

PERSONAL INFORMATION

Mark Hermann Rummeli



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Sex Male | Date of birth 16/10/1967 | Nationality Swiss/British

JOB APPLIED FOR  
POSITION  
PREFERRED JOB  
STUDIES APPLIED FOR

ERA Chair, Institute of Environmental Technology, Centre for Energy and Environmental Technologies (CEET), VSB – Technical University of Ostrava (CZ), Ostrava, Czech Republic

SCIENTIFIC FOCUS

Nano-Materials discovery, fabrication & functionalization. In situ electron microscopy. Electron – specimen interactions related to nanomaterials for manufacturing and engineering.

WORK EXPERIENCE

- 2015 – current Distinguished Professor, Group Leader - Laboratories for Integrated Nanomaterials, Director of the Characterization Centre. College of Energy, Soochow University, PRC
- 2014 – current Professor/Scholar, Polish Academy of Sciences, Centre of Polymer and Carbon Sciences, Zabrze, Poland
- 2019 – current Excellent Researcher, Institute of Environmental Technology, Centre for Energy and Environmental Technologies (CEET), VSB – Technical University of Ostrava (CZ), Ostrava, Czech Republic
- 2003 – current Visiting Professor/Scholar, Leibniz Institute for Solid State and Materials Research, IFW Dresden, Germany.
- 2013 - 2015 Full Professor, Centre for Integrated Nanostructure Physics (IBS) & Dept. of Energy Sciences, Sungkyunkwan University, S. Korea

EDUCATION AND TRAINING

- 1991-1996 **Doctor of Philosophy**  
The University of North London, London, UK
  - Plasma Physics and Analytical Atomic Spectroscopy
- 1994 **Certificate**  
The University of North London, London, UK
  - Data Communication Systems
- 1993 **Post-Graduate School**  
Durham University, Durham, UK
  - Scientists in Industry and Commerce
- 1988 to 1991 **Bachelor of Science** First Class Honors  
The Polytechnic of North London, London, UK
  - Physics and Computer Electronics

PERSONAL SKILLS

Mother tongue(s) English

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Spanish	Medium	Medium	Medium	Medium	Medium
Certificate for completion of middle school, Argentina					
German	Basic	Basic	Basic	Basic	Basic
No certifications					

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

- Communication skills**
- Excellent written and verbal communication skills built on many years of managing teams
  - Articulate, and professional speaking abilities (and experience)
  - Empathic listener and persuasive speaker.
  - Writing creative or factual based on over 20 years in academic research.
  - Speaking in public, to groups, or via electronic media (significant experience).
  - Excellent presentation and negotiation skills.
  - Excellent team building (based on founding many research teams globally)

- Organisational / managerial skills**
- Group Leadership (currently responsible for 3 teams of 18, 5 and 2 people)
  - Founded and managed 4 research teams (internationally)
  - Founded and managed 7 laboratories (4 currently)
  - Management of scientific characterization centre (current)
  - Member of various academic committees and boards (international)
  - Member of various international conference committees
  - Management of academic courses
  - Producing high-quality results and working cooperatively to achieved shared goals
  - Experience in managing and mentoring scientists, technicians, Ph.D. candidates, master's and bachelor's students
  - Experience in managing research budgets, procuring multimillion-dollar equipment, applying for grant funding and other related administrative and operational leadership responsibilities

- Job-related skills**
- Significant experience in establishing and managing research groups
  - Setting up and managing academic courses
  - Establishing laboratory guidelines (safety & Health)
  - Establishing academic collaborative research and joint academic degrees etc (international)
  - Planning and executing impactful scientific research

- Computer skills**
- Good command of Microsoft Office™ tools
  - Origin
  - JEMS
  - Materials Studio
  - Microscopy Suite
  - HTML programming
  - Various scientific instrumentation software

- Statement**
- Passionate about cutting-edge research and development. Strong desire to meld science and technology toward the improvement of human health, welfare and sustainability.

- Driving licence**
- UK driving licence AM to D1, CN driving licence (Car)

ADDITIONAL INFORMATION
 

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## Lectures

*Total peer review publications is 401. For convenience only the past five years lectures are provided. Per Google Scholar, H index is 69, Citations is 17160.*

401. Shu Zhang, Jinbo Pang, Yufen Li, Bergoi Ibarlucea, Yu Liu, Ting Wang, Xiaoyan Liu, Songang Peng, Thomas Gemming, Qilin Cheng, Hong Liu, Jiali Yang, Gianaurelio Cuniberti, Weijia Zhou, **Mark H Rummeli\***, An effective formaldehyde gas sensor based on oxygen-rich three-dimensional graphene, *Nanotechnology* (2022) – accepted.
400. Chengyi Lu, Meng Tian, Xiangjun Zheng, Chaohui Wei, **Mark H Rummeli**, Peter Strasser, Ruizhi Yang, Cotton pad derived 3D lithiophilic carbon host for robust Li metal anode: In-situ generated ionic conductive Li<sub>3</sub>N protective decoration, *Chemical Engineering Journal* (2022) **430**, 132722.
399. Jinbo Pang, Yanhao Wang, Xiaoxin Yang, Lei Zhang, Yufen Li, Yu Zhang, Jiali Yang, Feng Yang, Xiao Wang, Gianaurelio Cuniberti, Hong Liu, **Mark H Rummeli\***, Wafer-scale two-dimensional platinum monosulfide ultrathin film via metal sulfurization for high performance photoelectronics, *Mater. Adv.* (2022) **3**, 1497-1505.
398. Sami Ullah, Yu Liu, Maria Hasan, Wenwen Zeng, Qitao Shi, Xiaoqin Yang, Lei Fu, Huy Q Ta, Xueyu Lian, Jingyu Sun, Ruizhi Yang, Lijun Liu, **Mark H Rummeli\***, Direct synthesis of large-area Al-doped graphene by chemical vapor deposition: Advancing the substitutionally doped graphene family, *Nano Res.* (2022) **15**, 1310–1318.
397. Sami Ullah, Huy Q. Ta, Xiaoqin Yang, Yu Liu, Maria Hasan, Alicja Bachmatiuk, Lijun Liu, **Mark H. Rummeli\***, Quasistatic Equilibrium Chemical Vapor Deposition of Graphene, *Adv. Mater. Interfaces* (2022) **9**, 2101500.
396. Xueyu Lian, Zhongti Sun, Qingqing Mei, Yuyang Yi, Junhua Zhou, **Mark H Rummeli**, Jingyu Sun, Biomass Template Derived Boron/Oxygen Co-Doped Carbon Particles as Advanced Anodes for Potassium-Ion Batteries, *Energy Environ. Mater.* (2022) **5**, 344-352.
395. Junhua Zhou, Weibin Ye, Xueyu Lian, Qitao Shi, Yu Liu, Xiaoqin Yang, Lijun Liu, Dan Wang, Jin-Ho Choi, Jingyu Sun, Ruizhi Yang, Ming-Sheng Wang, **Mark H Rummeli\***, Advanced red phosphorus/carbon composites with practical application potential for sodium ion batteries, *Energy Storage Materials* (2022) **46**, 20-28.
394. Junhua Zhou, Xueyu Lian, Qitao Shi, Yu Liu, Xiaoqin Yang, Alicja Bachmatiuk, Lijun Liu, Jingyu Sun, Ruizhi Yang, Jin-Ho Choi, **Mark H Rummeli\***, Dual-Salt Electrolyte Additives Enabled Stable Lithium Metal Anode/Lithium–Manganese-Rich Cathode Batteries, *Adv. Energy Sustainability Res.* (2022) **3**, 2100140.
393. Wenjie Wang, Yao Wang, Runze He, Xiaozheng Wang, Zheng Shen, Xiaocang Han, Alicja Bachmatiuk, Wen Wen, **Mark H Rummeli**, Pan Liu, Mengqi Zeng, Lei Fu, Ultrafast Single-Crystal-to-Single-Crystal Transformation from Metal–Organic Framework to 2D Hydroxide, *Adv. Mater.* (2022) **34**, 2106400.
392. Shu Zhang, Jinbo Pang, Yufen Li, Feng Yang, Thomas Gemming, Kai Wang, Xiao Wang, Songang Peng, Xiaoyan Liu, Bin Chang, Hong Liu, Weijia Zhou, Gianaurelio Cuniberti, **Mark H Rummeli\***, Emerging Internet of Things driven carbon nanotubes-based devices. *Nano Res.* (2022). <https://doi.org/10.1007/s12274-021-3986-7>.
391. Xulan Xie, Xiang Zhang, Miao Xie, Likun Xiong, Hao Sun, Yongtao Lu, Qiaoqiao Mu, **Mark H Rummeli**, Jiabin Xu, Shuo Li, Jun Zhong, Zhao Deng, Bingyun Ma, Tao Cheng, William A Goddard, Yang Peng, Au-activated N motifs in non-coherent cupric porphyrin metal organic frameworks for promoting and stabilizing ethylene production, *Nat. Commun.* (2022) **13**, 63.
390. Junhua Zhou, Yizhou You, Xueyu Lian, Qitao Shi, Yu Liu, Xiaoqin Yang, Alicja Bachmatiuk, Lijun Liu, Jingyu Sun, Ruizhi Yang, Jin-Ho Choi, **Mark H Rummeli\***, Toward stable lithium-ion batteries: Accelerating the transfer and alloying reactions of Sn-based anodes via coordination atom regulation and carbon hybridization, *Journal of Power Sources* (2022) **519**, 230778.

389. Qingfang Han, Jinbo Pang, Yufen Li, Baojun Sun, Bergoi Ibarlucea, Xiaoyan Liu, Thomas Gemming, Qilin Cheng, Shu Zhang, Hong Liu, Jingang Wang, Weijia Zhou, Gianaurelio Cuniberti, **Mark H Rummeli\***, Graphene Biodevices for Early Disease Diagnosis Based on Biomarker Detection, *ACS Sens.* (2021) **6**, 3841–3881.
388. Hao Sun, Ling Chen, Likun Xiong, Kun Feng, Yufeng Chen, Xiang Zhang, Xuzhou Yuan, Baiyu Yang, Zhao Deng, Yu Liu, **Mark H Rummeli**, Jun Zhong, Yan Jiao, Yang Peng, Promoting ethylene production over a wide potential window on Cu crystallites induced and stabilized via current shock and charge delocalization, *Nat. Commun.* (2021) **12**, 6823.
387. Ping Wei, Yong Cheng, Xiaolin Yan, Weibin Ye, Xiangna Lan, Lina Wang, Jingjie Sun, Zhiyang Yu, Guangfu Luo, Yong Yang, **Mark H Rummeli**, Ming-Sheng Wang, Mechanistic Probing of Encapsulation and Confined Growth of Lithium Crystals in Carbonaceous Nanotubes, *Adv. Mater.* (2021) **33**, 2105228.
386. Yongxiang Jiang, Meng Tian, Haibo Wang, Chaohui Wei, Zhihui Sun, **Mark H Rummeli**, Peter Strasser, Jingyu Sun, Ruizhi Yang, Mildly Oxidized MXene (Ti<sub>3</sub>C<sub>2</sub>, Nb<sub>2</sub>C, and V<sub>2</sub>C) Electrocatalyst via a Generic Strategy Enables Longevous Li–O<sub>2</sub> Battery under a High Rate, *ACS Nano* (2021) **15**, 19640–19650.
385. Wanli Wang, Jinbo Pang, Jie Su, Fujiang Li, Qiang Li, Xiaoxiong Wang, Jingang Wang, Bergoi Ibarlucea, Xiaoyan Liu, Yufen Li, Weijia Zhou, Kai Wang, Qingfang Han, Lei Liu, Ruohan Zang, **Mark H Rummeli**, Yang Li, Hong Liu, Han Hu, Gianaurelio Cuniberti, Applications of nanogenerators for biomedical engineering and healthcare systems, *InfoMat.* (2021) 1- 57.
384. Shu Zhang, Jinbo Pang, Qilin Cheng, Feng Yang, Yu Chen, Yu Liu, Yufen Li, Thomas Gemming, Xiaoyan Liu, Bergoi Ibarlucea, Jiali Yang, Hong Liu, Weijia Zhou, Gianaurelio Cuniberti, **Mark H. Rummeli\***, High-performance electronics and optoelectronics of monolayer tungsten diselenide full film from pre-seeding strategy, *InfoMat* (2021) **3**, 1455-1469.
383. Jinbo Pang, Alicja Bachmatiuk, Feng Yang, Hong Liu, Weijia Zhou, **Mark H Rummeli**, Gianaurelio Cuniberti, Applications of Carbon Nanotubes in the Internet of Things Era, *Nano-Micro Lett.* (2021) **13**, 191.
382. Diana Galiakhmetova, Yuriy Gladush, Aram Mkrtchyan, Fedor S Fedorov, Eldar M Khabushev, Dmitry V Krasnikov, Raghavan Chinnambedu-Murugesan, Egor Manuylovich, Vladislav Dvoyrin, Alex Rozhin, **Mark Rummeli**, Sergey Alyatkin, Pavlos Lagoudakis, Albert G Nasibulin, Direct measurement of carbon nanotube temperature between fiber ferrules as a universal tool for saturable absorber stability investigation, *Carbon* (2021) **184**, 941-948.
381. Ping Wei, Yong Cheng, Xiaolin Yan, Weibin Ye, Xiangna Lan, Lina Wang, Jingjie Sun, Zhiyang Yu, Guangfu Luo, Yong Yang, **Mark H Rummeli**, Ming-Sheng Wang, Nano-Encapsulation and Confined Growth Kinetics of Lithium Crystals in One-Dimensional Carbon Hosts, *Adv. Mater.* (2021) 2105228.
380. Chengyi Lu, Meng Tian, Xiangjun Zheng, Chaohui Wei, **Mark H Rummeli**, Peter Strasser, Ruizhi Yang, Cotton pad derived 3D lithiophilic carbon host for robust Li metal anode: In-situ generated ionic conductive Li<sub>3</sub>N protective decoration, *Chemical Engineering Journal* (2021) **430**, 132722.
379. Jingyuan Shan, Sunmiao Fang, Wendong Wang, Wen Zhao, Rui Zhang, Bingzhi Liu, Li Lin, Bei Jiang, Haina Ci, Ruojuan Liu, Wen Wang, Xiaoqin Yang, Wenyue Guo, **Mark H Rummeli**, Wanlin Guo, Jingyu Sun, Zhongfan Liu, Copper acetate-facilitated transfer-free growth of high-quality graphene advancing hydrovoltaic electricity generators, *National Science Review* (2021) nwab169.
378. Huy Q Ta, Rafael G Mendes, Yu Liu, Xiaoqin Yang, Jingping Luo, Alicja Bachmatiuk, Thomas Gemming, Mengqi Zeng, Lei Fu, Lijun Liu, **Mark H Rummeli**, In Situ Fabrication of Freestanding Single-Atom-Thick 2D Metal/Metallene and 2D Metal/Metallene Oxide Membranes: Recent Developments, *Adv. Sci.* (2021) **8**, 2100619.
377. Linyang Li, Fangyun Lu, Wenqi Xiong, Yu Ding, Yangyi Lu, Yao Xiao, Xin Tong, Yao Wang,

- Shuangfeng Jia, Jianbo Wang, Rafael G Mendes, **Mark H Rummeli**, Shengjun Yuan, Mengqi Zeng, Lei Fu, General synthesis of 2D rare-earth oxides single crystals with tailorable facet, *National Science Review* (2021) nwab153.
376. Xueyu Lian, Junhua Zhou, Yizhou You, Zhengnan Tian, Yuyang Yi, Jin-Ho Choi, **Mark H Rummeli**, Jingyu Sun, Boosting K<sup>+</sup> Capacitive Storage in Dual-Doped Carbon Crumples with B–N Moiety via a General Protic-Salt Synthetic Strategy, *Adv. Funct. Mater.* (2021) 2109969.
375. Yanhao Wang, Jinbo Pang, Qilin Cheng, Lin Han, Yufen Li, Xue Meng, Bergoi Ibarlucea, Hongbin Zhao, Feng Yang, Haiyun Liu, Hong Liu, Weijia Zhou, Xiao Wang, **Mark H Rummeli**, Yu Zhang, Gianarelio Cuniberti, Applications of 2D-Layered Palladium Diselenide and Its van der Waals Heterostructures in Electronics and Optoelectronics, *Nano-Micro Lett.* (2021) **13**, 1-52.
374. Likun Xiong, Xiang Zhang, Ling Chen, Zhao Deng, Sheng Han, Yufeng Chen, Jun Zhong, Hao Sun, Yuebin Lian, Baiyu Yang, Xuzhou Yuan, Hui Yu, Yu Liu, Xiaoqin Yang, Jun Guo, **Mark H Rummeli**, Yan Jiao, Yang Peng, Geometric Modulation of Local CO Flux in Ag@Cu<sub>2</sub>O Nanoreactors for Steering the CO<sub>2</sub>RR Pathway toward High-Efficacy Methane Production, *Adv. Mater.* (2021) **33**, 2101741.
373. Zhihui Sun, Xuecheng Cao, Meng Tian, Kai Zeng, Yongxiang Jiang, **Mark H Rummeli**, Peter Strasser, Ruizhi Yang, Synergized Multimetal Oxides with Amorphous/Crystalline Heterostructure as Efficient Electrocatalysts for Lithium–Oxygen Batteries, *Adv. Energy Mater.* (2021) **11**, 2100110.
372. Yan Zhang, Chaohui Wei, Jiawen Sun, Jiejie Jian, Chao Jin, Chengyi Lu, Lin Peng, Shuai Li, **Mark H Rummeli**\*, Ruizhi Yang\*, Au@rGO modified Ni foam as a stable host for lithium metal anode, *Solid State Ionics* (2021) **364**, 115636.
371. Alexey Stepanov, Svetlana Fedorenko, Rafael Mendes, **Mark Rummeli**, Lars Giebeler, Bruno Weise, Thomas Gemming, Silvio Dutz, Diana Zahn, Ildus Ismaev, Rustem Amirov, Kirill Kholin, Alexandra Voloshina, Anastasiya Sapunova, Svetlana Solovieva, Asiya Mustafina, T<sub>2</sub>- and T<sub>1</sub> relaxivities and magnetic hyperthermia of iron-oxide nanoparticles combined with paramagnetic Gd complexes, *J. Chem. Sci.* (2021) **133**, 43.
370. Junhua Zhou, Xueyu Lian, Yizhou You, Qitao Shi, Yu Liu, Xiaoqin Yang, Lijun Liu, Dan Wang, Jin-Ho Choi, Jingyu Sun, Ruizhi Yang, **Mark H Rummeli**\*, Revealing the Various Electrochemical Behaviors of Sn<sub>4</sub>P<sub>3</sub> Binary Alloy Anodes in Alkali Metal Ion Batteries, *Adv. Funct. Mater.* (2021) **31**, 2102047.
369. Yindong Gu, Yuxiang Min, Li Li, Yuebin Lian, Hao Sun, Dan Wang, **Mark H Rummeli**, Jun Guo, Jun Zhong, Lai Xu, Yang Peng, Zhao Deng, Crystal Splintering of β-MnO<sub>2</sub> Induced by Interstitial Ru Doping Toward Reversible Oxygen Conversion, *Chem. Mater.* (2021) **33**, 4135–4145.
368. Luzhao Sun, Zihao Wang, Yuechen Wang, Liang Zhao, Yanglizhi Li, Buhang Chen, Shenghong Huang, Shishu Zhang, Wendong Wang, Ding Pei, Hongwei Fang, Shan Zhong, Haiyang Liu, Jincan Zhang, Lianming Tong, Yulin Chen, Zhenyu Li, **Mark H Rummeli**, Kostya S Novoselov, Hailin Peng, Li Lin, Zhongfan Liu, Hetero-site nucleation for growing twisted bilayer graphene with a wide range of twist angles, *Nat. Commun.* (2021) **12**, 1-8.
367. Yu Cao, Chaoying Liu, Jiahao Jiang, Xinyun Zhu, Jing Zhou, Jian Ni, Jianjun Zhang, Jinbo Pang, **Mark H Rummeli**, Weijia Zhou, Hong Liu, Gianarelio Cuniberti, Theoretical Insight into High-Efficiency Triple-Junction Tandem Solar Cells via the Band Engineering of Antimony Chalcogenides, *Solar RRL* (2021) **5**, 2000800.
366. Xiaoqin Yang, Yu Liu, Huy Q. Ta, Yue Zhang, Ehsan Rezvani, Mengqi Zeng, Lei Fu, Alicja Bachmatiuk, Jinping Luo, Lijun Liu, **Mark H. Rummeli**\*, Single-Atom Catalytic Growth of Crystals; Graphene a Case Study, *npj 2D Mater. Appl.* (2021) **5**, 1-13.
365. Yaru Li, Pengju Ren, Dongsheng Zhang, Wei Qiao, Dan Wang, Xiaoqin Yang, Xiaodong Wen, **Mark H Rummeli**, Hans Niemantsverdriet, James P Lewis, Flemming Besenbacher, Hongwei Xiang, Yongwang Li, Ren Su, Rationally Designed Metal Cocatalyst for Selective Photosynthesis of Bibenzyls via Dehalogenative C–C Homocoupling, *ACS Catalysis* (2021) **11**, 4338-4348.

364. Xiaoqin Yang, Huy Q Ta, Huimin Hu, Shuyuan Liu, Yu Liu, Alicja Bachmatiuk, Jinping Luo, Lijun Liu, Jin-Ho Choi, **Mark H Rummeli\***, On the Catalytic Activity of Sn Monomers and Dimers at Graphene Edges and the Synchronized Edge Dependence of Diffusing Atoms in Sn Dimers, *Adv. Funct. Mater.* (2021), 2104340.
363. Xiangjun Zheng, Xuecheng Cao, Kai Zeng, Jin Yan, Zhihui Sun, **Mark H Rummeli\***, and Ruizhi Yang\*, A Self-Jet Vapor-Phase Growth of 3D FeNi@NCNT Clusters as Efficient Oxygen Electrocatalysts for Zinc-Air Batteries, *Small* (2021) **17**, 2006183.
362. Rafael G. Mendes, Huy Q Ta, Xiaoqin Yang, Alicja Bachmatiuk, Petr Praus, Aref Mamakhel, Bo Brummerstedt Iversen, Ren Su, Thomas Gemming, **Mark Rummeli\***, Tailoring the stoichiometry of C<sub>3</sub>N<sub>4</sub> nanosheets under electron beam irradiation, *Phys. Chem. Chem. Phys.*, (2021) **23**, 4747-4756 .
361. Wenwen Zeng, Chaohui Wei, Kai Zeng, Xuecheng Cao, **Mark H Rummeli\***, Ruizhi Yang\*, NiFeMo Nanoparticles Encapsulated within Nitrogen-Doped Reduced Graphene Oxide as Bifunctional Electrocatalysts for Zinc-Air Batteries, *ChemElectroChem* (2021) **8**, 524.
360. Sami Ullah, Xiaoqin Yang, Huy Q Ta, Maria Hasan, Alicja Bachmatiuk, Klaudia Tokarska, Barbara Trzebicka, Lei Fu, **Mark H Rummeli\***, Graphene transfer methods: A review, *Nano Res.* (2021), 1-17.
359. Qitao Shi, Junhua Zhou, Sami Ullah, Xiaoqin Yang, Klaudia Tokarska, Barbara Trzebicka, Huy Quang Ta, **Mark H Rummeli\***, A review of recent developments in Si/C composite materials for Li-ion batteries, *Energy Storage Materials* (2021) **34**, 735.
358. Sami Ullah, Qitao Shi, Junhua Zhou, Xiaoqin Yang, Huy Q Ta, Maria Hasan, Nasir Mahmood Ahmad, Lei Fu, Alicja Bachmatiuk, **Mark H Rummeli\***, Advances and Trends in Chemically Doped Graphene, *Adv. Mater. Interfaces* (2020), **7**, 2000999.
357. Jingjing Si, Mengqi Zeng, Huy Q. Ta, Shuting Zheng, Jihai Liao, Xiaobao Yang, **Mark H. Rummeli\***, Lei Fu\*, Adsorption Free Growth of Ultra-Thin Molybdenum Membranes with a Low-Symmetry Rectangular Lattice Structure, *Small* (2020) **16**, 2001325.
356. Svetlana Fedorenko, Julia Elistratova, Alexey Stepanov, Alsu Khazieva, Maksim Mikhailov, Maxim Sokolov, Kirill Kholin, Irek Nizameev, Rafael Mendes, **Mark Rummeli**, Thomas Gemming, Bruno Weise, Lars Giebeler, Daria Mikhailova, Silvio Dutz, Diana Zahn, Alexandra Voloshina, Anastasia Sapunova, Amina Daminova, Svetlana Fedosimova, Asiya Mustafina, ROS-generation and cellular uptake behavior of amino-silica nanoparticles arisen from their uploading by both iron-oxides and hexamolybdenum clusters, *Materials Science and Engineering: C* (2020) **117**,111305.
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354. Klaudia Tokarska, Qitao Shi, Lukasz Otulakowski, Pawel Wrobel, Huy Quang Ta, Przemyslaw Kurtyka, Aleksandra Kordyka, Mariola Siwy, Margaryta Vasylieva, Aleksander Forsys, Barbara Trzebicka, Alicja Bachmatiuk, **Mark H Rummeli\***, Facile production of ultra-fine silicon nanoparticles, *Royal Society Open Science* (2020) **7**, 00736.
353. Junhua Zhou, Qitao Shi, Sami Ullah, Xiaoqin Yang, Alicja Bachmatiuk, Ruizhi Yang, **Mark H Rummeli\***, Phosphorus-Based Composites as Anode Materials for Advanced Alkali Metal Ion Batteries, *Adv. Func. Mater.* (2020) **30**, 2004648.
352. Huy Quang Ta, Alicja Bachmatiuk, Rafael Gregorio Mendes, David J Perello, Liang Zhao, Barbara Trzebicka, Thomas Gemming, Slava V Rotkin, **Mark H Rummeli\***, Large-Area Single-Crystal Graphene via Self-Organization at the Macroscale, *Advanced Materials* (2020) **32**, 2002755.
351. Chao Li, Zhongti Sun, Tian Yang, Lianghao Yu, Nan Wei, Zhengnan Tian, Jingsheng Cai, Jiaze

- Lv, Yuanlong Shao, **Mark H Rummeli**, Jingyu Sun, Zhongfan Liu, Directly Grown Vertical Graphene Carpets as Janus Separators toward Stabilized Zn Metal Anodes, *Advanced Materials* (2020) **32**, 3003425.
350. Jin Yan, Xiangjun Zheng, Chaohui Wei, Zhihui Sun, Kai Zeng, Liwei Shen, Jiawen Sun, **Mark H Rummeli**, Ruizhi Yang, Nitrogen-Doped Hollow Carbon Polyhedron Derived from Salt-Encapsulated ZIF-8 for Efficient Oxygen Reduction Reaction, *Carbon* (2020) **171**, 320.
349. Xian Sun, Shasha Zhao, Alicja Bachmatiuk, **Mark H Rummeli**, Sandeep Gorantla, Mengqi Zeng, Lei Fu, 2D Intrinsic Ferromagnetic MnP Single Crystals, *Small* (2020), **16**, 2001484.
348. Bei Jiang, Qiyue Zhao, Zhepeng Zhang, Bingzhi Liu, Jingyuan Shan, Liang Zhao, **Mark H Rummeli**, Xuan Gao, Yanfeng Zhang, Tongjun Yu, Jingyu Sun, Zhongfan Liu, Batch synthesis of transfer-free graphene with wafer-scale uniformity, *Nano Res.* (2020) **13**, 1564 .
347. Huy Quang Ta, Qin Xiao Yang, Shuyuan Liu, A Bachmatiuk, Rafael G Mendes, Thomas Gemming, Yu Liu, Lijun Liu, Klaudia Tokarska, Rajen B Patel, Jin-Ho Choi, **Mark H Rummeli\***, In Situ Formation of Free-Standing Single-Atom-Thick Antiferromagnetic Chromium Membranes, *Nano Lett.* (2020), **20**, 6, 4354.
346. Liang Zhao, Huy Quang Ta, Rafael G Mendes, Alicja Bachmatiuk, **Mark H Rummeli\***, In situ Observations of Free-Standing Single-atom-thick Gold Nanoribbons Suspended in Graphene, *Adv. Mater. Interfaces*, 2020, **7**, 2000436.
345. Qitao Shi, Klaudia Tokarska, Huy Quang Ta, Xiaoqin Yang, Yu Liu, Sami Ullah, Lijun Liu, Barbara Trzebicka, Alicja Bachmatiuk, Jingyu Sun, Lei Fu, Zhongfan Liu, **Mark H Rummeli\***, Substrate developments for the chemical vapor deposition synthesis of graphene, *Adv. Mater. Interfaces* (2020) **7**, 1902024.
344. Mengqi Zeng, Jinxin Liu, Lu Zhou, Rafael G Mendes, Yongqi Dong, Min-Ye Zhang, Zhi-Hao Cui, Zhonghou Cai, Zhan Zhang, Daming Zhu, Tiejing Yang, Xiaolong Li, Jianqiang Wang, Liang Zhao, Guoxian Chen, Hong Jiang, **Mark H Rummeli**, Hua Zhou, Lei Fu, Bandgap tuning of two-dimensional materials by sphere diameter engineering, *Nature Materials* (2020) **19**, 528–533 .
343. Rafael Gregorio Mendes, Huy Quang Ta, Xiaoqin Yang, Wei Li, Alicja Bachmatiuk, Jin-Ho Choi, Thomas Gemming, Babak Anasori, Liu Lijun, Lei Fu, Zhongfan Liu, **Mark H. Rummeli\***, In Situ N-Doped Graphene and Mo Nanoribbon Formation from Mo<sub>2</sub>TiC<sub>3</sub> MXene Monolayers, *Small* (2020) **16**, 1907115.
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341. Alexey Stepanov, Rafael Mendes, **Mark Rummeli**, Thomas Gemming, Irek Nizameev, Asiya Mustafina, Synthesis of spherical iron-oxide nanoparticles of various sizes under different synthetic conditions, *Chem. Pap.* (2019) **73**, 2715–2722.
340. Mengqi Zeng, Yunxu Chen, Enze Zhang, Jiaxu Li, Rafael G Mendes, Xiahao Sang, Shulin Luo, Wenmei Ming, Yuhao Fu, Mao-Hua Du, Lijun Zhang, David S Parker, Raymond R Unocic, Kai Xiao, Chenglai Wang, Tao Zhang, Yao Xiao, **Mark H Rummeli**, Faxian Xiu, Lei Fu, Molecular scaffold growth of two-dimensional, strong interlayer-bonding-layered materials, *CCS Chem.* (2019) **1**, 117–127.
339. Grażyna Simha Martynková, Fatih Becerik, Daniela Plachá, Jinbo Pang, Hatem Akbulut, Alicja Bachmatiuk, **Mark H Rummeli\***, Effect of Milling and Annealing on Carbon–Silver System, *Journal of nanoscience and nanotechnology* (2019) **19**, 2770.
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#### Books and Book Chapters

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## Presentations (invited)

1. **Mark H. Rummeli**, Towards atom precise synthesis and engineering of nanomaterials with electron beams, Energy and Materials Workshop, Jiangsu University, Zhenjiang, PRC, June, 2021
2. **Mark H. Rummeli**, Towards atom precise synthesis and engineering of nanomaterials with electron beams, NanoOstrava 2021, Ostrava, Czech Republic, May, 2021
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5. **M.H. Rummeli**, Nano Chemistry and Engineering with Electron Beams, DSL 2019, Athens, Greece, June 2019
6. **M.H. Rummeli**, Thoughts on automation in Electron Microscopy, Materials Research Society, Fall Meeting, Boston, USA, November 2018
7. **M.H. Rummeli**, Nano Chemistry and Engineering with Electron Beams, Warsaw Polytechnic, Warsaw, Poland, November 2018
8. **M.H. Rummeli**, In-situ electron beam driven reactions as a nanotechnology tool, 42nd International Conference and Exposition on Advanced Ceramics and Composites, Daytona Beach, USA, January 2018
9. **M.H. Rummeli**, Nano-engineering and Chemistry with electrons, University of Science and Technology Beijing, Beijing, China, December 2017
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  24. **M.H. Rummeli**, In-situ nano-engineering with Graphene, ICOMF 2014, Jeju, South Korea, July 2014
  25. **M.H. Rummeli**, Room temperature in-situ nanostructure synthesis using electron beam irradiation, ICOMF 2014, Jeju, South Korea, July 2014
  26. **M. H. Rummeli**, Room temperature in-situ nanostructure synthesis using electron beam irradiation, DSL 2014, Paris, France, June 2014
  27. **M. H. Rummeli**, In Situ transmission electron microscopy-based electron engineering of (graphene) nanostructures, SAINT, Sunkyungkwan University, S. Korea, May 2014
  28. **M. H. Rummeli**, Synthesis and Engineering sp<sup>2</sup> carbon nanostructures, Polish Academy of Sciences, Poland, December 2013
  29. **M. H. Rummeli**, Electron-driven in-situ growth of B/BOx nanowires and BOx Nanotubes, Wuhan University, China, November, 2013.
  30. **M. H. Rummeli**, Electron-driven in-situ growth of B/BOx nanowires and BOx Nanotubes, Asia 3 (A3) conference, Jeju, Korea, November, 2013.
  31. **M. H. Rummeli**, The Nanostructure Analysis Unit at CINAP, 1st IBS conference, Daejeon, Korea, November 2013.
  32. **M. H. Rummeli**, The Nanostructure Analysis Unit at CINAP, Workshop, POSTECH, Pohang, Korea, August 2013.
  33. **M. H. Rummeli**, The Nanostructure Analysis Unit at CINAP, Sungkyunkwan University, Suwon, Korea, August 2013.
  34. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, Invited Talk, KRICT, Daejing, South Korea, July 2013
  35. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, Invited Talk, Aalto University, July 2013
  36. **M.H. Rummeli**, On the Catalyst-free Growth of Carbon Nanotubes, Invited Talk, DSL 2013, Madrid, Spain June 2013
  37. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, Invited Talk, Institute of Integrative Nanotechnology, IFW Dresden, Germany, January 2013
  38. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, Invited Talk, Joint Dresden-Japan Workshop on Molecular Scale and Organic Electronic Materials, Germany, December 2012.
  39. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, Invited Talk, MRS Fall meeting, USA, December 2012.
  40. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, plenary lecture, XXV Congreso Nacional de la Sociedad Polimerica de Mexico, November 2012
  41. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, 5<sup>th</sup> European school on Molecular Nanoscience, Cuenca, Spain, 31<sup>st</sup> October 2012
  42. **M.H. Rummeli**, Understanding sp<sup>2</sup> carbon growth, functionalization and bio-applications, invited talk, International ECEMP colloquium 2012, Technical University Dresden, 2012, Germany
  43. **M.H. Rummeli**, Understanding sp<sup>2</sup> carbon growth, invited talk, Sino-European Workshop on Graphene Applications, Peking University, 28<sup>th</sup> September 2012
  44. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, Okinawa Institute of Science and Technology, 25<sup>th</sup> September 2012
  45. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, Wuhan University, 21<sup>st</sup> September 2012
  46. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, Tsinghua

University, Chinese National Electron Microscopy Centre, 18<sup>th</sup> September 2012

47. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, Chinese academy of sciences, department of chemistry, China, September 17<sup>th</sup> September.
48. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, Sung Kyun Kwan University, Korea 12 September 2012
49. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, Samsung Electronics, R & D labs, Korea 11 September 2012
50. **M.H. Rummeli**, Engineering sp<sup>2</sup> carbon nanostructures with electrons, invited talk, Pohang university of science and technology (POSTECH), Korea 10 September 2012
51. **M.H. Rummeli**, Electron driven Engineering of Graphene, Invited Talk, Diffusion in Solids and Liquids (DSL 2012), Turkey 25-29 June 2012
52. **M.H. Rummeli**, A Microscopic Evaluation of Metal Free CVD Grown Graphene, Plenary lecture, New Diamond and Nano Carbons 2012, Puerto Rico, May 20-24, 2012
53. **M.H. Rummeli**, Conventional and unconventional approaches to carbon nanotube fabrication and manipulation, CAMS3'12 Ustron, Poland 27-29.2 (2012)
54. **M.H. Rummeli**, Functionalized Carbon Nanotubes, THz Workshop, Rosendorf, Dresden, German 05 -07.03 (2012)
55. **M.H. Rummeli**, A. Bachmatiuk, I. Ibrahim, Evolving catalytic routes for carbon nanotube and graphene growth, Invited Talk, Nablus/ Palestine, 1.-2.6.11 (2011).
56. **M.H. Rummeli**, Evolving catalytic routes for carbon nanotube and graphene growth, Invited Talk, Al Quds/ Palestine, 4.-6.6.11 (2011).
57. **M.H. Rummeli**, The rise of ceramic catalysts for carbon nanotube and graphene growth, Conference Trends in Nanotechnology (TNT 2010), Braga/ Portugal, 8.-10.9.10 (2010).
58. **M.H. Rummeli**, Rethinking Carbon Nanotube Growth, Keynote lecture, Edgar-Luescher-Seminar, Klosters/ Schweiz, 6-12.2.10 (2010).
59. **M.H. Rummeli**, Rethinking carbon nanotube and graphene growth, Lecture in Triest/ Italien, 26.3.2010 (2010).
60. **M.H. Rummeli**, Opportunities for Academics and Students in Germany, National Autonomous University Mexico, Queretaro/ Mexico, 8.-9.4.10 (2010).
61. **M.H. Rummeli**, Rethinking carbon nanotube and graphene growth, Centre for Applied Physics and Advanced Technology, Queretaro/ Mexico, 9.4.10 (2010).
62. **M.H. Rummeli**, A. Bachmatiuk, F. Börmert, B. Büchner, Rethinking carbon nanotube and graphene growth, Invited Lecture, 1st International Conference on Nanotechnology, Quito/ Ecuador, 14.-18.6.10 (2010).
63. **M.H. Rummeli**, Rethinking carbon nanotube and graphene growth, Talk, University of the Witwatersrand, Johannesburg/ South Africa, 3.-4.12.09 (2009).
64. **M.H. Rummeli**, M. Bystrzejewski, R. Schönfelder, A. Bachmatiuk, I. Ibrahim, C. Schuenemann, A. Balanaga Tetali, F. Börmert, B.L. Aryasomayajula, A. Scott, 12 Months growth at the IFW, Oxford/ UK, (2009).
65. **M.H. Rummeli**, F. Schäffel, A. Bachmatiuk, R. Schönfelder, M. Bystrzejewski, F. Börmert, U. Wolff, E. Coric, C. Schuenemann, M. Ulbrich, R. Huebel, M. Knupfer, B. Büchner, Advances in understanding carbon nanotube nucleation and growth, *Oxford University, Oxford/ UK*, (2009).
66. **M.H. Rummeli**, Advances in understanding the nucleation and growth of carbon nanotubes, Invited Talk, *London Metropolitan University, London/ UK*, (2009).
67. **M.H. Rummeli**, Engineering carbon at the nanoscale, Presentation at the Max Bergmann Zentrum, *Dresden, Germany*, (2009).
68. **M.H. Rummeli**, Engineering carbon at the nanoscale, Individual Seminar, *Sakarya University, Tuerkei*, (2009).
69. **M.H. Rummeli**, Opportunities with nanostructured thermoelectric materials, Seminar talk at the

*ITT Friction, Barge, Piemont/ Italy, (2008).*

70. **M.H. Rummeli**, F. Schäffel, M. Bystrzejewski, M. Löffler, R. Schönfelder, J. Warner, B. Rellinghaus, L. Schultz, B. Büchner, On the advantages of gas phase prepared catalyst particles in understanding carbon nanotube growth, Conference, *Ostrava/ Czech Republic, (2008).*
71. **M.H. Rummeli**, F. Schäffel, M. Bystrzejewski, M. Löffler, R. Schönfelder, B. Büchner, Advances in understanding carbon nanotube nucleation and growth, Invited talk at the *University of Alabama, Birmingham/ USA, (2008).*
72. **M.H. Rummeli**, F. Schäffel, M. Bystrzejewski, R. Schönfelder, B. Büchner, Advances in understanding carbon nanotube nucleation and growth, Invited talk at the *Vanderbilt University, Nashville/ USA, (2008).*
73. **M.H. Rummeli**, F. Schäffel, M. Bystrzejewski, R. Schönfelder, B. Büchner, Advanced in understanding carbon nanotube nucleation and growth, Invited talk at *the Fisk University/ USA, (2008).*
74. **M.H. Rummeli**, F. Schäffel, M. Bystrzejewski, R. Schönfelder, B. Büchner, Advanced in understanding carbon nanotube nucleation and growth, Invited talk at *the US Air Force Research Laboratories/ USA, (2008).*
75. **M.H. Rummeli**, A. Grüneis, M. Löffler, O. Jost, R. Schönfelder, K. Kramberger, D. Grimm, T. Gemming, A. Barreiro, P. Agola, E. Borowiak-Palen, M. Kalbac, L. Dunsch, T. Pichler, M. Knupfer, H.W. Huekers, B. Büchner, Novel catalysis, room temperature and the importance of O<sub>2</sub> for the synthesis of single wall carbon nanotubes, *XXth International Winterschool on Electronic Properties of Novel Materials, IWEPM, Kirchberg/ Oesterreich, (2006).*
76. **M.H. Rummeli**, C. Kramberger, A. Grueneis, F. Schäffel, M. Löffler, D. Grimm, E. Mohn, B. Rellinghaus, T. Pichler, B. Büchner, Single wall carbon nanotubes: synthesis, characterization and growth mechanism, *Politechnika Szczecinska, Szczecin/ Poland, (2006).*
77. **M.H. Rummeli**, E. Borowiak-Palen, G.G. Fuentes, T. Gemming, T. Pichler, M. Knupfer, Synthesis and characterization of molecular nanostructures, *Warsaw University/Poland, (2004).*

<b>Projects</b>	1. DFG (German research council)	- 151000 Euro
	2. DFG (German research council)	- 190000 Euro
	3. Sino-German Institute Grant	- 151000 Euro (current)
	4. Sino-German Institute Grant	- 120000 Euro
	5. Foreign Expert NSFC (China)	- 1600000 RMB (current)
	6. NSFC (China)	- 770000 RMB (current)
	7. National R & D program (China)	- 286000 RMB (current)
	8. NSFC (China)	- 580000 RMB
	9. 100 Talents Jiangsu Province	- 400000 RMB (current)
	10. Startup fund (Suzhou University)	- 1500000 RMB
	11. Suzhou University	- 20000000 RMB (for electron microscopes)
	12. IBS annual support (South Korea - SKKU)	- 1000000 USD p.a.
	13. Saxony Development Bank (TEM)	- 1500000 Euro
	14. Foundation for Polish Science (NCN)	- 200000 Euro
	15. EOARD (AFRL)	- 50000 USD
	16. US Army Laboratory	- 50000 USD
	17. Various Small DFG/DAAD grants	> 63000 Euro
	18. Other misc. grants	> 20000 Euro

Conference Positions

1. The Institute Council, Polish Center for Technology Development (PORT), 2019 to Present
2. International Advisory Board, Thanh Tay Institute for Advanced Study (TIAS), 2018 to Present
3. Foreign Expert Committee, Research base of 111 project for fluid machinery of Shaanxi Province, 2021 to Present.
4. Member of the Scientific Committee Diffusion in Solids and Liquids (DSL 2020) and Organizer for special session organizer for Microscopy, Microanalysis and their Application on Materials (DSL 2020, 2019, 2020, 2021, 2022)
5. Int. Scientific Advisory Committee Member, International Congress on Energy Chemistry and Engineering 2022 (ICECE-2022)
6. International Advisory Board, An-Najah National University, Palestine, Ongoing
7. Organizing Committee, International Workshop on Advanced Energy Conversion & Catalysis, PRC (2021)
8. Academic Committee, Nano Ostrava, Czech Republic, 2019
9. Scientific Committee & Microscopy Session Co-Chair, International Conference on Diffusion and Solids and Liquids (DSL), 2019
10. Organizing Committee, The 3rd International Conference on New Material and Chemical Industry (2018)
11. Academic Committee, Nano Ostrava, Czech Republic, 2017
12. Organizing Committee & Vice-Chairman of Conference, Nano Ostrava, Czech Republic, 2015
13. Organizing Committee, Muju International Winter School Series & 19th Nanotube Workshop, 2014
14. Academic Committee, Nano Ostrava, Czech Republic, 2013
15. Co-Organizer, International Advanced Materials Science Networking Workshop, Vietnam, 2013
16. Symposium Organizer, MRS International Materials Research Congress (IMRC), 2012
17. Academic Committee, Nano Ostrava, Czech Republic, 2011
18. Symposium Organizer, MRS Fall Meeting, USA, 2010
19. Scientific Advisory Committee. Nano Ostrava, Czech Republic, 2008
20. Scientific Committee, III Workshop on Functional Materials, Greece, 2006

Pedagogical activities

**EXAMINER/SUPERVISOR FOR MSC & PHD THESES**

<b>Name</b>	<b>Degree</b>	<b>Year</b>	<b>Institution</b>	<b>Role</b>
Marta Havlicek	M.Sc.	2007	Ostrava Uni.	Informal Supervisor
Sailaja Tetali	M.Sc.	2008	TU Dresden	Supervisor
Danny Harberer	M.Sc.	2009	TU Dresden	Informal Supervisor
Rafael G Mendes	M.Sc.	2010	TU Dresden	Supervisor
Johannes Phieler	M.Sc.	2010	Appl. Uni. Dd	Supervisor
C. Schünemann	M.Sc.	2011	TU Dresden	Informal Supervisor
Andrew Scott	M.Sc.	2012	TU Dresden	Supervisor
Martin Frizsche	M.Sc.	2013	TU Dresden	Informal Supervisor

Elisabeth Preuss	M.Sc.	2014	TU Dresden	Supervisor
Huy Q Ta	M.Sc.	2016	SKKU	Supervisor
Akash Soni	M.Sc.	2017	Soochow Uni.	Supervisor
Meiou Wang	M.Sc.	2021	Soochow Uni.	Supervisor
Yulian Liu	M.Sc.	2020	Soochow Uni.	Supervisor
Wenwen Zeng	M.Sc.	2021	Soochow Uni.	Supervisor
Alicja Bachmatiuk	Ph.D.	2009	W. Pom. Uni.	Informal Supervisor
Franziska Schaeffel	Ph.D.	2010	TU Dresden	Informal Supervisor
Marcus Loeffler	Ph.D.	2011	TU Dresden	Informal Supervisor
Sadeep Gorontla	Ph.D.	2012	TU Dresden	Informal Supervisor
Sami Makharza	Ph.D.	2012	TU Dresden	Informal Supervisor
Anja Jedrzejewska	Ph.D.	2013	W. Pom. Uni	Informal Supervisor
M. O. Cichocka	Ph.D.	2013	SKKU	Supervisor
Felix Boernert	Ph.D.	2014	TU Dresden	Supervisor
Imad Ibrahim	Ph.D.	2014	TU Dresden	Supervisor
Goerge Bepete	Ph.D.	2014	Uni. Witwater.	Informal Supervisor
Rafael G Mendes	Ph.D.	2015	TU Dresden	Supervisor
M. Dimitrakopoulou	Ph.D.	2014	TU Dresden	Informal Supervisor
E. G. Uc-Cayetano	Ph.D.	2015	CICY (Mex.)	Co-Supervisor
Neeraj Mishra	Ph.D.	2016	Griffith Uni.	Examiner
I. G. G. Martinez	Ph.D.	2016	TU Dresden	Supervisor
Anja B.Minela	Ph.D.	2017	TU Dresden	Examiner
Jinbo Pang	Ph.D.	2017	TU Dresden	Supervisor
Huy Q. Ta Quang	Ph.D.	2017	Pol. Acad. Sci.	Co-Supervisor
Gao Jing	Ph.D.	2017	Soochow Uni.	Examiner
Hongyu Gong	Ph.D.	2018	Soochow Uni.	Examiner
Zhao Liang	Ph.D.	2020	Soochow Uni.	Supervisor
Sami Ullah	Ph.D.	2021	Soochow Uni.	Supervisor
Pawel Wrobel	Ph.D.	2021	Pol. Acad. Sci.	Informal Supervisor
Kludia Tokarska	Ph.D.	current	Pol. Acad. Sci.	Supervisor
Qitao Shi	Ph.D.	current	Soochow Uni.	Supervisor
Junhua Zhou	Ph.D.	2022	Soochow Uni.	Supervisor
Xiaoqin Yang	Ph.D.	2021	Xi'an Jiaot.Uni	Co-Supervisor

## TEACHING

Advanced Characterisation of Nano-Materials and Energy Materials (BSc/MSc)\*

Transmission Electron Microscopy I & II (MSc)\*

Manuscript preparation (MSc & PhD)\*

Physical properties of carbon nanomaterials I & II (MSc)\*

Electron Microscopy (Postgraduate – IKEST under the auspices of UNESCO – Xi'an University) - online courses

*\*fully responsible for course preparation, implementation (including feedback and evaluation/examinations)*

## ESTABLISHMENT OF LABORATORIES

Laser Ablation Deposition Laboratory, TU Dresden (Chair Prof. G Cuniberti - TUD)

CVD and SEM Laboratory, TU Dresden (Chair Prof. G Cuniberti - TUD)

Laser CVD Laboratory, IFW Dresden

Thermal CVD Laboratory, IFW Dresden

Electron Microscopy Laboratory, IFW Dresden

Raman Spectroscopy Laboratory, IFW Dresden

Electron Microscopy Laboratory, SKK University

Nano Materials Synthesis, SKK University

Gas sensor and electrochemical testing laboratories (Polish Academy of Sciences)

Laboratory for Integrated Nanomaterials, Soochow University

Electron Microscopy Laboratories, Soochow University

Note: within the laboratories I was/am responsible for their management, team leadership, mentoring, safety, etc.

### Honours and awards

1. Full Professor Ordinarius, awarded by the President of the Polish Republic (President A. Duda) 2021, PL
2. D.Sc. Honoris Causa, London Metropolitan University, UK
3. Suzhou Talents, Suzhou & 100 Talents Program, Jiangsu Province, PRC
4. Certificate of Recognition, Program of Introducing Talents of Disciplines to Universities, University of Science and Technology Beijing
5. IFF Research Prize, Leibniz Institute IFW-Dresden, DE
6. Chartered Scientist, Institute of Physics, London, UK
7. Registered European Physicist, European Physical Society, The Netherlands
8. Chartered Physicist, Institute of Physics, London, UK

### Memberships

1. Fellow, Royal Society of Chemistry (RSC), UK
2. Fellow, Institute of Materials, Minerals and Mining, UK

3. Fellow, Institute of Engineering and Technology, UK
4. Senior Member, Institute of Electrical and Electronics Engineers, USA
5. Member, Materials Research Society (MRS), USA
6. Member, Electrochemical Society (ECS), USA

#### References

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