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Technical Program as of June 19, 2025 – Please keep checking back for updates

Sunday, June 22

14:00	*Registration, putting up posters*	*All posters will be on display during the entire conference week*
Sunday		
15:40 -15:50	OPENING REMARKS by Twinning Project coordinators **Jan HRUŠÁK** & **Štefan VAJDA**	
	Chair: Štefan VAJDA	
15:50 -16:00	*Introduction by the Chair*	
16:00 -16:25	IL 01	**JACOB Timo** *Institute of Electrochemistry, Ulm University, Germany* FUNDAMENTAL INSIGHTS INTO CATHODIC CORROSION: FABRICATION OF NANO- AND MICROSTRUCTURED METALS
16:25 -16:50	IL 02	**PARKINSON Gareth** *Institute of Applied Physics, TU Wien, Austria* STABILIZATION AND STRUCTURAL EVOLUTION OF Pt SINGLE ATOMS ON Fe_2O_3(1-102)
16:50 -17:05	HT	**STENER Mauro** *University of Trieste, Italy* PEEKING INTO THE FEMTOSECOND HOT-CARRIER DYNAMICS REVEALS UNEXPECTED MECHANISMS IN PLASMONIC PHOTOCATALYSIS
17:05 -17:20	HT	**SHUKUROV Andrey** *Charles University Prague, Czech Republic* CYLINDRICAL MAGNETRON FOR REACTIVE SPUTTER-DRIVEN SYNTHESIS OF Cu_3N NANOPARTICLES
17:20 -17:30		Discussion of the session
18:00	*Reception*	

Monday, June 23

Mo-AM1	Chair:	**Charles SYKES**
8:20 - 8:30		**WELCOME** by the Director of the Heyrovský Institute **Martin HOF**
8:30 - 8:40		*Introduction by the Chair*
8:40 - 9:05	IL 04	**OLSZÓWKA Joanna E.** *J. Heyrovský Institute of Physical Chemistry, Czech Republic* APPLICATION OF DEFECTED ZIRCONIA SUPPORT IN DRY METHANE REFORMING FOR ENHANCED CO_2 ACTIVATION
9:05 - 9:20	HT 01 Po 33	**SHANG Yuxuan** *King Abdullah University of Science and Technology, Saudi Arabia* DEFECT DENSITY THRESHOLD THEORY OF METHANE DRY REFORMING REACTION
9:20 - 9:45	IL 05	**SCHLÖGL Robert** *Alexander-von-Humboldt Foundation Bonn & Fritz-Haber Institut, Berlin, Germany* MULTISCALE NATURE OF INTERFACIAL CATALYSIS
9:45 - 9:55		Discussion of the session
9:55 -10:30		*Coffee Break*

Mo-AM2	Chair:	**Matthias HILLENKAMP**
10:30 -10:40		*Introduction by the Chair*
10:40 -11:05	IL 06	**HEARD Christopher** *Charles University Prague, Czech Republic* INVESTIGATING THE DYNAMICS OF OXIDE-SUPPORTED METAL CLUSTERS WITH MACHINE LEARNING
11:05 -11:30	IL 07	**LOPEZ-HARO Miguel** *University of Cádiz, Spain* QUANTITATIVE STRUCTURAL CHARACTERIZATION OF METAL-SUPPORT AND METAL-METAL INTERACTIONS IN SINGLE ATOM CATALYSTS USING DEEP LEARNING AND *HAADF-STEM*
11:30 -11:45	IHT 01	**MUROOKA Yoshie** *University of Liverpool, UK* PROGRESS OF RELATIVISTIC ULTRAFAST ELECTRON DIFFRACTION AND IMAGING (*RUEDI*) NATIONAL FACILITY FOR NANOMATERIALS AND CATALYSIS IN THE U.K.
11:45 -11:55		Discussion of the session
12:00 -13:30		*Lunch*

Monday, June 23

Mo-PM1	Chair:	**Timo JACOB**
13:30 -13:40		*Introduction by the Chair*
13:40 -14:05	IL 08	**YAVUZ Cafer T.** *King Abdullah University of Science and Technology, Saudi Arabia* THE DAWN OF SINGLE CRYSTALLINE SUPPORTS IN HETEROGENEOUS CATALYSIS
14:05 -14:20	HT 02 Po 15	**HÜTNER Johanna** *Institute of Applied Physics, TU Wien, Austria* THE UNRECONSTRUCTED Al_2O_3(0001) SURFACE IS METASTABLE AND ROUGH
14:20 - 14:35	IHT 02	**LEWANDOWSKI Mikołaj** *NanoBioMedical Centre, Adam Mickiewicz University in Poznań, Poland* UNDERSTANDING THE CATALYTIC ACTIVITY OF IRON NITRIDES: MODEL STUDIES ON Fe_xN/Cu
14:35 -14:50	HT 03 Po 17	**KUGLER David** *Institute of Applied Physics, TU Wien, Austria* STABILIZATION OF THE POLAR SPINEL $MgAl_2O_4$(001) SURFACE BY AN Al-RICH RECONSTRUCTION
14:50 -15:00		Discussion of the session
15:00 -15:30		*Coffee Break*

Mo-PM2	Chair:	**Manfred KAPPES**
15:30 -15:40		*Introduction by the Chair*
15:40 -15:55	HT 04 Po 45	**WANG Chunlei** *Institute of Applied Physics, TU Wien, Austria* DIHYDROGEN OR DIHYDRIDE ADSORPTION ON A HETEROGENEOUS Rh_1/Fe_3O_4(001) CATALYST
15:55 -16:20	IL 09	**NAKAJIMA Atsushi** *Department of Chemistry, Keio University, Japan* SIZE- AND CHARGE-STATE-DEPENDENT CHEMICAL REACTIVITY OF SINGLE-SIZED METAL NANOCLUSTERS SUPPORTED ON N-TYPE AND P-TYPE ORGANIC SUBSTRATES
16:20 -16:45	IL 10	**MANDAL Sukhendu** *IISER Thiruvananthapuram, India* CLUSTER AND CLUSTER-ASSEMBLY: LIGAND ENGINEERING AND PHOTO PHYSICAL PROPERTIES
16:45 -16:55		Discussion of the session

Poster I	Chair:	**Armin KLEIBERT**
17:00 -17:45		Flash Presentations – Odd Poster Numbers
18:00 - 21:00		**Poster Session I**

Tuesday, June 24

Tue-AM1	Chair:	**Mikołaj LEWANDOWSKI**
8:30 - 8:40		*Introduction by the Chair*
8:40 - 8:55	IHT 03	**KRAUSHOFER Florian** *Technical University of Munich, Germany* DISENTANGLING SIZE, PRESSURE, AND SUBSTRATE EFFECTS OF Pt PARTICLE OXIDATION ON TiO_2
8:55 - 9:10	HT 05 Po 09	**CONTI Andrea** *Institute of Applied Physics, TU Wien, Austria* UNRAVELING THE ATOMIC-SCALE SURFACE CHEMISTRY OF WOLLASTONITE ($CaSiO_3$)
9:10 - 9:25	IHT 04	**HILLENKAMP Matthias** *Institute of Light and Metter / University of Lyon 1, France* INTRINSIC COEXISTENCE OF MISCIBILITY AND SEGREGATION IN GOLD-SILVER NANOALLOYS
9:25 - 9:50	IL 11	**LECHNER Barbara** *Technical University of Munich, Germany* ATOMIC-SCALE STRUCTURAL DYNAMICS OF METAL CLUSTERS ON REDUCIBLE OXIDE SUPPORTS
9:50 -10:00		Discussion of the session
10:00 -10:30		*Coffee Break*

Tue-AM2	Chair:	**Cafer YAVUZ**
10:30 -10:40		*Introduction by the Chair*
10:40 -11:05	IL 12	**NACHTEGAAL Maarten** *PSI Villigen, Switzerland* FROM SINGLE SITE TO CLUSTERS: METAL SPECIATION AFFECTS SELECTIVITY IN NH_3-SCR AND PARTIAL OXIDATION OF METHANE
11:05 -11:20	HT 06 Po 38	**SWATHILAKSHMI S.** *PSI Villigen, Switzerland* TRANSMISSION ELECTRON MICROSCOPY TO STUDY Ni-BASED NANOCATALYSTS FOR DRY METHANE REFORMING
11:20 -11:45	IL 13 ***streamed***	**BROWNING Nigel** *University of Liverpool, UK* APPLICATIONS OF HIGH SPATIAL AND TEMPORAL RESOLUTION (SCANNING) TRANSMISSION ELECTRON MICROSCOPY TO THE STUDY OF DYNAMICS ON THE ATOMIC SCALE
11:45 -11:55		Discussion of the session
12:00 -13:30		*Lunch*

Tuesday, June 24

Tue-PM1	Chair:	**Jeroen van BOKHOVEN**
13:30 -13:40		*Introduction by the Chair*
13:40 -14:05	IL 14	**ANDREAZZA Pascal** *Université d'Orléans, France* STRUCTURAL STABILITY OF Pt-BASED NANOALLOYS: FROM BINARY TO MULTIMETALLIC
14:05 -14:20	IHT 05	**LOI Federico** *J. Heyrovský Institute of Physical Chemistry, Czech Republic* SYNERGISTIC EFFECTS IN AuNi CLUSTERS FOR CO OXIDATION: STRUCTURAL, ELECTRONIC, AND CATALYTIC INSIGHTS
14:20 -14:45	IL 15	**YANG Bing** *Dalian Institute of Chemical Physics, China* REGULATING THE SYNERGY BETWEEN CLUSTERS AND SINGLE ATOMS FOR ADVANCED CATALYSIS
14:45 -14:55		Discussion of the session
14:55 -15:30		*Coffee Break*

Tue-PM2	Chair:	**Gareth PARKINSON**
15:30 -15:40		*Introduction by the Chair*
15:40 -16:05	IL 16	**SYKES Charles** *Tufts University, USA* SINGLE-ATOM ALLOY CATALYSTS: BORN IN A VACUUM, TESTED IN REACTORS, AND UNDERSTOOD IN SILICO
16:05 -16:30	IL 17	**PICCOLO Laurent** *IRCELYON, CNRS & University Lyon 1, France* OXIDE-SUPPORTED PLATINUM-GROUP-METAL CLUSTERS VERSUS SINGLE ATOMS IN CATALYSIS: CLUSTERS CAN STILL MAKE A DIFFERENCE!
16:30 -16:45	HT 07 Po 05	**BENEŠOVÁ Tereza** *Charles University Prague, Czech Republic* STRUCTURE AND STABILITY OF SUPPORTED NOBLE METAL CLUSTERS *VIA* MACHINE LEARNING-ASSISTED MODELLING
16:45 -17:00	HT 08 Po 44	**VÍTEK Petr** *J. Heyrovský Institute of Physical Chemistry, Czech Republic* ATOM BY ATOM BUILT ATOMICALLY PRECISE CuPd PENTAMER CLUSTERS FOR CYCLOHEXENE DEHYDROGENATION
17:00 -17:10		Discussion of the session

Wednesday, June 25

Wed-AM1	Chair:	**Laurent PICCOLO**
8:30 - 8:40		*Introduction by the Chair*
8:40 - 8:55	HT 09 Po 31	**ROONGCHAROEN Thantip** *CNR-ICCOM, Italy* CONFORMAL SAMPLING OF CATALYTIC PROCESSES (*CSCP*) APPLIED TO CARBON DIOXIDE HYDROGENATION FOR METHANOL PRODUCTION
8:55 - 9:10	HT 10 Po 27	**PAVELEC Jiri** *Institute of Applied Physics, TU Wien, Austria* SURFACE SCIENCE APPROACH TO CO TITRATION OF Rh SINGLE-ATOM MODEL CATALYSTS
9:10 - 9:35	IL 18	**DIEBOLD Ulrike** *Institute of Applied Physics, TU Wien, Austria* ATOMICALLY-RESOLVED SURFACE STRUCTURE: THE PREREQUISITE FOR UNDERSTANDING SURFACE CHEMISTRY
9:35 -10:00	IL 19	**van BOKHOVEN Jeroen A.** *ETH Zurich & PSI Villigen, Switzerland* METHANOL TO OLEFINS, FROM ZEOLITE STRUCTURE TO MECHANISM AND IMPROVED PERFORMANCE
10:00 -10:10		Discussion of the session
10:10 -10:40		*Coffee Break*

WeAM2	Chair:	**Vlasta BONAČIĆ-KOUTECKÝ**
10:40 -10:50		*Introduction by the Chair*
10:50 -11:15	IL 20	**FORTUNELLI Alessandro** *National Research Council (CNR-ICCOM), Pisa, Italy* CONFORMAL SAMPLING APPROACH FOR PRACTICAL HIGH-THROUGHPUT SCREENING OF NOVEL CATALYSTS VIA ACCURATE MACHINE LEARNING INTERATOMIC POTENTIALS
11:15 -11:40	IL 21	**HE Sheng-Gui** *Institute of Chemistry, Chinese Academy of Sciences, China* MODELING THE CHEMICAL REACTIVITY OF METAL CLUSTERS BY MACHINING LEARNING
11:40 -11:55	IHT 06	**LEE Yonghyuk** *University of California Los Angeles, USA* SINTERING DYNAMICS OF RHODIUM CLUSTERS ON TiO_2 UNDER *RWGS* CONDITIONS *VIA* PHYSICS-INFORMED MACHINE LEARNING
11:55 -12:10	HT 11	**LANG Sandra M.** *Institute of Surface Chemistry and Catalysis, Ulm University, Germany* CATALYSIS MEETS ASTROCHEMISTRY: STRUCTURE, FORMATION, AND REACTIVITY OF ULTRA-SMALL MAGNESIUM-SILICATES IN THE GAS-PHASE
12:10 -12:20		Discussion of the session
12:30 -14:00		*Lunch*
14:30		*Departure of the bus to NanoCat Labs Excursion/Free afternoon*

Thursday, June 26

Thu-AM1		Chair: **Claude HENRY**
8:30 - 8:40		*Introduction by the Chair*
8:40 - 8:55	HT 12 Po 35	**MASSARIA DE ARCANTO João Pedro** *Helmholtz-Zentrum Berlin, Germany* PLATINUM GROUP METALS IN THE LIGHT OF *XAS*: SPECTROSCOPIC INSIGHTS OF HEAVY 5d TRANSITION METAL OXIDES
8:55 - 9:10	HT 13 Po 41	**ŠULKOVÁ Katarína** *ATRI MTF, Slovak University of Technology Bratislava, Slovakia* SUPERALKALI CLUSTERS FOR CO_2 ACTIVATION: ROLE OF ELECTRONIC STRUCTURE, SURFACE CHARGES AND IONIZATION POTENTIAL
9:10 - 9:25	HT 14 Po 06	**BERGUA Ramon** *University of the Basque Country, Spain* ENHANCING SELECTIVITY AND STABILITY OF Pd WITH Ti ALLOYS FOR SEMI-HYDROGENATION REACTIONS
9:25 - 9:50	IL 22	**WILLINGER Marc** *Technical University of Munich, Germany* NON-EQUILIBRIUM DYNAMICS AND THE EMERGENCE OF FUNCTION: INSIGHTS FROM OPERANDO ELECTRON MICROSCOPY
9:50 -10:00		Discussion of the session
10:00 -10:30		*Coffee Break*

Thu-AM2		Chair: **Atsushi NAKAJIMA**
10:30 -10:40		*Introduction by the Chair*
10:40 -10:55	HT 15 Po 26	**PERCO Deborah** *University of Trieste, Italy* LIMITATIONS IN DETERMINING OXIDATION STATES IN CONDENSED MATTER AT THE SUB-NANOMETRIC SCALE
10:55 -11:20	IL 23	**KAPPES Manfred** *KIT, Karlsruhe, Germany* ION MOBILITY STUDIES OF MASS-SELECTED CLUSTERS
11:20 -11:45	IL 24	**BAKKER Joost** *Radboud University, Nijmegen, The Netherlands* INFRARED FEL-BASED SPECTROSCOPIC CHARACTERIZATION OF METAL CLUSTERS, METAL-FULLERENE COMPLEXES, AND THEIR REACTION PRODUCTS WITH SMALL MOLECULES
11:45 -11:55		Discussion of the session
12:00 -13.30		*Lunch*

Thursday, June 26

Thu-PM1	Chair:	**Scott ANDERSON**
13:30 -13:40		*Introduction by the Chair*
13:40 -14:05	IL 25	**CENTI Gabriele** *University of Messina, Italy* ELECTROCATALYSIS: PROSPECTS AND ROLE TO ENABLE an e-CHEMISTRY FUTURE
14:05 -14:20	IHT 07	**DRNEC Jakub** *ESRF, France* IN-SITU AND OPERANDO X-RAY SCATTERING INSIGHTS INTO THE FORMATION AND STRUCTURAL TRANSFORMATION OF NANOPARTICLE ELECTROCATALYSTS
14:20 -14:35	HT 16 Po 11	**FACKLER Sebastian** *Institute of Electrochemistry, Ulm University, Germany* INFLUENCE OF THE PRESENCE OF ACETIC ACID ON THE UNDERPOTENTIAL DEPOSITION OF COPPER ONTO NOBLE METAL SINGLE CRYSTALS
14:35 -14:50	HT 17 Po 47	**WANG Jue** *Yancheng Institute of Technology, China* PRECISE SYNTHESIS OF ATOMIC CLUSTERS FOR EFFICIENT CO_2 ELECTROREDUCTION: Cu-BASED AND Ag-Cu ALLOY NANOCLUSTER CATALYSTS
14:50 -15:00		Discussion of the session
15:00 -15:30		*Coffee Break*

Thu-PM2	Chair:	**Richard PALMER**
15:30 -15:40		*Introduction by the Chair*
15:40 -16:05	IL 26	**ANDERSON Scott L.** *University of Utah, USA* CLUSTER SIZE AND SUPPORT EFFECTS ON ELECTROCATALYTIC ACTIVITY OF SUB-NANO Pt_n
16:05 -16:20	HT 18 Po 29	**PRADEEP Deepak** *Radboud University, The Netherlands* DOPING CATIONIC COBALT CLUSTERS TO TUNE CO_2 ACTIVATION
16:20 -16:45	IL 27	**SZANYI Janos** *Pacific Northwest National Laboratory, USA* ROLES OF CATION MIGRATION AND CLUSTER FORMATION IN NO_X STORAGE AND LOW TEMPERATURE CO OXIDATION OVER Pd/FER ZEOLITES
16:45 -16:55		Discussion of the session

Poster II	Chair:	**Joanna OLSZÓWKA**
17:00 -17:45		Flash Presentations – Even Poster Numbers
18:00 - 21:00		**Poster Session II**

Friday June 27

Fri-AM1	Chair:	**Alessandro FORTUNELLI**
8:30 - 8:40		*Introduction by the Chair*
8:40 - 9:05	IL 28	**TSUKUDA Tatsuya** *The University of Tokyo, Japan* ATOMICALLY PRECISE GOLD-BASED NANOCLUSTERS AS MODEL CATALYSTS
9:05 - 9:20	HT 19 Po 16	**KIM Seok-Jin** *King Abdullah University of Science and Technology, Saudi Arabia* EXPLORING NOSCE BEHAVIOR IN THE DRY REFORMING REACTION
9:20 - 9:35	HT 20 Po 32	**SAJAD Mehran** *J. Heyrovský Institute of Physical Chemistry, Czech Republic* NICKEL-BASED MATERIALS AS LOW-TEMPERATURE ACTIVE CATALYSTS IN DRY METHANE REFORMING
9:35 - 9:50	HT 21 Po 20	**LI Xia** Institute of Applied Physics, TU Wien, Austria D_2O-ICE AT OXIDE FILM SURFACES AND H_2O AT THE LIQUID-AIR INTERFACE STUDIED BY SUM FREQUENCY GENERATION (*SFG*) LASER SPECTROSCOPY
9:50 -10:05	HT 22 Po 14	**HERMANN Johannes** *Institute of Electrochemistry, Ulm University, Germany* CATHODIC CORROSION FOR FABRICATION OF NANOSTRUCTURED METALS
10:05 -10:15		Discussion of the session
10:15 -10:45		*Coffee Break*

Friday June 27

Fri-AM2	Chair:	**Tatsuya TSUKUDA**
10:45 -10:55		*Introduction by the Chair*
10:55 -11:20	IL 29	**KLEIBERT Armin** *Swiss Light Source, Switzerland* STRUCTURE, MAGNETISM, AND OXIDATION MECHANISM IN INDIVIDUAL Co NANOPARTICLES REVEALED BY CORRELATED MICROSCOPY
11:20 -11:35	HT 23 Po 10	**ELNAGAR Mohamed** *Institute of Electrochemistry, Ulm University, Germany* LIGHT-INDUCED REDUCTION OF OXYGEN TO HYDROGEN PEROXIDE ON Au/ZnO-CARBON-NITRIDE HETEROSTRUCTURES
11:35 -11:50	HT 24 Po 03	**ARYAN Aryan** *GREMI, CNRS, Université d'Orléans, France* PLASMA-INDUCED TRANSFORMATION OF MULTIMETALLIC PtSn AND PtRuSn NANOCATALYSTS FOR HYDROGEN FUEL CELLS
11:50 -12:05	HT 25 Po 42	**VAIDULYCH Mykhailo** *J. Heyrovský Institute of Physical Chemistry, Czech Republic* NANOPLASMONIC SENSING ON SIZE-SELECTED Pt_{10} CLUSTERS TO STUDY CO AND OXYGEN ADSORPTION AND CO OXIDATION
12:05 -12:20	HT 26 Po 46	**WEISSKER Hans-Christian** *CINaM, Aix-Marseille University and CNRS, France* OPTICAL PROPERTIES OF GOLD CLUSTERS FOLLOWING SURFACE-MODIFICATION BY HYDROGEN EXPOSURE
12:20 -12:30		Discussion of the session
12:30		*Polls results announcements: Best Posters*
13:00		*Farewell*

POSTERS

Monday Poster Session I preceded by Flash Talks - Odd poster numbers

Thursday Poster Session II preceded by Flash Talks - Even poster numbers

All posters on display *Sunday afternoon – Friday morning*, <u>including those regular abstracts which were selected for Hot Topic talk.</u>

1 **ADVANI Jacky**
VSB-Technical University of Ostrava, Czech Republic
IRON SINGLE-ATOM CATALYSIS: A SUSTAINABLE ROUTE TO *DFF* FROM *HMF* ON NITROGEN-DOPED GRAPHENE ACID

2 **ANDERSSON Gunther**
Flinders University, Australia
VALENCE BAND SPECTROSCOPY OF Pt CLUSTERS AS Co-CATALYSTS SUPPORTED ON *ITO* AND *FTO*: EFFECTS OF SIZE AND COVERAGE

3 **ARYAN Aryan**
HT 24 *GREMI, CNRS, Université d'Orléans, France*
PLASMA-INDUCED TRANSFORMATION OF MULTIMETALLIC PtSn AND PtRuSn NANOCATALYSTS FOR HYDROGEN FUEL CELLS

4 **BARAMA Nail El Hocine**
Institute of Applied Physics, TU Wien, Austria
ADVANCED *IRAS* ANALYSIS OF CO ADSORPTION ON TiO_2(110)

5 **BENEŠOVÁ Tereza**
HT 07 *Charles University Prague, Czech Republic*
STRUCTURE AND STABILITY OF SUPPORTED NOBLE METAL CLUSTERS *VIA* MACHINE LEARNING-ASSISTED MODELLING

6 **BERGUA Ramon**
HT 14 *University of the Basque Country (UPV/EHU), Spain*
ENHANCING SELECTIVITY AND STABILITY OF Pd WITH TI ALLOYS FOR SEMI-HYDROGENATION REACTIONS

7 **BULÁNEK Roman**
University of Pardubice, Czech Republic
ENCAPSULATION OF COPPER NANOPARTICLES IN ZEOLITES

8 **CANESTRARI Nicolò**
University of Genoa, Italy
ICOSAHEDRA: STRUCTURE AND GROWTH

9 **CONTI Andrea**
HT 05 *Institute of Applied Physics, TU Wien, Austria*
UNRAVELING THE ATOMIC-SCALE SURFACE CHEMISTRY OF WOLLASTONITE ($CaSIO_3$)

10 **ELNAGAR Mohamed**
HT 23 *Institute of Electrochemistry, Ulm University, Germany*
LIGHT-INDUCED REDUCTION OF OXYGEN TO HYDROGEN PEROXIDE ON Au/ZnO–CARBON-NITRIDE HETEROSTRUCTURES

11 **FACKLER Sebastian**
HT 16 *Institute of Electrochemistry, Ulm University, Germany*
INFLUENCE OF THE PRESENCE OF ACETIC ACID ON THE UNDERPOTENTIAL DEPOSITION OF COPPER ONTO NOBLE METAL SINGLE CRYSTALS

12 **FILZMOSER Johannes**
Institute of Applied Physics, TU Wien, Austria
IMPROVING SENSITIVITY: A DIFFERENTIALLY PUMPED MASS SPECTROMETRY SETUP FOR DETECTING PRODUCTS FROM SINGLE-ATOM CATALYSTS

13 **GERMAN Estefania**
Universidad de Valladolid, Spain
STRUCTURES OF TRANSITION METAL CLUSTERS SUPPORTED ON FULLERENE

14 **HERMANN Johannes**
HT 22 *Institute of Electrochemistry, Ulm University, Germany*
CATHODIC CORROSION FOR FABRICATION OF NANOSTRUCTURED METALS

15 **HÜTNER Johanna**
HT 02 *Institute of Applied Physics, TU Wien, Austria*
THE UNRECONSTRUCTED Al_2O_3(0001) SURFACE IS METASTABLE AND ROUGH

16 **KIM Seok-Jin**
HT 19 *King Abdullah University of Science and Technology, Saudi Arabia*
EXPLORING NOSCE BEHAVIOR IN THE DRY REFORMING REACTION

17 **KUGLER David**
HT 03 *Institute of Applied Physics, TU Wien, Austria*
STABILIZATION OF THE POLAR SPINEL $MgAl_2O_4$(001) SURFACE BY AN Al-RICH RECONSTRUCTION

18 **LAGIN Adam**
Wien University of Technology, Austria
BRIDGING THE PRESSURE GAP FOR SINGLE-ATOM MODEL CATALYSTS: DEVELOPMENT OF NEAR-AMBIENT-PRESSURE REACTION CELL

19 **LANG Sandra M.**
HT 11 *Institute of Surface Chemistry and Catalysis, Ulm University, Germany*
CATALYSIS MEETS ASTROCHEMISTRY: STRUCTURE, FORMATION, AND REACTIVITY OF ULTRA-SMALL MAGNESIUM-SILICATES IN THE GAS-PHASE

20 **LI Xia**
HT 21 *Institute of Applied Physics, TU Wien, Austria*
D_2O-ICE AT OXIDE FILM SURFACES AND H_2O AT THE LIQUID-AIR INTERFACE STUDIED BY SUM FREQUENCY GENERATION (*SFG*) LASER SPECTROSCOPY

21 **LOI Federico**
J. Heyrovský Institute of Physical Chemistry, Czech Republic
OSCILLATORY CATALYTIC ACTIVITY IN MAGNETRON-SPUTTERED Cu–Pd/ZIRCONIA THIN FILMS FOR CYCLOHEXENE ODH

22 **LU Xinran**
University of Santiago de Compostela, Spain
NEW POLYMERIZATION REACTION CATALYZED BY SILVER CLUSTERS

23 **MASSARIA DE ARCANTO João Pedro**
HT 12 *Helmholtz-Zentrum Berlin, Germany*
PLATINUM GROUP METALS IN THE LIGHT OF *XAS*: SPECTROSCOPIC INSIGHTS OF HEAVY 5dTRANSITION METAL OXIDES

24 **MOLINA Luis M.**
Universidad de Valladolid, Spain
AB INITIO SIMULATIONS OF CARBON DIOXIDE FORMATION AT OXIDIZED BIMETALLIC Pt-Re CLUSTERS

25 **NARYYEV Eziz**
King Abdullah University of Science and Technology, Saudi Arabia
MICROWAVE-ENHANCED CATALYSIS FOR HYDROGEN AND SULFUR RECOVERY FROM WASTE H_2S

26 **PERCO Deborah**
HT 15 *University of Trieste, Italy*
LIMITATIONS IN DETERMINING OXIDATION STATES IN CONDENSED MATTER AT THE SUB-NANOMETRIC SCALE

27 **PAVELEC Jiri**
HT 16 *Institute of Applied Physics, TU Wien, Austria*
SURFACE SCIENCE APPROACH TO CO TITRATION OF Rh SINGLE-ATOM MODEL CATALYSTS

28 **POKORNÁ Kristýna**
Charles University Prague, Czech Republic
SUB-NANO CuAg CLUSTERS SUPPORTED ON α-ALUMINA: MACHINE-LEARNING-ASSISTED *DFT* CHARACTERIZATION

29 **PRADEEP Deepak**
HT 18 *Radboud University, Nijmegen, Netherlands*
DOPING CATIONIC COBALT CLUSTERS TO TUNE CO_2 ACTIVATION

30 **RADDE Nico**
Technical Universtity of Munich, Germany
DEPENDENCY OF *SMSI* EFFECT OF TiO_2 SUPPORTED Pt PARTICLES ON Ti REDUCTION STATE AND PRESSURE

31 **ROONGCHAROEN Thantip**
HT 09 *CNR-ICCOM, Italy*
CONFORMAL SAMPLING OF CATALYTIC PROCESSES (*CSCP*) APPLIED TO CARBON DIOXIDE HYDROGENATION FOR METHANOL PRODUCTION

32 **SAJAD Mehran**
HT 20 *J. Heyrovský Institute of Physical Chemistry, Czech Republic*
NICKEL-BASED MATERIALS AS LOW-TEMPERATURE ACTIVE CATALYSTS IN DRY METHANE REFORMING

33 **SHANG Yuxuan**
HT 01 *King Abdullah University of Science and Technology, Saudi Arabia*
DEFECT DENSITY THRESHOLD THEORY OF METHANE DRY REFORMING REACTION

34 **SHUKUROV Andrey**
HT- Su *Charles University Prague, Czech Republic*
CYLINDRICAL MAGNETRON FOR REACTIVE SPUTTER-DRIVEN SYNTHESIS OF Cu_3N NANOPARTICLES

35 **STENER Mauro**
HT- Su *University of Trieste, Italy*
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