funding, bilateral partner Prof. Christian Teichert-Universität Leoben, 7.000 EUR for Croatian side)
- 11/2019–11/2022, **Synthesis of novel low-dim materials for information applications and the characterization of their magnetic and optical properties** (MZOS-China funding, bilateral partner Prof. Yeliang Wang- Beijing Institute of Technology, 8.000 EUR for Croatian side)

Team member on 1 running project,

- 08/2017–01/2021 (PI: Damir Aumiler), **Centar za napredne laserske tehnike (CALT) | Centre for Advanced Laser Techniques**, <http://calt.ifs.hr/en/>, Croatian national strategic project in the field of scientific and research infrastructure [EU structural funds (KK.01.1.1.05.0001), 16 M€]

Principal investigator on 12 finished projects,

- 01/2018–12/2019, **Two-dimensional metals** (MZO-DAAD funding, bilateral partner Prof. Carsten Busse-Universität Siegen, 17.000 EUR)
- 04/2016–12/2017, **Tuning many-body interactions in graphene by cesium intercalation** (MZOS-Serbia funding, bilateral partner Dr. Marko Spasenović-Institute of Physics Belgrade, 3.000 EUR for Croatian side)
- 01/2016–12/2017, **Intercalation of epitaxial dichalcogenides** (MZOS-DAAD financiranje, partner Dr. Carsten Busse-Universität Münster, 17.000 EUR)
- 09/2015–09/2017, **Large-scale synthesis and characterization of novel 2D materials** (MZOS-China funding, bilateral partner Prof. Bin Wu-Institute of Chemistry CAS, 10.000 EUR for Croatian side)
- 06/2016–10/2017, **NanoporeArray: Ion-beam patterned nanopore arrays in polymer supported 2D materials** (HAMAG-BICRO funding, 45.000 EUR)
- 2014–2015, **2D materials with novel properties** (MZOS-DAAD funding, bilateral partner Dr. Carsten Busse-Universität zu Köln, 17.000 EUR)
- 2012–2013, **Electrons in two dimensions: Graphene and topological insulators** (MZOS-DAAD funding, bilateral partner Dr. Carsten Busse-Universität zu Köln, 17.000 EUR)
- 06/2010–06/2012, **Photolithographic synthesis and electronic properties of graphene based devices and related structures**, no. UKF 66/10, (UKF + MZOS funding, 130.000 EUR)
- 06/2009–06/2012, **Epitaxial-graphene-enabled tunable metamaterials** (MZOS-NSF funding, bilateral partner Prof. Richard Osgood-Columbia University, 16.000 EUR for Croatian side)
- 2010–2011, **Graphene-cluster hybrids** (MZOS-DAAD funding, bilateral partner Dr. Carsten Busse-Universität zu Köln, 17.000 EUR)
- 2007, **Implementation of an ambient STM laboratory for studying the interaction of biologically important molecules with surfaces**, AvH Return Fellowship (AvH funding, 5.000 EUR)
- 01/2005–07/2006, **VTSTM study of metal clusters nucleation and their interaction with adsorbed molecules**, PostDoc program Alexander von Humboldt Foundation (AvH funding, 35.000 EUR/year)

Team member on 15 finished projects,

- 12/2015–12/2017 (PI: Predrag Lazić), **Van der Waals heterostructures: fundamentals and applications** (UKF + MZOS funding, 215.000 EUR)
- 04/2016–12/2017 (PI: Nataša Vujičić), **Growth and characterization of functional 2D materials based on graphene and dichalcogenides** (MZOS-Slovenia funding, 2.000 EUR for Croatian side)
- 06/2016–08/2017 (PI: Tomislav Vuletić), **QuartzNano: Quartz microbalance sensors improved on the nanolevel** (HAMAG-BICRO funding, 45.000 EUR)
- 10/2013–10/2015 (PI: Tomislav Vuletić), **Confined DNA** (UKF funding 200.000 EUR)
- 2006–2009 (PI: Petar Pervan), produžavano u više navrata do kraja 2013, **Elektronska i kristalna struktura poduprtih samoorganiziranih nano-sistema**, MZOS # 035-0352828-2840 (MZOS funding 32.000 EUR/year)
- 2006–2007 (PI: Petar Pervan), **Electronic properties of manganese nanostructures at surfaces** (MZOS-DAAD funding, 16.000 EUR)
- 2002–2011 (PI: Klaus Wandelt/Conrad Becker), **Template – Functional chemical matrices**, SFB 624 (DFG funding)
- 2002–2005 (PI: Klaus Wandelt/Philippe Sautet), **Molecular scale reactivity at bimetallic surfaces** (DFG-CNRS funding, 510.000 EUR)
- 2002–2006 (PI: Milorad Milun), **Elektronska struktura nano-strukturiranih materijala na površinama**, MZOS # 0035016 (MZOS funding 16.500 EUR/year)

- 1996–2002 (PI: Branko Gumhalter), *Fizika površina i adsorbiranih slojeva*, MZOS # 00350108 (MZOS funding, 19.000 EUR/year)
- 1999–2001 (PI: Milorad Milun), *Surface states and quantum well states and their role in nanostructures* (MZOS-ALIS funding, 7.000 EUR/year)
- 1998–2001 (PI: Petar Pervan), *Nanostructures and new materials* (MZOS-SLO funding, 4.000 EUR/year)
- 1998–2001 (PI: Milorad Milun), *Preparation and characterization of nanostructures* (MZOS-DAAD funding, 11.000 EUR)
- 1998–2001 (PI: Milorad Milun), *Restructuring of surfaces* (MZOS-SLO funding, 4.000 EUR/year)
- 1995–1997 (PI: Petar Pervan), *Electronic structure of magnetic materials, ultrathin films and surfaces* (MZOS-ALIS funding, 7.000 EUR/year)

LEADERSHIP AND ORGANIZATIONAL SKILLS AND COMPETENCES

Marko Kralj is a senior scientist at *Institute of Physics, Zagreb (IFZ)*, and the leader of a research unit *Graphene and related 2D structures* (with 16 permanent scientists and more than 10 PhD students and postdocs) in the scope of *Center of Excellence for Advanced Materials and Sensing Devices, CEMS*. He has a strong background in the surface science and application of scanning probe microscopy (STM & AFM) and photoemission spectroscopy (ARPES) techniques. Since 2009 he works extensively on the investigations of two-dimensional (2D) materials, starting with the *Phys. Rev. Lett. Paper* on electronic properties of epitaxial graphene which brought 2D materials research in Croatia to top internationally competitive level. Dr. Kralj is a winner of prestigious Humboldt fellowship, the Croatian State Award for Science, and the award of the Croatian Academy of Sciences for Highest Scientific and Artistic Accomplishments in the Republic of Croatia He is actively involved in strategic infrastructural projects of IFZ, in particular as a team member for IFZ's *Center for Advanced Laser Techniques*. He is also very active in mentorship and in organization of conferences. M. Kralj was the vice-president and president of the Croatian Physical Society (HFD, 2017-2020) and director of the IFZ (06/2017-06/2021).

TEACHING

2015–, "**Nanotechnology**", for graduates in Chemistry, Chemistry Department, University of Zagreb
 2015–, "**Experimental methods in biophysics / Scanning probe microscopy**", for graduates in Biophysics, Physics Department, University of Zagreb
 2007–, occasionally participating with expert lectures and lab demos within several undergraduate courses at University of Zagreb (e.g. "Overview of modern experimental research" or "Experimental methods of modern physics")
 2003–2006, Teaching assistant "**Physical chemistry lab course**" for undergraduates, Chem. Dept., University of Bonn

MENTORSHIP AND FINISHED PHD AND MASTER THESES

- Kamal, Sherif. Characterization of nanoscale defects in 2D layered materials / diplomski rad, diplomski studij, Odjel za fiziku, Rijeka, 27.09.2019., 68 str. Voditelj: Kralj, Marko.
- Supina, Antonio. Mikroskopija na mikro i nano-skali i obrada slike / završni rad - diplomski/integralni studij. Zagreb : Prirodoslovno-matematički fakultet, 21.02. 2019, 77 str. Voditelj: Kralj, Marko.
- Delač Marion, Ida. Hybrids of biomacromolecules and modern two- dimensional materials / doktorska disertacija. Zagreb : Prirodoslovno-matematički fakultet, 02.10. 2017, 98 str. Voditelj: Vuletić, Tomislav & Kralj, Marko
- Radatović, B. Sklopovi bazirani na slojevitim 2D materijalima i njihovim heterostrukturama / završni rad - diplomski/integralni studij. Zagreb: Prirodoslovno-matematički fakultet, 30.09. 2016, 56 str. Voditelj: Kralj, Marko.
- Krajinović, D. In situ karakterizacija rasta slojevitih materijala na ravnim podlogama / završni rad - diplomski/integralni studij. Zagreb: Prirodoslovno-matematički fakultet, 8.3.2016, 85 str. Voditelj: Kralj, Marko.
- Pelić, B. Dvodimenzionalni materijali nakon grafena / završni rad - diplomski/integralni studij. Zagreb: Prirodoslovno-matematički fakultet, 29.5.2015, 85 str. Voditelj: Kralj, Marko.
- Šrut Rakić, I. Manipulation of Dirac electrons through the nanoscale modulation of epitaxial graphene / doktorska disertacija. Zagreb: Prirodoslovno-matematički fakultet, 7.5.2015, 147 str. Voditelj: Kralj, Marko.
- Petrović, M. Synthesis and intercalation of epitaxial graphene on iridium / doktorska disertacija. Zagreb: Prirodoslovno-matematički fakultet, 10.10.2014, 143 str. Voditelj: Kralj, Marko.
- Jurdana, M. Grafen: od sinteze do transfera i elektroničkog sklopa / završni rad - diplomski/integralni studij. Zagreb: Prirodoslovno-matematički fakultet, 14.3.2014, 77 str. Voditelj: Kralj, Marko.
- Krajinović, I. Zakrivljeni grafen; Modulacija elektronskih svojstava / završni rad - diplomski/integralni studij. Zagreb: Prirodoslovno-matematički fakultet, 21.9.2012, 59 str. Voditelj: Kralj, Marko.
- Vojnić Kortmiš, M. Međudjelovanje grafena sa metalnom površinom: utjecaj na svojstva Diracovih fermiona / diplomski rad. Zagreb: Prirodoslovno-matematički fakultet, 7.2.2011., 58 str. Voditelj: Kralj, Marko
- Delač, I. Rast i svojstva grafena na stepenastim površinama / završni rad - diplomski/integralni studij. Zagreb: Prirodoslovno-matematički fakultet, 20.12.2010., 52 str. Voditelj: Kralj, Marko.
- Šrut, I. Moduliranje dvodimenzionalnog elektronskog plina periodičkim nizom stepenica / diplomski rad. Zagreb: Prirodoslovno-matematički fakultet, 14.7.2010., 87 str. Voditelj: Kralj, Marko.

The three completed PhD theses under his mentorship were written in English and defended in front of international committees. M. Petrović won a recognition for his work in Nature Communications by receiving an award from the "Society of university teachers and scientists in Zagreb". I. Šrut Rakić won a prestigious L'oreal-Unesco Fellowship for Women in Science. At the moment, M. Kralj mentors 2 PhD students (B. Pelić, A. Supina). Besides, he participated as a member or president of PhD evaluation and defense committees for a number of candidates at Faculty of Science at University of Zagreb, as well as one PhD thesis at University of Aarhus (S. Ulstrup 2014) and one at Ecole Supérieure de Physique et Chimie Industrielles de la ville de Paris (T. Vincent 2019). M. Kralj was a mentor in large number of master thesis and different seminar works. He actively helps and encourages young researchers in a development of their independent research careers.

MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES

2019–, **EPS**: European Physical Society
2016–, **HMD**: Hrvatsko mikroskopijsko društvo (Croatian Microscopy Society)
2004–2019, **DPG**: Deutsche Physikalische Gessellschaft (German Physical Society)
1997–, **HFD**: Hrvatsko fizikalno društvo (Croatian Physical Society)
1997–, **HVD**: Hrvatsko vakuumsko društvo (Croatian Vacuum Society)

COMMISSIONS, COMMITTEES, BOARDS AND WORK GROUPS

2019–2020, president of Croatian Physical Society
2019–2022, member of Surface and Interfaces Section of the Condensed Matter Division of the EPS
2017–2018, member of the governing board and vice president of Croatian Physical Society
2011–2016, member of the Executive board and Treasurer of Croatian Vacuum Society
2009–2010, treasurer of Croatian Physical Society
2007–2010, Electoral college Member of the Applied Surface Science Division (ASSD) of IUVESTA

2008–, Head or a member in committees for scientific positions and titles (Institute of Physics, Ruđer Bošković Institute, Physics and Chemistry Departments at Faculty of Science of Zagreb University)

CONFERENCE ORGANIZATIONS

Head of the organizing committee

- The European Workshop on Epitaxial Graphene and 2D Materials (EWEG/2D'2014), June 15-19, 2014 in Primošten, Croatia

Member of the organizing committee

- 12th Croatian Physical Society Meeting, September 21-23, 2020 in Rijeka, Croatia
- 10th Croatian Physical Society Meeting, October 11-13, 2017 in Baška-Krk, Croatia
- Multinational Congress on Microscopy (MCM2017), September 24-29, 2017 in Rovinj, Croatia
- 16th Joint Vacuum Conference (JVC-16/EVC-14/CroSloVM-23), June 6-10, 2016 in Portorož, Slovenia
- 16th International Conference on Thin Films (ICTF-16), October 13-16, 2014 in Dubrovnik, Croatia
- 6th Croatian Physical Society Meeting, October 8-11, 2009 in Primošten, Croatia

Member of the program committee

- ECOSS 32, August 28 - September 2, 2016 in Grenoble, France
- 15th Joint Vacuum Conference (JVC-15), June 15-20, 2014 in Vienna, Austria
- 21st International Scientific Meeting on Vacuum Science and Techniques, May 8-9, 2014 in Samobor, Croatia
- 20th International Scientific Meeting on Vacuum Science and Techniques, May 9-10, 2013 in Jeruzalem, Slovenia

PUBLICATIONS

60+ published scientific publications in refereed journals

1 book chapter with K. Wandelt, Surface and Interface Science (Wiley, 2012)

1 editorial book with J. Coraux and H. Buljan, European workshop on epitaxial graphene and 2D materials: Booklet of abstracts (Institut za fiziku, 2014)

1 international patent

2 articles on popular science

WoS-ISI citations: @[ResearcherID A-8232-2008](#), Hirsch Index 19, cites >1600

@[Scopus](#), @[Google Scholar](#), Hirsch Index 22, cites >2150

OTHER RELEVANT ACTIVITIES

- **Editorial Board member** "NPJ 2D Materials and Applications", <http://www.nature.com/npj2dmaterials/about/editorial-board> , since August 2016.
- **EPS editorial board member Grand Challenges in Physics for Society in the Horizon 2050**, since March 2019.
- **Referee for:** Nature Physics, Nature Communications, Nano Letters, ACS Nano, ACS Applied Nano Materials, JACS, The Journal of Physical Chemistry Letters, Journal of Physical Chemistry C, Physical Review Letters, Physical Review B, Physical Review Materials, RSC Nanoscale, Nanotechnology, Applied Physics Letters, Applied Surface Science, Surface Science (Elsevier Reviewer Recognition: recognized reviewer & outstanding reviewer), Optics Letters, Optical and Quantum Electronics, Vacuum, Croatica Chemica Acta, EPJ Plus.
- **Referee for funding agencies:** Deutsche Forschungsgemeinschaft (DFG); European Research Council (ERC); Department of Energy (DOE); French National Research Agency (ANR); Swiss National Science Foundation (SNF); Croatian Science Foundation (HrZZ); Slovenian Quality Assurance Agency for Higher Education (NAKVIS); Ministry of Science and Education of the Republic of Croatia (MZO).
- Presented invited and regular talks and posters at more than **65+ conferences and workshops**.
- **20+ invited conference and workshop talks**.
- Visited **research institutes and universities worldwide** (in Germany, Spain, Switzerland, France, Denmark Poland, Serbia, United States, Singapore, Japan, China...). Presented more than **40+ seminars or colloquia**.
- Gave about **15 popular talks** in schools, museums, in various societies.
- Popularized science at **TV and Radio and printed media** many times.

COMPUTER SKILLS

Widows, MS-Office, CAD, Image editing, Vector graphics, HTML, ...

OTHER IMPORTANT SKILLS AND COMPETENCES

Driver's license.

LIST OF INVITED CONFERENCE AND WORKSHOP TALKS

1. High-resolution photoelectron spectroscopy, 10th International Meeting of Croatian and Slovenian Vacuum Societies, May 22, 2003, Brdo pri Kranju, Slovenia
2. High-resolution ARPES: a tool for characterizing an electron in a box, Wroclaw-Bonn Workshop on Surface Physics and Chemistry, March 23-26, 2006, Wroclaw, Poland
3. The electronic and structural properties of Al₂O₃/Ni₃Al(111) and their relation to 2-D nanostructuring, From Solid State To BioPhysics III, June 24 - July 1, 2006, Dubrovnik, Croatia
4. Ordered surface structure: Basis of a nanoworld studied by STM (case study - Pd(110)), 11th Joint Vacuum Conference - JVC 11, September 24-28, 2006, Prague, Czech Republic
5. Graphene: shaping Dirac fermions for the application, 4th International Workshop on Surface Physics, September 21-25, 2009, Ladek-Zdrój, Poland
6. Grafen: oblikovanje Diracovih Fermiona za primjenu, 6th Croatian Physical society meeting, October 8-11, 2009, Primošten, Croatia
7. Exploring and exploiting intercalation of epitaxial graphene, The European Workshop on Epitaxial Graphene and 2D Materials, June 15-19, 2014, Primošten, Croatia
8. Exploring the mechanism behind the alkali metal intercalation process in epitaxial graphene, 73 IUVESTA Workshop on Nanostructures on 2D solids, September 22-26, 2014, Eisenerz, Austria
9. 'Chemical' and 'mechanical' engineering of epitaxial graphene, C-MAC Days 2014, December 8-11, 2014, Zagreb, Croatia
10. Tailoring of layered 2D materials: epitaxial graphene and beyond, 22nd International Scientific Meeting on Vacuum Science and Technique, May 21-22, 2015, Osilnica, Slovenia
11. Chemical and mechanical nanoengineering of (epitaxial) graphene, Energy Materials and Nanotechnology Qingdao Meeting, June 14-17, 2015, Qingdao, China
12. Epitaksijalni grafen i srodni 2D materijali, 9th Croatian Physical society meeting, October 5-7, 2015, Umag, Croatia
13. Graphene applications, Innovation - Driven Defence Enterprising, October 19-20, 2015, Zagreb, Croatia
14. 2D materials modifications and growth controlled in situ, International Workshop on Nanomaterials and Nanodevices, July 8-10, 2016, Beijing, China
15. Synthesis and properties of graphene and transition metal dichalcogenides with atomic-scale precision, Solid-State Science & Research meeting, June 28-30, 2017, Zagreb, Croatia
16. In situ visual observation of 2D materials growth and modifications, and characterization of their optical properties, VI International School and Conference on Photonics - Photonica2017, Aug 28-Sept 1, 2017, Belgrade, Serbia
17. Microscopic and spectroscopic characterization of epitaxial graphene and transition metal dichalcogenides, 13th Multinational Congress on Microscopy, Sept 24-29, 2017, Rovinj, Croatia

18. Atomic-scale control of epitaxial graphene and TMDs, Workshop 2D Nanomaterials and Emerging Technologies, Dec 5-6, 2017, Osijek, Croatia
19. Novel two-dimensional materials and their properties, 17th Joint Vacuum Conference, Sep 10-14, 2018, Olomouc, Czech Republic
20. Sinteza 2D materijala te fizikalna i kemijska modifikacija njihovih svojstava, 11. znanstveni sastanak Hrvatskog fizikalnog društva, Oct 3-5, 2018, Beli Manastir, Croatia
21. In situ growth control and further physical and chemical engineering of CVD MoS₂, 4th International Conference on 2D Materials and Technologies, Dec 10-13, 2018, Melbourne, Australia
22. Pristine and modified interfaces with epitaxial 2D materials: electronic and optical properties, SPb Photonic, Optoelectronic, & Electronic Materials 2021, May 25-28, 2021, hybrid onsite-online, St. Petersburg, Russia

LIST OF PUBLISHED PAPERS

Scientific papers

1. *Growth, structure and properties of ultra-thin copper films on a V(110) surface*, M. Kralj, P. Pervan, M. Milun, **Surface Science** 423 (1999) 24–31
2. *STM investigations of contaminated and clean V(100) surface*, M. Kralj, P. Pervan, M. Milun, J. Schneider, B. Schaefer, A. Rosenhahn, K. Wandelt, **Fizika A** 8 (1999) 123–130
3. *Oscillatory Electron-Phonon Coupling in Ultra-Thin Silver Films on V(100)*, T. Valla, M. Kralj, A. Šiber, P.D. Johnson, M. Milun, P. Pervan, D.P. Woodruff, **Journal of Physics: Condensed Matter** 12 (2000) L477–L482
4. *Temperature dependence of photoemission from quantum-well states in Ag/V(100): moving surface-vacuum barrier effects*, M. Kralj, A. Šiber, P. Pervan, M. Milun, T. Valla, P.D. Johnson, D.P. Woodruff, **Physical Review B** 64 (2001) 085411
5. *Growth of copper and vanadium on a thin Al₂O₃-film on Ni₃Al(111)*, A. Wiltner, A. Rosenhahn, J. Schneider, C. Becker, P. Pervan, M. Milun, M. Kralj, K. Wandelt, **Thin Solid Films** 400 (2001) 71–75
6. *Al₂O₃-films on Ni₃Al(111): a template for nanostructured cluster growth*, C. Becker, A. Rosenhahn, A. Wintler, K. von Bergmann, J. Schneider, P. Pervan, M. Milun, M. Kralj, K. Wandelt, **New Journal of Physics** 4 (2002) 75.1–75.15
7. *HRAES, STM and ARUPS study of the (5 × 1) reconstructed V(100) surface*, M. Kralj, P. Pervan, M. Milun, K. Wandelt, D. Mandrino, M. Jenko, **Surface Science** 526 (2003) 166–176
8. *Tetragonal silver films on V(100): Experimental and ab initio studies*, M. Kralj, P. Pervan, M. Milun, P. Lazić, Ž. Crljen, R. Brako, J. Schneider, A. Rosenhahn, K. Wandelt, **Physical Review B** 68 (2003) 195402
9. *d-band quantum well states in ultrathin silver films on V(100)*, M. Kralj, P. Pervan, M. Milun, T. Valla, P.D. Johnson, D.P. Woodruff, **Physical Review B** 68 (2003) 245413
10. *Spin-orbit splitting in ultra thin Ag films on Cu(100)*, V. Mikšić-Trontl, M. Kralj, M. Milun, P. Pervan, **Surface Science** 551 (2004) 125–131
11. *Surface waves on Ag/V(100)*, M. Kralj, M. Milun, P. Pervan, **Surface Science** 557 (2004) 208–214
12. *Determination of the coincidence lattice of an ultra thin alumina films on Ni₃Al(111)*, S. Degen, A. Krupski, M. Kralj, A. Langner, C. Becker, M. Sokolowski, K. Wandelt, **Surface Science** 576 (2005) L57–L64
13. *Final-state screening dynamics in resonant Auger decay at the 2p edge of vanadium*, V. Ilakovac, M. Kralj, P. Pervan, M.C. Richter, A. Goldoni, R. Larciprete, L. Petaccia, K. Hricovini, **Physical Review B** 71 (2005) 085413
14. *Hybridization schemes for Ag films on V(100)*, M. Kralj, **Surface Science** 599 (2005) 150–159
15. *Nucleation of ordered Fe islands on Al₂O₃/Ni₃Al(111)*, A. Lehnert, A. Krupski, S. Degen, K. Franke, S. Decker, S. Rusponi, M. Kralj, C. Becker, H. Brune, K. Wandelt, **Surface Science** 600 (2006) 1804–1808
16. *Temperature and coverage-dependent evolution of the Au/Pd(110) surface structure*, M. Kralj, A. Bailly, M.-C. Saint-Lager, S. Degen, A. Krupski, C. Becker, P. Dolle, M. De Santis, K. Wandelt, **Surface Science** 600 (2006) 2614–2622
17. *The initial stages of the hydrogen-induced reconstruction of Pd(110) studied with STM*, M. Kralj, C. Becker, K. Wandelt, **Surface Science** 600 (2006) 4113–4118
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