Shuit-Tong Lee

List of Publications by Citations

47 papers	9,359 citations	35 h-index	55 g-index
55 ext. papers	10,646 ext. citations	15.5 avg, IF	6.15 L-index

#	Paper	IF	Citations
47	Water splitting. Metal-free efficient photocatalyst for stable visible water splitting via a two-electron pathway. *Science*, **2015**, 347, 970-4	33.3	3101
46	Water-soluble fluorescent carbon quantum dots and photocatalyst design. *Angewandte Chemie - International Edition*, **2010**, 49, 4430-4	16.4	1947
45	Ligand Mediated Transformation of Cesium Lead Bromide Perovskite Nanocrystals to Lead Depleted CsPbBr Nanocrystals. *Journal of the American Chemical Society*, **2017**, 139, 5309-5312	16.4	301
44	Aligned Single-Crystalline Perovskite Microwire Arrays for High-Performance Flexible Image Sensors with Long-Term Stability. *Advanced Materials*, **2016**, 28, 2201-8	24	283
43	Hybrid heterojunction solar cell based on organic-inorganic silicon nanowire array architecture. *Journal of the American Chemical Society*, **2011**, 133, 19408-15	16.4	249
42	Liquid-Metal-Based Super-Stretchable and Structure-Designable Triboelectric Nanogenerator for Wearable Electronics. *ACS Nano*, **2018**, 12, 2027-2034	16.7	247
41	High efficiency hybrid PEDOT:PSS/nanostructured silicon Schottky junction solar cells by doping-free rear contact. *Energy and Environmental Science*, **2015**, 8, 297-302	35.4	196
40	Organometal Halide Perovskite Quantum Dot Light-Emitting Diodes. *Advanced Functional Materials* , **2016**, 26, 4797-4802	15.6	196
39	A rhodium/silicon co-electrocatalyst design concept to surpass platinum hydrogen evolution activity at high overpotentials. *Nature Communications*, **2016**, 7, 12272	17.4	195
38	Ultrahigh-Responsivity Photodetectors from Perovskite Nanowire Arrays for Sequentially Tunable Spectral Measurement. *Nano Letters*, **2017**, 17, 2482-2489	11.5	184
37	Surface-Dominated Transport Properties of Silicon Nanowires. *Advanced Functional Materials*, **2008**, 18, 3251-3257	15.6	161
36	Janus Structures of Transition Metal Dichalcogenides as the Heterojunction Photocatalysts for Water Splitting. *Journal of Physical Chemistry C*, **2018**, 122, 3123-3129	3.8	160
35	Integrating a Silicon Solar Cell with a Triboelectric Nanogenerator via a Mutual Electrode for Harvesting Energy from Sunlight and Raindrops. *ACS Nano*, **2018**, 12, 2893-2899	16.7	155
34	13.8% Efficiency hybrid Si/organic heterojunction solar cells with MoO3 film as antireflection and inversion induced layer. *Advanced Materials*, **2014**, 26, 6007-12	24	149
33	High-Efficiency Perovskite Light-Emitting Diodes with Synergetic Outcoupling Enhancement. *Advanced Materials*, **2019**, 31, e1901517	24	130
32	Extremely Efficient White Organic Light-Emitting Diodes for General Lighting. *Advanced Functional Materials*, **2014**, 24, 7249-7256	15.6	130
31	High-performance flexible organic light-emitting diodes using embedded silver network transparent electrodes. *ACS Nano*, **2014**, 8, 12796-805	16.7	126

30	Carbon dots: advances in nanocarbon applications. *Nanoscale*, **2019**, 11, 19214-19224	7.7	122
29	Silicon Nanowire/Polymer Hybrid Solar Cell-Supercapacitor: A Self-Charging Power Unit with a Total Efficiency of 10.5. *Nano Letters*, **2017**, 17, 4240-4247	11.5	106
28	Thin-Layer Fe2TiO5 on Hematite for Efficient Solar Water Oxidation. *ACS Nano*, **2015**, 9, 5348-56	16.7	102
27	Heterojunction with Organic Thin Layers on Silicon for Record Efficiency Hybrid Solar Cells. *Advanced Energy Materials*, **2014**, 4, 1300923	21.8	93
26	Ti-doped hematite nanostructures for solar water splitting with high efficiency. *Journal of Applied Physics*, **2012**, 112, 084312	2.5	92
25	Impacts of Carbon Dots on Rice Plants: Boosting the Growth and Improving the Disease Resistance.. *ACS Applied Bio Materials*, **2018**, 1, 663-672	4.1	85
24	Nanostructured Si/Organic Heterojunction Solar Cells with High Open-Circuit Voltage via Improving Junction Quality. *Advanced Functional Materials*, **2016**, 26, 5035-5041	15.6	77
23	High Performance Nanostructured Silicon-Organic Quasi p-n Junction Solar Cells via Low-Temperature Deposited Hole and Electron Selective Layer. *ACS Nano*, **2016**, 10, 704-12	16.7	66
22	Hydroxyl-Group-Dominated Graphite Dots Reshape Laser Desorption/Ionization Mass Spectrometry for Small Biomolecular Analysis and Imaging. *ACS Nano*, **2017**, 11, 9500-9513	16.7	59
21	Rational Interface Engineering for Efficient Flexible Perovskite Light-Emitting Diodes. *ACS Nano*, **2020**, 14, 6107-6116	16.7	58
20	Approaching the Volcano Top: Iridium/Silicon Nanocomposites as Efficient Electrocatalysts for the Hydrogen Evolution Reaction. *ACS Nano*, **2019**, 13, 2786-2794	16.7	57
19	A 12%-efficient upgraded metallurgical grade silicon-organic heterojunction solar cell achieved by a self-purifying process. *ACS Nano*, **2014**, 8, 11369-76	16.7	57
18	Low-temperature synthesis TiO x passivation layer for organic-silicon heterojunction solar cell with a high open-circuit voltage. *Nano Energy*, **2017**, 34, 257-263	17.1	52
17	Naphthalene Diimide-Based n-Type Polymers: Efficient Rear Interlayers for High-Performance Silicon-Organic Heterojunction Solar Cells. *ACS Nano*, **2017**, 11, 7215-7222	16.7	50
16	Triboelectric Nanogenerator Driven Self-Powered Photoelectrochemical Water Splitting Based on Hematite Photoanodes. *ACS Nano*, **2018**, 12, 8625-8632	16.7	44
15	Dual-Band, High-Performance Phototransistors from Hybrid Perovskite and Organic Crystal Array for Secure Communication Applications. *ACS Nano*, **2019**, 13, 5910-5919	16.7	43
14	Efficiently Releasing the Trapped Energy Flow in White Organic Light-Emitting Diodes with Multifunctional Nanofunnel Arrays. *Advanced Functional Materials*, **2015**, 25, 2660-2668	15.6	41
13	Fe2TiO5-incorporated hematite with surface P-modification for high-efficiency solar water splitting. *Nano Energy*, **2017**, 32, 526-532	17.1	37

12	Single Vanadium Atoms Anchored on Graphitic Carbon Nitride as a High-Performance Catalyst for Non-oxidative Propane Dehydrogenation. *ACS Nano*, **2020**, 14, 5772-5779	16.7	31
11	A surface curvature oscillation model for vapour-liquid-solid growth of periodic one-dimensional nanostructures. *Nature Communications*, **2015**, 6, 6412	17.4	25
10	Hole electrical transporting properties in organic-Si Schottky solar cell. *Applied Physics Letters*, **2013** , 103, 013504	3.4	24
9	Centimeter-Long Single-Crystalline Si Nanowires. *Nano Letters*, **2017**, 17, 7323-7329	11.5	23
8	Buried MoO /Ag Electrode Enables High-Efficiency Organic/Silicon Heterojunction Solar Cells with a High Fill Factor. *ACS Applied Materials & Interfaces*, **2018**, 10, 13767-13773	9.5	22
7	High-Performance Ultrathin Organic-Inorganic Hybrid Silicon Solar Cells via Solution-Processed Interface Modification. *ACS Applied Materials & Interfaces*, **2017**, 9, 21723-21729	9.5	16
6	Bioinspired Hierarchical Nanofabric Electrode for Silicon Hydrovoltaic Device with Record Power Output. *ACS Nano*, **2021**, 15, 7472-7481	16.7	15
5	Plasmonic enhancement in hybrid organic/Si heterojunction solar cells enabled by embedded gold nanoparticles. *Applied Physics Letters*, **2014**, 105, 241110	3.4	14
4	Nanoscience and Nanotechnology Cross Borders. *ACS Nano*, **2017**, 11, 1123-1126	16.7	3
3	Connecting Together Nanocenters around the World. *ACS Nano*, **2017**, 11, 8531-8532	16.7	3
2	Revealing Hydrogen Evolution Performance of Single-Atom Platinum Electrocatalyst with Polyoxometalate Molecular Models. *ACS Energy Letters*,4055-4062	20.1	3
1	The Inhibition of SARS-CoV-2 3CL M by Graphene and Its Derivatives from Molecular Dynamics Simulations.. *ACS Applied Materials & Interfaces*, **2021**,	9.5	1