Illias Hischier

List of Publications by Year
in descending order

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25 papers	817 citations	623699 14 h-index	713444 21 g-index
26 all docs	26 docs citations	26 times ranked	775 citing authors

#	Article	IF	Citations
1	CO₂ Splitting via Two-Step Solar Thermochemical Cycles with Zn/ZnO and FeO/Fe₃O₄ Redox Reactions: Thermodynamic Analysis. Energy & Fuels, 2008, 22, 3544-3550.	5.1	149
2	CO₂Splitting via Two-Step Solar Thermochemical Cycles with Zn/ZnO and FeO/Fe₃O₄Redox Reactions II: Kinetic Analysis. Energy & Fuels, 2009, 23, 2832-2839.	5.1	110
3	Coupled simulation of thermally active building systems to support a digital twin. Energy and Buildings, 2019, 202, 109298.	6.7	76
4	Dynamic photovoltaic building envelopes for adaptive energy and comfort management. Nature Energy, 2019, 4, 671-682.	39.5	63
5	Experimental and Numerical Analyses of a Pressurized Air Receiver for Solar-Driven Gas Turbines. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.8	62
6	CO2 splitting in an aerosol flow reactor via the two-step Zn/ZnO solar thermochemical cycle. Chemical Engineering Science, 2010, 65, 1855-1864.	3.8	46
7	Ammonia Production via a Two-Step Al₂O₃/AlN Thermochemical Cycle. 3. Influence of the Carbon Reducing Agent and Cyclability. Industrial & Engineering Chemistry Research, 2008, 47, 2231-2237.	3.7	40
8	A reflective adaptive solar faÃ§ade for multi-building energy and comfort management. Energy and Buildings, 2018, 177, 303-315.	6.7	34
9	A Modular Ceramic Cavity-Receiver for High-Temperature High-Concentration Solar Applications. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.8	32
10	Pressure dependent kinetics of magnesium oxide carbothermal reduction. Thermochimica Acta, 2016, 636, 23-32.	2.7	30
11	Nowcasting, predictive control, and feedback control for temperature regulation in a novel hybrid solar-electric reactor for continuous solar-thermal chemical processing. Solar Energy, 2018, 174, 474-488.	6.1	30
12	NEST HiLo: Investigating lightweight construction and adaptive energy systems. Journal of Building Engineering, 2017, 12, 332-341.	3.4	29
13	A novel experimental method to study metal vapor condensation/oxidation: Mg in CO and CO2 at reduced pressures. Solar Energy, 2016, 139, 389-397.	6.1	24
14	A novel population-based occupancy modeling approach for district-scale simulations compared to standard-based methods. Building and Environment, 2020, 181, 107084.	6.9	24
15	Worst-case losses from a cylindrical calorimeter for solar simulator calibration. Optics Express, 2015, 23, A1309.	3.4	14
16	Experimental evidence of an observer effect in high-flux solar simulators. Solar Energy, 2017, 158, 889-897.	6.1	13
17	Optical and Thermal Analysis of a Pressurized-Air Receiver Cluster for a 50 MWe Solar Power Tower. Journal of Solar Energy Engineering, Transactions of the ASME, 2015, 137, .	1.8	12
18	Scenario-based robustness assessment of building system life cycle performance. Applied Energy, 2022, 311, 118606.	10.1	9

#	Article	IF	Citations
19	Ultra-thin and lightweight photovoltaic/thermal collectors for building integration. Energy Procedia, 2017, 122, 409-414.	1.8	8
20	Building Energy Performance Assessment Using an Easily Deployable Sensor Kit: Process, Risks, and Lessons Learned. Frontiers in Built Environment, 2021, 6, .	2.3	5
21	Heat Transfer Analysis of a Novel Pressurized Air Receiver for Concentrated Solar Power Via Combined Cycles. , 2009, , .		2
22	Experimental and Numerical Analyses of a Pressurized Air Receiver for Solar-Driven Gas Turbines. , 2010, , .		2
23	A novel design framework for solar thermal/electrical activation of building envelopes. Journal of Physics: Conference Series, 2019, 1343, 012085.	0.4	0
24	CO2 Splitting in a Hot-Wall Aerosol Reactor via the Two-Step Zn/ZnO Solar Thermochemical Cycle. , 2009, , .		0
25	Evidence of an Observer Effect Predicted in High-Flux Solar Simulators, but not High-Flux Solar Furnaces. , 2017, , .		0