Oliver R Inderwildi

List of Publications by Year
in descending order

43 papers	3,277 citations	218677 26 h-index	265206 42 g-index
47 all docs	47 docs citations	47 times ranked	4555 citing authors

#	Article	IF	Citations
1	The World Avatarâ€"A World Model for Facilitating Interoperability. Lecture Notes in Energy, 2022, , 39-53.	0.3	7
2	Cyber-Physical Systems inÂDecarbonisation. Lecture Notes in Energy, 2022, , 17-28.	0.3	2
3	The license to mine: Making resource wealth work for those who need it most. Resources Policy, 2021, 74, 101418.	9.6	8
4	The impact of intelligent cyber-physical systems on the decarbonization of energy. Energy and Environmental Science, 2020, 13, 744-771.	30.8	104
5	Enhanced Procurement and Production Strategies for Chemical Plants: Utilizing Real-Time Financial Data and Advanced Algorithms. Industrial & Engineering Chemistry Research, 2019, 58, 3072-3081.	3.7	1
6	Energy shift: decline of easy oil and restructuring of geo-politics. Frontiers in Energy, 2016, 10, 260-267.	2.3	2
7	Simulation and life cycle assessment of algae gasification process in dual fluidized bed gasifiers. Green Chemistry, 2015, 17, 1793-1801.	9.0	29
8	The Catalyst Selectivity Index (CSI): A Framework and Metric to Assess the Impact of Catalyst Efficiency Enhancements upon Energy and CO2 Footprints. Topics in Catalysis, 2015, 58, 682-695.	2.8	18
9	Macroeconomic impacts of oil price volatility: mitigation and resilience. Frontiers in Energy, 2014, 8, 9-24.	2.3	61
10	The feedstock curve: novel fuel resources, environmental conservation, the force of economics and the renewed eastâ€"west power struggle. Applied Petrochemical Research, 2014, 4, 157-165.	1.3	4
11	Response to Comment on â€œEffects of Ethanol on Vehicle Energy Efficiency and Implications on Ethanol Life-Cycle Greenhouse Gas Analysisâ€• Environmental Science & Technology, 2014, 48, 9953-9954.	10.0	0
12	The carbon footprint and non-renewable energy demand of algae-derived biodiesel. Applied Energy, 2014, 113, 1632-1644.	10.1	83
13	Production of Biorenewable Hydrogen and Syngas via Algae Gasification: A Sensitivity Analysis. Energy Procedia, 2014, 61, 2767-2770.	1.8	26
14	The carbon curse: Are fuel rich countries doomed to high CO2 intensities?. Energy Policy, 2013, 62, 1356-1365.	8.8	92
15	Global and local impacts of UK renewable energy policy. Energy and Environmental Science, 2013, 6, 18-24.	30.8	31
16	Liquid fuels, hydrogen and chemicals from lignin: A critical review. Renewable and Sustainable Energy Reviews, 2013, 21, 506-523.	16.4	880
17	Effects of Ethanol on Vehicle Energy Efficiency and Implications on Ethanol Life-Cycle Greenhouse Gas Analysis. Environmental Science & Technology, 2013, 47, 5535-5544.	10.0	41
18	Unraveling the Fischerâ€"Tropsch mechanism: a combined DFT and microkinetic investigation of Câ€"C bond formation on Ru. Physical Chemistry Chemical Physics, 2012, 14, 7028.	2.8	20

#	Article	IF	Citations
19	Life cycle energy and greenhouse gas analysis for algae-derived biodiesel. Energy and Environmental Science, 2011, 4, 3773.	30.8	141
20	Life cycle energy and greenhouse gas analysis for agave-derived bioethanol. Energy and Environmental Science, 2011, 4, 3110.	30.8	81
21	Theoretical insights into the surface growth of rutile TiO2. Combustion and Flame, 2011, 158, 1868-1876.	5.2	22
22	Electronic and optical properties of aluminium-doped anatase and rutile<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu initio</i>calculations. Physical Review B, 2010, 81, .	3.2	121
23	The status of conventional world oil reservesâ€"Hype or cause for concern?. Energy Policy, 2010, 38, 4743-4749.	8.8	314
24	Indirect emissions from electric vehicles: emissions from electricity generation. Energy and Environmental Science, 2010, 3, 1825.	30.8	58
25	Biofuels and synthetic fuels in the US and China: A review of Well-to-Wheel energy use and greenhouse gas emissions with the impact of land-use change. Energy and Environmental Science, 2010, 3, 190-197.	30.8	72
26	The simultaneous reduction of nitric oxide and soot in emissions from diesel engines. Carbon, 2009, 47, 866-875.	10.3	61
27	Quo vadis biofuels?. Energy and Environmental Science, 2009, 2, 343.	30.8	123
28	Fischer-Tropsch synthesis of liquid fuels: learning lessons from homogeneous catalysis. Physical Chemistry Chemical Physics, 2009, 11, 11110.	2.8	24
29	Mechanistic Studies of Hydrocarbon Combustion and Synthesis on Noble Metals. Angewandte Chemie - International Edition, 2008, 47, 5253-5255.	13.8	108
30	Synergetic Effects of the Cu/Pt{110} Surface Alloy:â€‰ Enhanced Reactivity of Water and Carbon Monoxide. Journal of Physical Chemistry C, 2008, 112, 6422-6429.	3.1	20
31	Fischerâ^'Tropsch Mechanism Revisited:â€‰ Alternative Pathways for the Production of Higher Hydrocarbons from Synthesis Gas. Journal of Physical Chemistry C, 2008, 112, 1305-1307.	3.1	250
32	In-silico investigations in heterogeneous catalysisâ€"combustion and synthesis of small alkanes. Chemical Society Reviews, 2008, 37, 2274.	38.1	52
33	Oxidation of Hydrocarbons at Surface Defects: Unprecedented Confirmation of the Oxomethylidyne Pathway on a Stepped Rh Surface. Journal of Physical Chemistry C, 2008, 112, 8751-8753.	3.1	4
34	Dynamic Interplay between Diffusion and Reaction:â€‰ Nitrogen Recombination on Rh{211} in Car Exhaust Catalysis. Journal of the American Chemical Society, 2008, 130, 2213-2220.	13.7	24
35	Toward a Comprehensive Model of the Synthesis of TiO₂ Particles from TiCl₄. Industrial & Engineering Chemistry Research, 2007, 46, 6147-6156.	3.7	70
36	An Unexpected Pathway for the Catalytic Oxidation of Methylidyne on Rh{111} as a Route to Syngas. Journal of the American Chemical Society, 2007, 129, 1751-1759.	13.7	56

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37	Adsorption, Diffusion and Desorption of Chlorine on and from Rutile TiO2{110}: A Theoretical Investigation. ChemPhysChem, 2007, 8, 444-451.	2.1	28
38	When adding an unreactive metal enhances catalytic activity: NOx decomposition over silverâ€“rhodium bimetallic surfaces. Surface Science, 2007, 601, L103-L108.	1.9	55
39	Competitive Adsorption of NO, NO2, CO2, and H2O on BaO(100):Â A Quantum Chemical Study. Journal of Physical Chemistry B, 2006, 110, 17484-17492.	2.6	63
40	Influence of Coadsorbates on the NO Dissociation on a Rhodium(311) Surface. ChemPhysChem, 2005, 6, 2513-2521.	2.1	15
41	Coverage dependence of oxygen decomposition and surface diffusion on rhodium (111): A DFT study. Journal of Chemical Physics, 2005, 122, 034710.	3.0	56
42	Influence of initial oxygen coverage and magnetic moment on the NO decomposition on rhodium (111). Journal of Chemical Physics, 2005, 122, 154702.	3.0	29
43	Linear relationship between activation energies and reaction energies for coverage-dependent dissociation reactions on rhodium surfaces. Physical Chemistry Chemical Physics, 2005, 7, 2552.	2.8	21