Christoph Rameshan

List of Publications by Year
in descending order

#	ARTICLE	IF	CITATIONS
1	How to Control the Selectivity of Palladiumâ€based Catalysts in Hydrogenation Reactions: The Role of Subsurface Chemistry. ChemCatChem, 2012, 4, 1048-1063.	1.8	223
2	Subsurfaceâ€Controlled CO₂ Selectivity of PdZn Nearâ€Surface Alloys in H₂ Generation by Methanol Steam Reforming. Angewandte Chemie - International Edition, 2010, 49, 3224-3227.	7.2	144
3	Ambient Pressure XPS Study of Mixed Conducting Perovskite-Type SOFC Cathode and Anode Materials under Well-Defined Electrochemical Polarization. Journal of Physical Chemistry C, 2016, 120, 1461-1471.	1.5	132
4	Operando XAS and NAP-XPS studies of preferential CO oxidation on Co3O4 and CeO2-Co3O4 catalysts. Journal of Catalysis, 2016, 344, 1-15.	3.1	126
5	Enhancing Electrochemical Waterâ€Splitting Kinetics by Polarizationâ€Driven Formation of Nearâ€Surface Iron(0): An Inâ€...Situ XPS Study on Perovskiteâ€Type Electrodes. Angewandte Chemie - International Edition, 2015, 54, 2628-2632.	7.2	110
6	Surface Chemistry of Perovskite-Type Electrodes During High Temperature CO₂ Electrolysis Investigated by <i>Operando</i> Photoelectron Spectroscopy. ACS Applied Materials & Interfaces, 2017, 9, 35847-35860.	4.0	107
7	Aqueous solution/metal interfaces investigated in operando by photoelectron spectroscopy. Faraday Discussions, 2015, 180, 35-53.	1.6	99
8	Pdâ€"In2O3 interaction due to reduction in hydrogen: Consequences for methanol steam reforming. Applied Catalysis A: General, 2010, 374, 180-188.	2.2	82
9	Hydrogen Production by Methanol Steam Reforming on Copper Boosted by Zincâ€Assisted Water Activation. Angewandte Chemie - International Edition, 2012, 51, 3002-3006.	7.2	79
10	Pd/Ga2O3 methanol steam reforming catalysts: Part I. Morphology, composition and structural aspects. Applied Catalysis A: General, 2009, 358, 193-202.	2.2	71
11	Steam reforming of methanol on PdZn near-surface alloys on Pd(1 1 1) and Pd foil studied by in-situ XPS, LEIS and PM-IRAS. Journal of Catalysis, 2010, 276, 101-113.	3.1	68
12	The Chemical Evolution of the La0.6Sr0.4CoO3âˆ'Î´ Surface Under SOFC Operating Conditions and Its Implications for Electrochemical Oxygen Exchange Activity. Topics in Catalysis, 2018, 61, 2129-2141.	1.3	65
13	The state of zinc in methanol synthesis over a Zn/ZnO/Cu(211) model catalyst. Science, 2022, 376, 603-608.	6.0	65
14	CO2-selective methanol steam reforming on In-doped Pd studied by in situ X-ray photoelectron spectroscopy. Journal of Catalysis, 2012, 295, 186-194.	3.1	53
15	Pd/Ga2O3 methanol steam reforming catalysts: Part II. Catalytic selectivity. Applied Catalysis A: General, 2009, 358, 203-210.	2.2	51
16	In situ XPS study of methanol reforming on PdGa near-surface intermetallic phases. Journal of Catalysis, 2012, 290, 126-137.	3.1	48
17	Surface science approach to Pt/carbon model catalysts: XPS, STM and microreactor studies. Applied Surface Science, 2018, 440, 680-687.	3.1	47
18	Temperature-Induced Modifications of PdZn Layers on Pd(111). Journal of Physical Chemistry C, 2010, 114, 10850-10856.	1.5	46

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19	Growth of an Ultrathin Zirconia Film on Pt₃Zr Examined by High-Resolution X-ray Photoelectron Spectroscopy, Temperature-Programmed Desorption, Scanning Tunneling Microscopy, and Density Functional Theory. Journal of Physical Chemistry C, 2015, 119, 2462-2470.	1.5	46
20	Ligand Migration from Cluster to Support: A Crucial Factor for Catalysis by Thiolateâ€protected Gold Clusters. ChemCatChem, 2018, 10, 5372-5376.	1.8	44
21	Novel visible-light-sensitized Chl-Mg/P25 catalysts for photocatalytic degradation of rhodamine B. Applied Catalysis B: Environmental, 2017, 207, 326-334.	10.8	43
22	Surface-assisted laser desorption/ionization-mass spectrometry using TiO2-coated steel targets for the analysis of small molecules. Analytical and Bioanalytical Chemistry, 2011, 401, 1963-1974.	1.9	41
23	From Oxideâ€Supported Palladium to Intermetallic Palladium Phases: Consequences for Methanol Steam Reforming. ChemCatChem, 2013, 5, 1273-1285.	1.8	41
24	CO2 activation on ultrathin ZrO2 film by H2O co-adsorption: In situ NAP-XPS and IRAS studies. Surface Science, 2019, 679, 139-146.	0.8	38
25	Support effect on the reactivity and stability of Au25(SR)18 and Au144(SR)60 nanoclusters in liquid phase cyclohexane oxidation. Catalysis Today, 2019, 336, 174-185.	2.2	33
26	<i>In situ</i> NAP-XPS spectroscopy during methane dry reforming on ZrO₂/Pt(1â€‰1â€‰1) inverse model catalyst. Journal of Physics Condensed Matter, 2018, 30, 264007.	0.7	32
27	Modifying the Surface Structure of Perovskite-Based Catalysts by Nanoparticle Exsolution. Catalysts, 2020, 10, 268.	1.6	32
28	Roughening of Copper (100) at Elevated CO Pressure: Cu Adatom and Cluster Formation Enable CO Dissociation. Journal of Physical Chemistry C, 2019, 123, 8112-8121.	1.5	30
29	Ice Nucleation Activity of Graphene and Graphene Oxides. Journal of Physical Chemistry C, 2018, 122, 8182-8190.	1.5	29
30	Dynamics of Pd Dopant Atoms inside Au Nanoclusters during Catalytic CO Oxidation. Journal of Physical Chemistry C, 2020, 124, 23626-23636.	1.5	28
31	Interplay between CO Disproportionation and Oxidation: On the Origin of the CO Reaction Onset on Atomic Layer Deposition-Grown Pt/ZrO₂ Model Catalysts. ACS Catalysis, 2021, 11, 208-214.	5.5	27
32	Novel perovskite catalysts for CO2 utilization - Exsolution enhanced reverse water-gas shift activity. Applied Catalysis B: Environmental, 2021, 292, 120183.	10.8	26
33	Preparation and structural characterization of SnO2 and GeO2 methanol steam reforming thin film model catalysts by (HR)TEM. Materials Chemistry and Physics, 2010, 122, 623-629.	2.0	25
34	CO Adsorption on Reconstructed Ir(100) Surfaces from UHV to mbar Pressure: A LEED, TPD, and PM-IRAS Study. Journal of Physical Chemistry C, 2016, 120, 10838-10848.	1.5	25
35	Origin of different deactivation of Pd/SnO2 and Pd/GeO2 catalysts in methanol dehydrogenation and reforming: A comparative study. Applied Catalysis A: General, 2010, 381, 242-252.	2.2	24
36	Catalytic characterization of pure SnO2 and GeO2 in methanol steam reforming. Applied Catalysis A: General, 2010, 375, 188-195.	2.2	23

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37	A Non-Enzymatic Glucose Sensor Based on the Hybrid Thin Films of Cu on Acetanilide/ITO. Journal of the Electrochemical Society, 2019, 166, B1116-B1125.	1.3	22
38	In situ XPS studies of MoS₂-based CO₂ hydrogenation catalysts. Journal Physics D: Applied Physics, 2021, 54, 324002.	1.3	22
39	Impregnated and Co-precipitated Pdâ€“Ga2O3, Pdâ€“In2O3 and Pdâ€“Ga2O3â€“In2O3 Catalysts: Influence of the Microstructure on the CO2 Selectivity in Methanol Steam Reforming. Catalysis Letters, 2018, 148, 3062-3071.	1.4	21
40	Novel Sample-Stage for Combined Near Ambient Pressure X-ray Photoelectron Spectroscopy, Catalytic Characterization and Electrochemical Impedance Spectroscopy. Crystals, 2020, 10, 947.	1.0	20
41	Reversible Modification of the Structural and Electronic Properties of a Boron Nitride Monolayer by CO Intercalation. ChemPhysChem, 2015, 16, 923-927.	1.0	18
42	Vibrational fingerprint of localized excitons in a two-dimensional metal-organic crystal. Nature Communications, 2018, 9, 4703.	5.8	18
43	Atmospheric pressure reaction cell for operando sum frequency generation spectroscopy of ultrahigh vacuum grown model catalysts. Review of Scientific Instruments, 2018, 89, 045104.	0.6	17
44	Water adsorption on polycrystalline vanadium from ultra-high vacuum to ambient relative humidity. Surface Science, 2015, 641, 141-147.	0.8	16
45	Surface Spectroscopy on UHV-Grown and Technological Niâ€“ZrO2 Reforming Catalysts: From UHV to Operando Conditions. Topics in Catalysis, 2016, 59, 1614-1627.	1.3	16
46	Combined UHV/high-pressure catalysis setup for depth-resolved near-surface spectroscopic characterization and catalytic testing of model catalysts. Review of Scientific Instruments, 2014, 85, 055104.	0.6	15
47	Ca-doped rare earth perovskite materials for tailored exsolution of metal nanoparticles. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2020, 76, 1055-1070.	0.5	15
48	Synthesis and Properties of Monolayer-Protected Co_{<i>x</i>}(SC₂H₄Ph)_{<i>m</i>} Nanoclusters. Journal of Physical Chemistry C, 2017, 121, 10948-10956.	1.5	14
49	Absorbance-based Spectroelectrochemical Sensor for Determination of Ampyra Based on Electrochemical Preconcentration. Sensors and Actuators B: Chemical, 2020, 324, 128723.	4.0	14
50	High Temperature Water Gas Shift Reactivity of Novel Perovskite Catalysts. Catalysts, 2020, 10, 582.	1.6	14
51	PdZn Surface Alloys as Models of Methanol Steam Reforming Catalysts: Molecular Studies by LEED, XPS, TPD and PM-IRAS. Topics in Catalysis, 2014, 57, 1218-1228.	1.3	13
52	Ligand and support effects on the reactivity and stability of Au38(SR)24 catalysts in oxidation reactions. Catalysis Communications, 2019, 130, 105768.	1.6	13
53	AgAu nanoclusters supported on zeolites: Structural dynamics during CO oxidation. Catalysis Today, 2022, 384-386, 166-176.	2.2	13
54	Enhancing Electrochemical Waterâ€Splitting Kinetics by Polarizationâ€Driven Formation of Nearâ€Surface Iron(0): An Inâ€…Situ XPS Study on Perovskiteâ€Type Electrodes. Angewandte Chemie, 2015, 127, 2666-2670.	1.6	12

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55	Polarization-Dependent SFG Spectroscopy of Near Ambient Pressure CO Adsorption on Pt(111) and Pd(111) Revisited. Topics in Catalysis, 2018, 61, 751-762.	1.3	11
56	Coverage-Induced Orientation Change: CO on Ir(111) Monitored by Polarization-Dependent Sum Frequency Generation Spectroscopy and Density Functional Theory. Journal of Physical Chemistry C, 2020, 124, 18102-18111.	1.5	9
57	Hybrid carbon spherogels: carbon encapsulation of nano-titania. Chemical Communications, 2021, 57, 3905-3908.	2.2	7
58	In Situ Growth of Exsolved Nanoparticles under Varying rWGS Reaction Conditionsâ€"A Catalysis and Near Ambient Pressure-XPS Study. Catalysts, 2021, 11, 1484.	1.6	7
59	Performance modulation through selective, homogenous surface doping of lanthanum strontium ferrite electrodes revealed by <i>in situ</i> PLD impedance measurements. Journal of Materials Chemistry A, 2022, 10, 2973-2986.	5.2	6
60	Thioether functionalised gallium and indium alkoxides in materials synthesis. New Journal of Chemistry, 2016, 40, 6962-6969.	1.4	5
61	Water Splitting on Model-Composite La_{0.6}Sr_{0.4}FeO_{3-Î´} (LSF) Electrodes in H₂/H₂O Atmosphere. ECS Transactions, 2015, 68, 3333-3343.	0.3	4
62	Aerosol-assisted CVD of thioether-functionalised indium aminoalkoxides. Monatshefte FÃ¼r Chemie, 2017, 148, 1385-1392.	0.9	4
63	An ultrahigh vacuum-compatible reaction cell for model catalysis under atmospheric pressure flow conditions. Review of Scientific Instruments, 2020, 91, 125101.	0.6	3
64	Chemically Selective Imaging of Individual Bonds through Scanning Electron Energy-Loss Spectroscopy: Disulfide Bridges Linking Gold Nanoclusters. Journal of Physical Chemistry Letters, 2020, 11, 796-799.	2.1	3
65	CO Oxidation Capabilities of La- and Nd-Based Perovskites. Fuels, 2022, 3, 31-43.	1.3	3
66	Exsolution Catalystsâ€"Increasing Metal Efficiency. Encyclopedia, 2021, 1, 249-260.	2.4	2
67	Comparison of novel Ni doped exsolution perovskites as methane dry reforming catalysts. E3S Web of Conferences, 2021, 266, 02019.	0.2	2
68	Frontispiz: Enhancing Electrochemical Water-Splitting Kinetics by Polarization-Driven Formation of Near-Surface Iron(0): An Inâ€...Situ XPS Study on Perovskite-Type Electrodes. Angewandte Chemie, 2015, 127, n/a-n/a.	1.6	0
69	Frontispiece: Enhancing Electrochemical Water-Splitting Kinetics by Polarization-Driven Formation of Near-Surface Iron(0): An Inâ€...Situ XPS Study on Perovskite-Type Electrodes. Angewandte Chemie - International Edition, 2015, 54, n/a-n/a.	7.2	0
70	Ligand Migration from Cluster to Support: A Crucial Factor for Catalysis by Thiolateâ€protected Gold Clusters. ChemCatChem, 2018, 10, 5341-5341.	1.8	0
71	Tailored exsolution of metal nanoparticles: structural and chemical characterisation of doped perovskites by XPS and XRD. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e314-e314.	0.0	0
72	Structural modification of perovskites by tailored exsolution for enhanced catalytic activity. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e322-e322.	0.0	0

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73	How Greenhouse Gases Can Be Used to Store Energy. Frontiers for Young Minds, 0, 8, .	0.8	0