

# Sven RÃ¼hle

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11882134/publications.pdf>

Version: 2024-02-01

29  
papers

5,686  
citations

236612

25  
h-index

454577

30  
g-index

30  
all docs

30  
docs citations

30  
times ranked

7777  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tabulated values of the Shockley-Queisser limit for single junction solar cells. <i>Solar Energy</i> , 2016, 130, 139-147.	2.9	1,103
2	Quantum-Dot-Sensitized Solar Cells. <i>ChemPhysChem</i> , 2010, 11, 2290-2304.	1.0	825
3	Physical Chemical Principles of Photovoltaic Conversion with Nanoparticulate, Mesoporous Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2004, 108, 8106-8118.	1.2	584
4	Chemical bath deposited CdS/CdSe-sensitized porous TiO <sub>2</sub> solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 181, 306-313.	2.0	368
5	Surface Photovoltage Spectroscopy of Dye-Sensitized Solar Cells with TiO <sub>2</sub> , Nb <sub>2</sub> O <sub>5</sub> , and SrTiO <sub>3</sub> Nanocrystalline Photoanodes: A Indication for Electron Injection from Higher Excited Dye States. <i>Journal of Physical Chemistry B</i> , 2001, 105, 6347-6352.	1.2	332
6	Molecular Adjustment of the Electronic Properties of Nanoporous Electrodes in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18907-18913.	1.2	327
7	PbS as a Highly Catalytic Counter Electrode for Polysulfide-Based Quantum Dot Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6162-6166.	1.5	279
8	All-Oxide Photovoltaics. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3755-3764.	2.1	263
9	Core/CdS Quantum Dot/Shell Mesoporous Solar Cells with Improved Stability and Efficiency Using an Amorphous TiO <sub>2</sub> Coating. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3895-3898.	1.5	239
10	Energy Band Alignment between Anatase and Rutile TiO <sub>2</sub> . <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 4182-4187.	2.1	210
11	Energy Level Alignment in CdS Quantum Dot Sensitized Solar Cells Using Molecular Dipoles. <i>Journal of the American Chemical Society</i> , 2009, 131, 9876-9877.	6.6	177
12	TiO <sub>2</sub> /Cu <sub>2</sub> O all-oxide heterojunction solar cells produced by spray pyrolysis. <i>Solar Energy Materials and Solar Cells</i> , 2015, 132, 549-556.	3.0	155
13	Conformal Nano-Sized Inorganic Coatings on Mesoporous TiO <sub>2</sub> Films for Low-Temperature Dye-Sensitized Solar Cell Fabrication. <i>Advanced Functional Materials</i> , 2010, 20, 282-288.	7.8	116
14	Electron Tunneling at the TiO <sub>2</sub> /Substrate Interface Can Determine Dye-Sensitized Solar Cell Performance. <i>Journal of Physical Chemistry B</i> , 2004, 108, 17946-17951.	1.2	103
15	Thin Film Co <sub>3</sub> O <sub>4</sub> /TiO <sub>2</sub> Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1401007.	10.2	86
16	Quantum Efficiency and Bandgap Analysis for Combinatorial Photovoltaics: Sorting Activity of Cu <sup>2+</sup> O Compounds in All-Oxide Device Libraries. <i>ACS Combinatorial Science</i> , 2014, 16, 53-65.	3.8	83
17	SrTiO <sub>3</sub> Recombination-Inhibiting Barrier Layer for Type II Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10015-10018.	1.5	67
18	Dye-sensitized solar tubes: A new solar cell design for efficient current collection and improved cell sealing. <i>Solar Energy Materials and Solar Cells</i> , 2010, 94, 317-322.	3.0	60

#	ARTICLE	IF	CITATIONS
19	The detailed balance limit of perovskite/silicon and perovskite/CdTe tandem solar cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1600955.	0.8	44
20	Investigation of the Electric Field in TiO <sub>2</sub> /FTO Junctions Used in Dye-Sensitized Solar Cells by Photocurrent Transients. <i>Journal of Physical Chemistry B</i> , 2005, 109, 9522-9526.	1.2	43
21	Importance of Recombination at the TCO/Electrolyte Interface for High Efficiency Quantum Dot Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 17473-17478.	1.5	42
22	Unpredicted electron injection in CdS/CdSe quantum dot sensitized ZrO <sub>2</sub> solar cells. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 19302.	1.3	36
23	A two junction, four terminal photovoltaic device for enhanced light to electric power conversion using a low-cost dichroic mirror. <i>Journal of Renewable and Sustainable Energy</i> , 2009, 1, 013106.	0.8	33
24	Strong Efficiency Enhancement of Dye-Sensitized Solar Cells Using a La-Modified TiCl <sub>4</sub> Treatment of Mesoporous TiO <sub>2</sub> Electrodes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 21481-21486.	1.5	32
25	Optical Waveguide Enhanced Photovoltaics. <i>Optics Express</i> , 2008, 16, 21801.	1.7	27
26	Four-point probe electrical resistivity scanning system for large area conductivity and activation energy mapping. <i>Review of Scientific Instruments</i> , 2014, 85, 055103.	0.6	15
27	A combined computational and experimental investigation of Mg doped $\text{La}_{1-x}\text{Fe}_x\text{O}_3$ . <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 781-791.	1.3	15
28	Electrochemistry in Mesoporous Electrodes: Influence of Nanoporosity on the Chemical Potential of the Electrolyte in Dye Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2022-2027.	1.5	14
29	Recombination Controlled Signal Transfer through Mesoporous TiO <sub>2</sub> Films. <i>Journal of Physical Chemistry B</i> , 2006, 110, 3883-3888.	1.2	7