CV Prof. Dr. Raffaella Buonsanti
Laboratory of Nanochemistry for Energy, Department of Chemical Sciences and Engineering,EPFL Valais
Rue de l'Industrie 17, Sion, Switzerland
Phone: +41 (0)216958287 | E-mail: raffaella.buonsanti@epfl.ch | Web: https://lnce.epfl.ch
Google Scholar ID: https://scholar.google.ch/citations?user=cWUMss8AAAAJ&hl=en&oi=ao

Education

2006 - 2010	PhD in Nanoscience, University of Salento, Italy. Advisors: Prof. P.D. Cozzoli
2000 – 2006	Master degree in Chemistry, University of Bari, Italy Advisors: Prof. P.D. Cozzoli and Prof. A. Agostiano

Employment History

2015 – present	Tenure-track Assistant Professor, EPFL
2013 – 2015	Tenure-track Staff Scientist at the Joint Center for Artificial Photosynthesis, Materials Science Department, Lawrence Berkeley National Laboratory
2012 – 2013	Project Scientist at the Molecular Foundry, Materials Science Department, Lawrence Berkeley National Laboratory
2010 – 2012	Postdoctoral Researcher at the Molecular Foundry, Materials Science Department, Lawrence Berkeley National Laboratory

Institutional Responsibilities and Service

2019 – present	Member of the CIME (EPFL Center of Electron Micoscopy) Steering Committee
2018 – present	Member of the Doctoral School Committee of Chemistry and Chemical Engineering
2017 – present	Member of the Teaching Committee of Chemistry and Chemical Engineering
2020	Member of the Sustainable Travels Working Group
2019 – 2020	Member of the Nanosafe Working Group
2016 - 2018	Chair of the Faculty Meetings, EPFL Valais

Participation into 6 hiring committees (2 ISIC scientists, 2 ISIC PATT, 1 PSI-ISIC PO, 1 IMX PATT)

Past and Ongoing Research Projects

2021-2024	SNSF Lead Agency Project "Synthesis and transformations of multimetallic nanoparticles for electrocatalysis"
2020-2025	Co-PI and Work Package Leader in SNSF NCCR Catalysis
2020-2023	Co-PI and Work Package Leader in FET ProActive LICROX "Light Assisted Solar Fuel Production by Artificial CO2 reduction and Water Oxidation"
2020-2022	Academic host for Dr. Kevin Rossi, Recipient of the Marie Curie Individual Fellowship, Title: "Nano2CORE: nanocrystals for CO2 reduction"
2020-2022	Academic host for Dr. James Pankhurst, Recipient of the Marie Curie Individual Fellowship, Title: "SURFCAT: Surface-functionalized nanocrystal catalysts for the electrochemical reduction of carbon dioxide"
2017-2018	Swiss National Science Foundation, Scientific Exchange Grant N° IZSEZ0_177984

	Title: “1st Winter School at EPFL Valais: Challenges and Opportunities in Energy Research”
2017-2020	Swiss National Science Foundation, AP Energy Grant N° PYAPP2_166897/1 Title: “Colloidal chemistry for engineering complex metal oxides to advance solar-to-fuels conversion studies”
2017-2021	ERC-STG-Grant Title” HYCAT: multifunctional hybrid platforms based on colloidal nanocrystals to advance CO2 conversion studies”
2017-2019	Academic host for Dr. Michal Strach, Recipient of the Marie Curie Individual Fellowship, Title: “NANOAID: Advanced in-situ techniques for the development of metal oxide nanostructures”
2016-2018	Academic host for Dr. Anna Loiudice, Recipient of the Marie Curie Reintegration Fellowship, Title: “NanoINCAGE: Luminescent nanocrystals in a cage for solar-to-fuels conversion”,
2016-2020	Gaznat Research Grant , Title: ”Electrochemical conversion of CO2 into value-added chemicals”
2016-2018	Project Grant in National Center of Competence in Research MARVEL Title “Colloidal nanocrystals as model systems to uncover structure/properties relation in CO2 electroreduction”

Supervision of Junior Researchers

- Currently promotor of 7 doctoral theses, 6 defended
- Currently supervising 7 postdoctoral researchers, 4 past
- Participation in 27 PhD committees, 30 candidacy exams

Teaching Activities

2018 – present	Nanomaterials for chemical engineering application, Master Course
2017 – present	Colloidal synthesis of nanoparticles and their energy applications, PhD Course
2017 – present	Introduction to Transport Phenomena , Bachelor Course

Membership in Panels, Boards, etc. and Individual Scientific Reviewing Activities

2021 – present	Associate Editor of ACS Catalysis
2021 – present	Chair-Elect of the Nanoscience Subdivision of the ACS Division of Inorganic Chemistry
2020 – present	Member of the Scientific Advisory Board of Dalton Transactions
2020 – present	Member of the Scientific Advisory Board for Nanoscale
2020 – present	Member of the Scientific Advisory Board for Chemical Communications
2020 – present	Member of the Early Career Advisory Board for ACS Materials Letters
2020 – present	Member of the Scientific Advisory Board for Chemistry of Materials
2018 – 2019	Member of the Early Career Advisory Board for ACS Catalysis
2014 – 2015	Lawrence Berkeley National Laboratory Safety Advisory Board Member, Berkeley,US
2013 – 2016	Member of the Molecular Foundry User Executive Committee, Berkeley, USA
2013 – present	Member of the User Proposal Review Board of the Molecular Foundry, Berkeley, US
2013 – 2016	Editorial Board Member for Nature Scientific Reports

Guest Editor for Electrosynthesis Special Issue iScience (Cell Press)
Guest Editor ACS Inorganic Chemistry Forum titled “The Inorganic Chemistry of Nanoparticles“

Regular reviewer for Journal of American Chemical Society, Chemistry of Materials, Advanced Materials, Advanced Functional Materials, Chemical Communications, Journal of Materials Chemistry, Physical Chemistry Chemical Physics, Chemical Science, ACS Catalysis, Nature Communications, Nature Catalysis

Regular reviewer for NWO (Dutch National Science Foundation), European Commission, ACS Petroleum Research Fund, DOE Early Career, DOE BES

Active Membership in Scientific Societies, Fellowships in Renowned Academies

Member of the Swiss Chemical Society (since **2016**), Royal Chemical Society (since **2017**), Materials Research Society (since **2015**)

Conference Organization

2022 Spring ACS, Symposium "Well-Defined Materials for Heterogeneous Catalysis: Synthesis, Characterization, and Performance Studies”
2022 Co-chair with Prof A. Llobet (ICIQ) of the 4th Materials and Molecules for Solar Fuels and Chemicals
2021 Fall MRS, Symposium “Women in Materials Science: Pioneers and a Vision for a More Inclusive Future”
2020 Online NanoGe Internet Conference for Quantum Dots iCQD (https://www.nanoge.org/iCQD/home)
2018 Chair of the 1st Winter School “Challenges and Opportunities for Energy Research”
(https://nrg2018.epfl.ch)

Prizes, Awards, Fellowships

2021	Swiss Chemical Society Werner Price
2019	Thieme Chemistry Journal Award
2019	European Chemical Society Lecture Award
2019	Royal Chemical Society ChemComm Emerging Investigator Lectureship
2018	Endowed Chair from the Sandoz Family Foundation
2013	R&D 100 Award (USA)

Institute of Chemical Sciences and Engineering
Laboratory of Nanochemistry for Energy

Raffaella Buonsanti, Research output

As of October 2021, Professor Raffaella Buonsanti has co-authored a total of **102 peer-review publications** in international journals, 42 as a PhD and Postdoctoral researcher and **60 during her independent career**. These publications have received over 6500 literature citations and an **h-index of 41**

The full list of publications can be found here:
https://scholar.google.ch/citations?user=cWUMss8AAAAJ&hl=en&oi=ao
The 3rd and 5th most cited publications have been published during independent career

Publications in international peer-reviewed scientific journals (since at EPFL)

1. S.B. Varandili, D. Stoian, J. Vavra, K. Rossi, J. R. Pankhurst, Y. Guntern, N. Lopez, R. Buonsanti* "Elucidating the structure-dependent selectivity towards methane and ethanol of CuZn in the CO2 electroreduction using tailored Cu/ZnO precatalysts " *Chem. Sci.* **2021**, just accepted

2. P. Iyengar, M. J. Kolb, J. Pankhurst, F. Calle Vallejo*, R. Buonsanti* "Theory-guided enhancement of CO2 reduction to ethanol on Ag-Cu tandem catalysts via particle-size effects" *ACS Catalysis* **2021**, just accepted

3. S.W. Sheehan and R. Buonsanti "Deriving value from CO_2: From catalyst design to industrial implementation" *Chem. Catalysis* **2021**, just accepted

4. R. Buonsanti and S.W. Sheehan "Catalyst discovery for electrochemical CO_2 conversion" *Chem. Catalysis* **2021**, just accepted

5. R. Buonsanti "Copper, my precious!" *Nature Catalysis* **2021**, 4, 736

6. A. Loiudice, A. Segura Lecina, A. Bornet, J. Luther, R. Buonsanti* "Ligand locking on quantum dot surfaces via a mild reactive surface treatment" *J. Am. Chem. Soc.* **2021**, 143, 13418

7. R. Buonsanti "Developing the Chemistry of Colloidal Cu Nanocrystals to Advance the CO_2 Electrochemical Reduction" *Chimia* **2021**, 75, 598

8. R. Buonsanti and W. Smith "Emerging collaborations at the forefront of growth in electrochemical synthesis" *iScience* **2021**, 24, 102639

9. R. Buonsanti * and N. Zheng* “The Inorganic Chemistry of Nanoparticles” *Inorg. Chem.* **2021**, 60, 4179

10. P. Iyengar, M. Kolb, J. Pankhurst, F. Calle Vallejo, R. Buonsanti* “Elucidating the Facet-dependent Selectivity for CO_2 Electroreduction to Ethanol of Cu-Ag Tandem Catalysts” *ACS Catalysis* **2021**,11, 4456

11. Y. Guntern, J. Vavra, V. Karve, S. Varandili, O. Segura Lecina, C. Gadiyar, R. Buonsanti* “Synthetic Tunability of Colloidal Covalent Organic Framework/Nanocrystal Hybrids” *Chem. Mater.* **2021**, 33, 2646.

12. J. Pankhurst, P. Iyengar, V. Okatenko, R. Buonsanti* “Copper nanocrystal morphology determines the viability of molecular surface functionalization in tuning electrocatalytic behavior in CO_2 reduction”, *Inorg. Chem.* **2021,** 60, 6939

13. R. Buonsanti*, A. Loiudice, V. Mantella “Colloidal Nanocrystals as Precursors and Intermediates in Solid State Reactions for Multinary Oxide Nanomaterials” *Acc. Chem. Res.* **2021**, 54, 754

14. Y.T. Guntern, V. Okatenko, J. Pankhurst, S.B. Varandili, P. Iyengar, C. Koolen, D. Stoian, J. Vavra, R. Buonsanti*, Colloidal Nanocrystals as Electrocatalysts with Tunable Activity and Selectivity, *ACS Catal.* **2021**, 11, 1248

15. R. Buonsanti* “Magic clusters are better together” *Nature Mater.* **2021**, 20, 580

16. V. Mantella, S.B. Varandili, J. R. Pankhurst, R. Buonsanti* "Colloidal synthesis of Cu-M-S (M=V, Cr, Mn) nanocrystals by tuning the copper precursor reactivity" *Chem. Mater.* **2020**, 32, 9780

17. S.B. Varandili, D. Stoian, Jan Vavra, J. R. Pankhurst, R. Buonsanti* "Ligand-mediated formation of Cu/metal oxide hybrid nanocrystals with tunable number of interfaces " *Chem. Sci.* **2020**, 11, 13094

18. L. Castilla-Amoros, D. Stoian, J. R. Pankhurst, S.B. Varandili, R. Buonsanti* "Exploring the chemical reactivity of gallium liquid metal nanoparticles in galvanic replacement" *J. Am. Chem. Soc.* **2020**, 2020, 142, 19283

19. V. Mantella, L. Castilla-Amoros, R. Buonsanti* "Shaping non-noble metal nanocrystals via colloidal chemistry" *Chem. Sci.* **2020**, 11, 11394

20. J. Vavra, T.-H Shen, D. Stoian, V. Tileli*, R. Buonsanti* "Real-time monitoring reveals dissolution/redeposition mechanism in Cu nanocatalysts during the initial stages of the CO_2 reduction reaction " *Angew. Chemie. Int. Ed.* **2020**, 60, 1347.

21. C. Gadiyar, A. Loiudice, F. D'Ambra, E. Oveisi, D. Stoian, P, Iyengar, L. Castilla-Amoros, V. Mantella, R. Buonsanti* "Nanocrystals as precursors in solid state reactions for size- and shape- controlled polyelemental nanomaterials" *J. Am. Chem. Soc.* **2020**, 142, 15931

22. J.R. Pankhurst, P. Iyengar, A. Loiudice, M. Mensi, R. Buonsanti* "Metal-ligand bond strength determines the fate of organic ligands on the catalyst surface during the electrochemical CO2 reduction reaction" *Chem. Sci.* **2020**, 11,929

23. A. Loiudice, O. Segura Lecina, R. Buonsanti* "Atomic Control in Multicomponent Nanomaterials: when Colloidal Chemistry meets Atomic Layer Deposition" *ACS Mater. Lett.* **2020**, 2, 1182

24. R. Buonsanti, J. M. Buriak, L. Cabana, B. M. Cossairt, M. Dasog, S. Dehnen, J. L. Dempsey, A. Nirmala Grace, D. Koziej, L. McElwee-White, C. Thomas, J. Y. Yang "Checking in with Women Materials Scientists during a Global Pandemic: May 2020" *Chem. Mater.* **2020**,32, 4859

25. V. Mantella+, M. Strach+, K. Frank, J.R. Pankhurst, D. Stoian, C. Gadiyar, B. Nickel, R. Buonsanti* “Polymer Lamellae as Reaction Intermediates of Cu Nanospheres Evidenced by In-situ-X-ray Studies” *Angew. Chemie. Int. Ed.* **2020**, 59, 11627.

26. S. Sarys, S. Dona, V. Niemann, A. Loiudice, R. Buonsanti* “Optimizing the Atomic Layer Deposition of Alumina on Perovskite Nanocrystals Films by Using O2 as a Molecular Probe” *Helv. Chim. Acta* **2020**, 103, e2000055.

27. A. Loiudice, S. Saris, R. Buonsanti* “A Tunable Metal Oxide Shell as a Spacer to Study Energy Transfer in Semiconductor Nanocrystals” *J. Phys. Chem. Lett.* **2020**, 2020, 11, 3430

28. G. De Gregorio, T. Burdyny, A. Loiudice, P. Iyengar, W. Smith, R. Buonsanti* “Facet-dependent selectivity of Cu catalysts in electrochemical CO2 reduction at commercially viable current densities”, *ACS Catalysis* **2020**, 10, 4854

29. S. Popović, M. , Smiljanić, P. Jovanovic, J. Vavra, R. Buonsanti*, N. Hodnik* “Stability and degradation mechanisms of copper-based catalysts for electrochemical CO2 reduction”, *Angew. Chemie. Int. Ed.* **2020,** doi 10.1002/anie.202000617

30. S. Saris, A. Loiudice, M. Mensi, R. Buonsanti* “Exploring Energy Transfer in a Metal/Perovskite Nanocrystal Antenna to Drive Photocatalysis” *J. Phys. Chem. Lett.* **2019**, 10, 7797.

31. S. Sarys, V. Niemann, V. Mantella, A. Loiudice, R. Buonsanti* “Understanding the mechanism of metal-induced degradation in perovskite nanocrystals” *Nanoscale* **2019**, 11, 19543

32. M. Strach, V. Mantella, J.R. Pankhurst, P. Iyengar, A. Loiudice, S. Das, C. Corminboeuf, W. van Beek, R. Buonsanti* "Insights into reaction intermediates to predict synthetic pathways for shape-controlled metal nanocrystals" *J. Am. Chem. Soc.* **2019**, 141, 16312

33. J.R. Pankhurst, Y.T. Guntern, M. Mensi, R. Buonsanti* "Molecular tunability of surface-functionalized metal nanocrystals for selective electrochemical CO_2 reduction" *Chem. Sci.* **2019**, 10, 10356

34. R. Buonsanti* "A solid advance in electrolytes" *Nature Energy* **2019**, 4, 728

35. G. Mangione, J.Huang, R. Buonsanti, C. Corminboeuf* "Dual-facet mechanism in copper nanocubes for electrochemical CO_2 reduction to ethylene" *J. Phys. Chem. Lett.* **2019**, 10, 4259

36. Y.T. Guntern, J.R. Pankhurst, J. Vávra, M. Mensi, V. Mantella, P. Schouwink, R. Buonsanti* "Nanocrystal/Metal-Organic Framework Hybrids as Electrocatalytic Platforms for CO_2 Conversion" *Angew. Chemie. Int. Ed.* **2019**, 58, 2.

37. A. Loiudice, M. Strach, S. Saris, D. Chernyshov, R. Buonsanti* "Universal Oxide Shell Growth Enables In-situ Structural Studies of Perovskite Nanocrystals during the Anion Exchange Reaction" *J. Am. Chem. Soc.* **2019**, 141, 8254.

38. P. Iyengar J. Huang, G.L. De Gregorio, C. Gadiyar, R. Buonsanti* "Size-dependent selectivity of Cu nano-octahedra catalysts for the electrochemical CO_2 reduction to CH_4" *Chem. Commun.* 2019, 55, 8796.

39. S. B. Varandili, J. Huang, E. Oveisi, G.L. De Gregorio, M. Mensi, M. Strach, J. Vavra, C. Gadiyar, A. Bhowmik, R. Buonsanti* "Synthesis of Cu/CeO_{2-x} heterodimers with interfacial active sites to promote CO_2 electroreduction" *ACS Catalysis* **2019**, 9, 5035

40. J. Huang, M. Mounir, E. Oveisi, V. Mantella, R. Buonsanti* "Structural sensitivities in bimetallic catalysts for electrochemical CO_2 reduction revealed by Ag-Cu nanodimers" *J. Am. Chem. Soc.* **2019**, 141, 2490.

41. V. Mantella, S. Ninova, S. Saris, A. Loiudice, U. Aschauer, R. Buonsanti* "Synthesis and size-dependent optical properties of intermediate band gap Cu_3VS_4 nanocrystals" *Chem. Mater.* **2019**, 31, 532.

42. J. Huang, R. Buonsanti* "Colloidal nanocrystals as heterogeneous catalysts for electrochemical CO2 conversion" *Chem. Mater.* **2019**, 31, 13. *Up-and-Coming Perspective. ACS Editors Choice.*

43. M. Scarongella[+], C. Gadyiar[+], M. Strach, L. Rimoldi, A. Loiudice, R. Buonsanti* "Assembly of β-$Cu_2V_2O_7/WO_3$ nanocomposites and the impact of their composition on structure and photoelectrochemical properties " *J. Mater. Chem. C.* **2018**, 6, 1262. *Emerging Investigators Collection.*

44. J. Wiktor, I. Reshetnyak, M. Strach, M. Scarongella, R. Buonsanti, A. Pasquarello "Sizable excitonic effects undermining the photocatalytic efficiency of β-$Cu_2V_2O_7$" *J. Phys. Chem. Lett.* **2018**, 9, 5698.

45. J. Huang, N. Hörmann, E. Oveisi, A. Loiudice, G. De Gregorio, O. Andreussi, N. Marzari, R. Buonsanti* "Potential-induced nanoclustering of metallic catalysts during electrochemical CO_2 reduction" *Nature Comm.* **2018**, 9, 3117.

46. C. Gadiyar, M. Strach, P. Schouwink, A. Loiudice, R. Buonsanti* "Chemical transformations at the nanoscale: nanocrystal-seeded synthesis of β-$Cu_2V_2O_7$ with enhanced photoconversion efficiencies" *Chem. Sci.* **2018**, 9, 5658.

47. W. Luo, W. Xie, R. Mutschler, E. Oveisi, G. L. De Gregorio, R. Buonsanti, A. Zuttel "Selective and stable electroreduction of CO2 to CO at the copper/indium interface" *ACS Catal.* **2018**, 8, 6571.

48. Z. Luo, D. Marson, Q.K. Ong, A. Loiudice, J. Kohlbrecher, A. Radulescu, A. Krause-Heuer, T. Darwish, S. Balog, R. Buonsanti, D.I. Svergun, P. Posocco, F. Stellacci, Quantitative 3D determination of self-assembled structures on nanoparticles using small angle neutron scattering, *Nature Comm.* **2018**, *9*, 1343.

49. R. Sharma, A. M. Sawvel, B. Barton, A. Dong, R. Buonsanti, A. Llordes, E. Schaible, S. Axnanda, Z. Liu, J. J Urban, D. Nordlund, C. Kisielowski, D. J. Milliron "Modulation of Carrier Type in Nanocrystal-in-Matrix Composites by Interfacial Doping" *Chem. Mater.* **2018**, 30, 2544.
50. A. Loiudice[+], S. Saris[+], E. Oveisi, D.T.L. Alexander, R. Buonsanti*, $CsPbBr_3$ QD/AlOx inorganic nanocomposites with exceptional stability in water, light and heat. *Angew. Chem. Int. Ed.* **2017**, *56,* 10696.
51. L. H. Hess, J.K. Cooper, A. Loiudice, C.-M. Jiang, R. Buonsanti*, I.D. Sharp*, Probing interfacial energetics and charge transfer kinetics in semiconductor nanocomposites: New insights into heterostructured TiO_2/$BiVO_4$ photoanodes, *Nano Energy* 2017, *34*, 375.
52. I. D. Sharp[*], J. K. Cooper, F. M. Toma, R. Buonsanti, Bismuth vanadate as a platform for accelerating discovery and development of complex transition metal oxide photoanodes, *ACS Energy Letters* **2017**, *2*, 139.
53. C. Gadiyar, A. Loiudice, R. Buonsanti*, Colloidal nanocrystals for photoelectrochemical and photocatalytic water splitting, *J. Phys. D: Appl. Phys.* **2017**, *50*, 074006.
54. R. Buonsanti*, Colloidal chemistry to advance studies in artificial photosynthesis, *Chimia* 2016, *70*, 780.
55. I. Luz[+], A. Loiudice[+], D.T. Sun. W. L. Queen, R. Buonsanti*, Understanding the formation mechanism of metal nanocrystal@MOF-74 hybrids, *Chem. Mater.* **2016**, *28*, 3839.
56. A. Loiudice, P. Lobaccaro, E.A. Kamali, T. Thao, B.H. Huang, J.W. Ager, R. Buonsanti*, Tailoring Copper Nanocystals towards C2 Products in Electrochemical CO_2 reduction, *Angew. Chemie. Int. Ed.* **2016**, *55*, 5789.

Invited contributions to international conferences since at EPFL

Conferences:

Spring ACS, ACS Division of Inorganic Chemistry, 65th symposium, **2022**

GRC "Atomically precise nanochemistry", **2022**

MRS Fall, Symposium ""Electrocatalytic Materials to Sustainably Convert Atmospheric C, H, O, and N into Fuels and Chemicals", Boston, **2021**,

NanoGe Fall Meeting, Symposium #SolCat21, **2021**

Account of Chemical Research Journal Club "Transformative Inorganic Nanocrystals"**, 2021** (virtual)

NanoGe The internet conference of Colloidal Quantum Dots**, 2021**

Middle Atlantic Regional Meeting of the American Chemical Society, **2021**

ACS Spring Virtual Meeting in Symposia CATL-"Well-Defined Materials for Heterogeneous Catalysis: Synthesis, Characterization, and Performance Studies" and COLL-"Nanomaterials, **2021**

The internet NanoGe Conference on Nanocrystals (iNCNC), **2021**

Online NanoGe Spring Meeting, Symposium "Photophysics of nanoscale semiconductors" **2021**

Pacifichem, Honolulu, December **2020** (cancelled for COVID)

NanoGe Online Conference, Fundamental Processes in Semiconductor Nanocrystals, November **2020**

Cell Press Webinar Light/Matter Interactions, June **2020**

NanoGe Online Meetup: Structure-Function Relationships in CO2 electrocatalysts, June **2020**

NanoGe Online Meetup: Shape-Controlled Nanocrystals: Synthesis, Characterization Methods and Applications, May **2020**

Electrochemistry, German Chemical Society Conference , Berlin **2020** (cancelled for COVID)

EuChemS, European Chemical Society Conference, Lisbon **2020** (cancelled for COVID)

GRC Inorganic Chemistry, Newport, **2020** (cancelled for COVID)

GRC Renewable Energy: Solar Fuels, Tuscany, **2020** (cancelled for COVID)

ACS, Philadelphia, **2020** (cancelled for COVID)

Annic_Applied Nanotechnology and Nanoscience International Conference, Paris, **2019**

NanoGe Conference, Solar Fuels, Berlin, **2019**

Nature Conference Solar Fuels, Wuhan, **2019**

ACS Fall Meeting, San Diego, **2019**

GRC Nanomaterials for Application in Energy technology, Ventura, **2019**

GRC Colloidal Semiconductor Nanocrystals, Smithfield, **2018**

ACS Fall Meeting, Boston, **2018**

E-MRS Spring Meeting, Strasbourg, **2018**

MRS Fall Meeting, Boston, **2017**

EuroMat, Thessaloniki, **2017**

21st Solid State Ionics, Padova, **2017**

RSC ISACS21 Challenges in Nanoscience, Beijing, **2017**

Schools and Workshops:

DFG (German Chemical Society) Colloquium "Catalysts and reactors under dynamic conditions for energy storage and conversion ", February **2021** (online)

Summer School of the European Federation of Catalysis Societies, Slovenia, September **2020** (online)

Online Summer School « Electrocatalysts for Energy Applications", July **2020**

ES3 Symposium_Exciton Engineering in Emerging Semiconductors, Madrid, **2020**

ETH-Japan Catalysis Workshop, ETH Zurich, **2019**

SUNCAT Summer School, Stanford, USA, **2019**

Energy-X Workshop, Brussels, **2019**

FOTOFUEL Workshop, Madrid, Spain, **2019**

SurfCat Summer School, Gilleleje, Denmark, **2018**

Department seminars:

2021 : UW (Seattle), UMass (Boston), NYU (New York), University of Virginia, Indiana University

2020 : Université de Paris, Fritz Haber Institute, ICIQ

2019 : TU Delft, University of Barcellona, LMU Munich, DTU Physics

2018 : University of Oslo, KAUST

2017 : ETH, King's College London, University of Geneva

2016 : University of Bern, Paul Scherrer Institute, Fudan University

OUTREACH ACTIVITIES

Partecipation to "ScienceGirls"

Participation to the event Scientastic – Festival des Sciences de l' EPFL (April 29-30, 2017) to promote EPFL Valais to the general public.

Interview for a local magazine Valais Valeur Ajoutée to reach out to general public