Yuan Li, or Li Yuan

List of Publications by Year
in descending order

37 papers	2,203 citations	236833 25 h-index	315616 38 g-index
38 all docs	38 docs citations	38 times ranked	1981 citing authors

#	Article	IF	Citations
1	The role of van der Waals forces in the performance of molecular diodes. Nature Nanotechnology, 2013, 8, 113-118.	15.6	299
2	Molecular diodes with rectification ratios exceeding 105 driven by electrostatic interactions. Nature Nanotechnology, 2017, 12, 797-803.	15.6	224
3	Controlling the direction of rectification in a molecular diode. Nature Communications, 2015, 6, 6324.	5.8	197
4	A Molecular Diode with a Statistically Robust Rectification Ratio of Three Orders of Magnitude. Nano Letters, 2015, 15, 5506-5512.	4.5	118
5	On the Remarkable Role of Surface Topography of the Bottom Electrodes in Blocking Leakage Currents in Molecular Diodes. Journal of the American Chemical Society, 2014, 136, 6554-6557.	6.6	98
6	Transition from direct to inverted charge transport Marcus regions in molecular junctions via molecular orbital gating. Nature Nanotechnology, 2018, 13, 322-329.	15.6	98
7	Giant enhancement in vertical conductivity of stacked CVD graphene sheets by self-assembled molecular layers. Nature Communications, 2014, 5, 5461.	5.8	83
8	Controlling Leakage Currents: The Role of the Binding Group and Purity of the Precursors for Self-Assembled Monolayers in the Performance of Molecular Diodes. Journal of the American Chemical Society, 2014, 136, 1982-1991.	6.6	83
9	Dependency of the Tunneling Decay Coefficient in Molecular Tunneling Junctions on the Topography of the Bottom Electrodes. Angewandte Chemie - International Edition, 2014, 53, 3377-3381.	7.2	78
10	A Single-Level Tunnel Model to Account for Electrical Transport through Single Molecule- and Self-Assembled Monolayer-based Junctions. Scientific Reports, 2016, 6, 26517.	1.6	70
11	One Carbon Matters: The Origin and Reversal of Oddâ€“Even Effects in Molecular Diodes with Self-Assembled Monolayers of Ferrocenyl-Alkanethiolates. Journal of Physical Chemistry C, 2015, 119, 17910-17919.	1.5	66
12	Comparison of DC and AC Transport in 1.5â€“7.5 nm Oligophenylene Imine Molecular Wires across Two Junction Platforms: Eutectic Gaâ€“In versus Conducting Probe Atomic Force Microscope Junctions. Journal of the American Chemical Society, 2016, 138, 7305-7314.	6.6	64
13	Nonideal Electrochemical Behavior of Ferrocenylâ€“Alkanethiolate SAMs Maps the Microenvironment of the Redox Unit. Journal of Physical Chemistry C, 2015, 119, 21978-21991.	1.5	58
14	Tuning the Rectification Ratio by Changing the Electronic Nature (Open-Shell and Closed-Shell) in Donorâ€“Acceptor Self-Assembled Monolayers. Journal of the American Chemical Society, 2017, 139, 4262-4265.	6.6	51
15	One-Nanometer Thin Monolayers Remove the Deleterious Effect of Substrate Defects in Molecular Tunnel Junctions. Nano Letters, 2015, 15, 6643-6649.	4.5	50
16	Chemical control over the energy-level alignment in a two-terminal junction. Nature Communications, 2016, 7, 12066.	5.8	50
17	Supramolecular vs Electronic Structure: The Effect of the Tilt Angle of the Active Group in the Performance of a Molecular Diode. Journal of the American Chemical Society, 2016, 138, 5769-5772.	6.6	49
18	Magnetic Levitation To Characterize the Kinetics of Free-Radical Polymerization. Journal of the American Chemical Society, 2017, 139, 18688-18697.	6.6	43

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19	Bias induced transition from an ohmic to a non-ohmic interface in supramolecular tunneling junctions with Ga₂O₃/EGaIn top electrodes. Nanoscale, 2014, 6, 11246-11258.	2.8	41
20	Anomalously Rapid Tunneling: Charge Transport across Self-Assembled Monolayers of Oligo(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 T	6.6	41
21	Dipole-Induced Rectification Across Ag^{TS}/SAM//Ga₂O₃/EGaIn Junctions. Journal of the American Chemical Society, 2019, 141, 8969-8980.	6.6	40
22	Rectification in Molecular Tunneling Junctions Based on Alkanethiolates with Bipyridineâ€“Metal Complexes. Journal of the American Chemical Society, 2021, 143, 2156-2163.	6.6	40
23	Arrays of high quality SAM-based junctions and their application in molecular diode based logic. Nanoscale, 2015, 7, 19547-19556.	2.8	38
24	Tuning the Tunneling Rate and Dielectric Response of SAMâ€Based Junctions via a Single Polarizable Atom. Advanced Materials, 2015, 27, 6689-6695.	11.1	34
25	Supramolecular Structure of Self-Assembled Monolayers of Ferrocenyl Terminated <i>n</i>-Alkanethiolates on Gold Surfaces. Langmuir, 2014, 30, 13447-13455.	1.6	30
26	The Drive Force of Electrical Breakdown of Largeâ€Area Molecular Tunnel Junctions. Advanced Functional Materials, 2018, 28, 1801710.	7.8	28
27	Temperature dependent charge transport across tunnel junctions of single-molecules and self-assembled monolayers: a comparative study. Dalton Transactions, 2016, 45, 17153-17159.	1.6	22
28	The Rate of Charge Tunneling in EGaIn Junctions Is Not Sensitive to Halogen Substituents at the Self-Assembled Monolayer//Ga₂O₃ Interface. ACS Nano, 2018, 12, 10221-10230.	7.3	17
29	Influence of the donor unit on the rectification ratio in tunnel junctions based on donorâ€“acceptor SAMs using PTM units as acceptors. Physical Chemistry Chemical Physics, 2018, 20, 25638-25647.	1.3	15
30	One-Pot Preparation of Mechanically Robust, Transparent, Highly Conductive, and Memristive Metalâ€“Organic Ultrathin Film. ACS Nano, 2018, 12, 10171-10177.	7.3	15
31	Tuning charge transport across junctions of ferrocene-containing polymer brushes on ITO by controlling the brush thickness and the tether lengths. European Polymer Journal, 2017, 97, 282-291.	2.6	11
32	Unraveling the Failure Modes of Molecular Diodes: The Importance of the Monolayer Formation Protocol and Anchoring Group to Minimize Leakage Currents. Journal of Physical Chemistry C, 2019, 123, 19759-19767.	1.5	11
33	The supramolecular structure and van der Waals interactions affect the electronic structure of ferrocenyl-alkanethiolate SAMs on gold and silver electrodes. Nanoscale Advances, 2019, 1, 1991-2002.	2.2	10
34	Orbital dependent ultrafast charge transfer dynamics of ferrocenyl-functionalized SAMs on gold studied by core-hole clock spectroscopy. Journal of Physics Condensed Matter, 2016, 28, 094006.	0.7	9
35	Charge Transport through Selfâ€Assembled Monolayers of Monoterpenoids. Angewandte Chemie - International Edition, 2019, 58, 8097-8102.	7.2	9
36	Charge Transport through Selfâ€Assembled Monolayers of Monoterpenoids. Angewandte Chemie, 2019, 131, 8181-8186.	1.6	2

#	Article	IF	Citations
37	Molecular Electronics: The Drive Force of Electrical Breakdown of Large-Area Molecular Tunnel Junctions (Adv. Funct. Mater. 28/2018). Advanced Functional Materials, 2018, 28, 1870192.	7.8	1