Hyo Jae Yoon

List of Publications by Year
in descending order

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86 papers	3,634 citations	159585 30 h-index	144013 57 g-index
91 all docs	91 docs citations	91 times ranked	3083 citing authors

#	Article	IF	Citations
1	Small Molecule Approach to Passivate Undercoordinated Ions in Perovskite Light Emitting Diodes: Progress and Challenges. Advanced Optical Materials, 2022, 10, 2101361.	7.3	34
2	Formation and superlattice of long-range and highly ordered alicyclic selenolate monolayers on Au(1) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	6.1	5
3	Heterocyclic Mechanophores in Polymer Mechanochemistry. Synlett, 2022, 33, 863-874.	1.8	4
4	Modulating the Local Coordination Environment of Singleâ€Atom Catalysts for Enhanced Catalytic Performance in Hydrogen/Oxygen Evolution Reaction. Small, 2022, 18, e2105680.	10.0	56
5	Synthesis of Benzoxaphosphole 1-Oxide Heterocycles via a Three-Component Coupling Reaction Involving Arynes, Phosphites, and Ketones. Organic Letters, 2022, 24, 2192-2196.	4.6	7
6	Thermal and Thermoelectric Properties of SAM-Based Molecular Junctions. ACS Applied Materials & Interfaces, 2022, 14, 22818-22825.	8.0	11
7	Electronic Mechanism of In Situ Inversion of Rectification Polarity in Supramolecular Engineered Monolayer. Journal of the American Chemical Society, 2022, 144, 7966-7971.	13.7	29
8	Thermopower of Molecular Junction in Harsh Thermal Environments. Nano Letters, 2022, 22, 3953-3960.	9.1	15
9	Improved Photovoltaic Performance of Ternary All-Polymer Solar Cells by Incorporating a New Y6-based Polymer Acceptor and PC61BM. Macromolecular Research, 2022, 30, 587-596.	2.4	8
10	Li-Ion Intercalation, Rectification, and Solid Electrolyte Interphase in Molecular Tunnel Junctions. Nano Letters, 2022, 22, 4956-4962.	9.1	7
11	Uniform Silver Nanowire Patterned Electrode on Robust PEN Substrate Using Poly(2-hydroxyethyl) Tj ETQq1 1 0.784314 rgBT /Overlock	8.0	3
12	Superexchange Coupling-Induced Enhancements of Thermoelectric Performance in Saturated Molecules. Nano Letters, 2021, 21, 360-366.	9.1	14
13	Rectification in Molecular Tunneling Junctions Based on Alkanethiolates with Bipyridineâ€“Metal Complexes. Journal of the American Chemical Society, 2021, 143, 2156-2163.	13.7	40
14	Conformation, and Charge Tunneling through Molecules in SAMs. Journal of the American Chemical Society, 2021, 143, 3481-3493.	13.7	30
15	Achieving Ultralow, Zero, and Inverted Tunneling Attenuation Coefficients in Molecular Wires with Extended Conjugation. Small, 2021, 17, e2005711.	10.0	19
16	<scp>Nâ€Heterocyclic</scp> Carbene Anchors in Electronics Applications. Bulletin of the Korean Chemical Society, 2021, 42, 712-723.	1.9	23
17	Nonhalogenated Solvent-Processed High-Performance Indoor Photovoltaics Made of New Conjugated Terpolymers with Optimized Monomer Compositions. ACS Applied Materials & Interfaces, 2021, 13, 13487-13498.	8.0	14
18	Characterizing Chelation at Surfaces by Charge Tunneling. Journal of the American Chemical Society, 2021, 143, 5967-5977.	13.7	10

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19	Interstitially Mixed Self-Assembled Monolayers Enhance Electrical Stability of Molecular Junctions. Nano Letters, 2021, 21, 3162-3169.	9.1	42
20	Improved Stability of All-Polymer Solar Cells Using Crosslinkable Donor and Acceptor Polymers Bearing Vinyl Moieties in the Side-Chains. ACS Applied Materials & Interfaces, 2021, 13, 16754-16765.	8.0	11
21	Case Studies on Structureâ€“Property Relations in Perovskite Light-Emitting Diodes via Interfacial Engineering with Self-Assembled Monolayers. ACS Applied Materials & Interfaces, 2021, 13, 31236-31247.	8.0	23
22	Comparative study of structural order, thermal desorption behavior, and work function change of self-assembled monolayers of pentafluorobenzenethiols and tetrafluorobenzenethiols on Au(1 1 1). Applied Surface Science, 2021, 555, 149671.	6.1	15
23	Comparison of the mechanical properties of polymer blend and main-chain conjugated copolymer films with donorâ€“acceptor heterojunctions. Chemical Engineering Journal, 2021, 415, 128952.	12.7	8
24	Enhanced Thermopower of Saturated Molecules by Noncovalent Anchorâ€Induced Electron Doping of Singleâ€Layer Graphene Electrode. Advanced Materials, 2021, 33, e2103177.	21.0	17
25	Mechanical Force for the Transformation of Aziridine into Imine. Angewandte Chemie - International Edition, 2021, 60, 23564-23568.	13.8	12
26	Validating the Mott Formula with Self-Assembled Monolayer (SAM)-Based Large-Area Junctions: Effect of Length, Backbone, Spacer, Substituent, and Electrode on the Thermopower of SAMs. Journal of Physical Chemistry C, 2021, 125, 20035-20047.	3.1	22
27	Mechanical Force for the Transformation of Aziridine into Imine. Angewandte Chemie, 2021, 133, 23756.	2.0	2
28	Directing electrochemical asymmetric synthesis at heterogeneous interfaces: Past, present, and challenges. Electrochimica Acta, 2021, 397, 139271.	5.2	4
29	Solid State Dilution Controls Marcus Inverted Transport in Rectifying Molecular Junctions. Journal of Physical Chemistry Letters, 2021, 12, 982-988.	4.6	15
30	Toward Printed Molecular Electronics: Direct Printing of Liquid Metal Microelectrode on Selfâ€Assembled Monolayers. Advanced Electronic Materials, 2021, 7, 2000829.	5.1	16
31	Gaâ€Based Liquid Metal Micro/Nanoparticles: Recent Advances and Applications. Small, 2020, 16, e1903391.	10.0	140
32	Interplay of Fermi Level Pinning, Marcus Inverted Transport, and Orbital Gating in Molecular Tunneling Junctions. Journal of Physical Chemistry Letters, 2020, 11, 8597-8603.	4.6	27
33	Selfâ€Assembled Monolayers as Interface Engineering Nanomaterials in Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2002606.	19.5	156
34	Thermal conductance in single molecules and self-assembled monolayers: physicochemical insights, progress, and challenges. Journal of Materials Chemistry A, 2020, 8, 19746-19767.	10.3	30
35	Rational design of a main chain conjugated copolymer having donorâ€“acceptor heterojunctions and its application in indoor photovoltaic cells. Journal of Materials Chemistry A, 2020, 8, 20091-20100.	10.3	25
36	Force-Induced Cycloaddition of Aziridine: Can We Force a New Route?. Synlett, 2020, 31, 1343-1348.	1.8	5

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37	Mechanical Force Induces Ylideâ€Free Cycloaddition of Nonscissible Aziridines. Angewandte Chemie, 2020, 132, 4913-4917.	2.0	5
38	Mixed Molecular Electronics: Tunneling Behaviors and Applications of Mixed Selfâ€Assembled Monolayers. Advanced Electronic Materials, 2020, 6, 1901157.	5.1	63
39	Mechanical Force Induces Ylideâ€Free Cycloaddition of Nonscissible Aziridines. Angewandte Chemie - International Edition, 2020, 59, 4883-4887.	13.8	23
40	Aziridine-based polyaddition, post-modification, and crosslinking: can aziridine rival epoxide in polymer chemistry?. Polymer Chemistry, 2019, 10, 4506-4512.	3.9	25
41	Two Different Length-Dependent Regimes in Thermoelectric Large-Area Junctions of n-Alkanethiolates. Chemistry of Materials, 2019, 31, 5973-5980.	6.7	27
42	Facile one-pot polymerization of a fully conjugated donorâ€“acceptor block copolymer and its application in efficient single component polymer solar cells. Journal of Materials Chemistry A, 2019, 7, 21280-21289.	10.3	45
43	Structureâ€“thermopower relationships in molecular thermoelectrics. Journal of Materials Chemistry A, 2019, 7, 14419-14446.	10.3	72
44	Tunneling and thermoelectric characteristics of N-heterocyclic carbene-based large-area molecular junctions. Chemical Communications, 2019, 55, 8780-8783.	4.1	44
45	Power Factor of One Molecule Thick Films and Length Dependence. ACS Central Science, 2019, 5, 1975-1982.	11.3	47
46	Molecularly Controlled Stark Effect Induces Significant Rectification in Polycyclic-Aromatic-Hydrocarbon-Terminated n-Alkanethiolates. Nano Letters, 2019, 19, 545-553.	9.1	35
47	Recent Progress in the Chemistry of Pyridazinones for Functional Group Transformations. Journal of Organic Chemistry, 2018, 83, 1-11.	3.2	16
48	New Approach for Large-Area Thermoelectric Junctions with a Liquid Eutectic Galliumâ€“Indium Electrode. Nano Letters, 2018, 18, 7715-7718.	9.1	86
49	Elucidating the Role of Moleculeâ€“Electrode Interfacial Defects in Charge Tunneling Characteristics of Large-Area Junctions. Journal of the American Chemical Society, 2018, 140, 12303-12307.	13.7	59
50	Thermally Controlled Phase Transition of Low-Melting Electrode for Wetting-Based Spontaneous Top Contact in Molecular Tunnel Junction. ACS Applied Materials & Interfaces, 2018, 10, 34758-34764.	8.0	11
51	Diaziridyl Ether of Bisphenol A. Macromolecules, 2018, 51, 4068-4076.	4.8	29
52	Deconvolution of Tunneling Current in Large-Area Junctions Formed with Mixed Self-Assembled Monolayers. Journal of Physical Chemistry Letters, 2018, 9, 4578-4583.	4.6	30
53	Understanding Keesom Interactions in Monolayer-Based Large-Area Tunneling Junctions. Journal of Physical Chemistry Letters, 2018, 9, 5078-5085.	4.6	26
54	Formation of Triboelectric Series via Atomic-Level Surface Functionalization for Triboelectric Energy Harvesting. ACS Nano, 2017, 11, 6131-6138.	14.6	172

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55	Aziridine-functionalized polydimethylsiloxanes for tailorable polymeric scaffolds: aziridine as a clickable moiety for structural modification of materials. Polymer Chemistry, 2017, 8, 2287-2291.	3.9	22
56	Maskless Arbitrary Writing of Molecular Tunnel Junctions. ACS Applied Materials & Interfaces, 2017, 9, 40556-40563.	8.0	27
57	Influence of Air-Oxidation on Rectification in Thiol-Based Molecular Monolayers. Journal of the Electrochemical Society, 2016, 163, G115-G121.	2.9	30
58	One for Many: A Universal Reagent for Acylation Processes. Advanced Synthesis and Catalysis, 2016, 358, 1725-1730.	4.3	22
59	Gradients of Rectification: Tuning Molecular Electronic Devices by the Controlled Use of Differentâ€Sized Diluents in Heterogeneous Selfâ€Assembled Monolayers. Angewandte Chemie, 2016, 128, 10463-10467.	2.0	5
60	Gradients of Rectification: Tuning Molecular Electronic Devices by the Controlled Use of Differentâ€Sized Diluents in Heterogeneous Selfâ€Assembled Monolayers. Angewandte Chemie - International Edition, 2016, 55, 10307-10311.	13.8	70
61	Alkyl and Aryl 4,5-Dichloro-6-oxopyridazin-1(6H)-carboxylates: A Practical Alternative to Chloroformates for the Synthesis of Symmetric and Asymmetric Carbonates. Synlett, 2016, 27, 1577-1581.	1.8	4
62	Aziridine in polymers: a strategy to functionalize polymers by ring-opening reaction of aziridine. Polymer Chemistry, 2015, 6, 3387-3391.	3.9	31
63	Direct synthesis of pyrazoles from esters using tert-butoxide-assisted Câ€“(Cî€O) coupling. Chemical Communications, 2015, 51, 9201-9204.	4.1	18
64	Fluorination, and Tunneling across Molecular Junctions. Journal of the American Chemical Society, 2015, 137, 3852-3858.	13.7	47
65	Facile Synthesis of Benzo[d]azol-2(3H)-ones Using 2-Phenoxycarbonyl-4,5-dichloropyridazin-3(2H)-one as Green CO Source. Synlett, 2015, 26, 1985-1990.	1.8	18
66	Influence of halogen substitutions on rates of charge tunneling across SAM-based large-area junctions. Physical Chemistry Chemical Physics, 2015, 17, 13804-13807.	2.8	27
67	EGaIn Microelectrode for Electrical Characterization of ITO-Based van der Waals Interface and Airborne Molecular Contamination of ITO Surface. Journal of the Electrochemical Society, 2015, 162, H703-H712.	2.9	7
68	Facile Esterification of Alcohols with 2-Acyl-4,5-dichloropyridazin-3(2H)-ones under Friedelâ€“Crafts Conditions. Synlett, 2014, 25, 1909-1915.	1.8	5
69	Replacing Ag^{TS}SCH₂â€R with Ag^{TS}O₂Câ€R in EGaInâ€Based Tunneling Junctions Does Not Significantly Change Rates of Charge Transport. Angewandte Chemie - International Edition, 2014, 53, 3889-3893.	13.8	44
70	Rectification in Tunneling Junctions: 2,2â€²-Bipyridyl-Terminated n-Alkanethiolates. Journal of the American Chemical Society, 2014, 136, 17155-17162.	13.7	105
71	Omniphobic â€œR^F Paperâ€•Produced by Silanization of Paper with Fluoroalkyltrichlorosilanes. Advanced Functional Materials, 2014, 24, 60-70.	14.9	169
72	Introducing Ionic and/or Hydrogen Bonds into the SAM//Ga₂O₃ Top-Interface of Ag^{TS}/S(CH₂)_nT//Ga₂O₃/EGaIn Junctions. Nano Letters, 2014, 14, 3521-3526.	9.1	45

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73	The Rate of Charge Tunneling Is Insensitive to Polar Terminal Groups in Self-Assembled Monolayers in Ag^{TS}S(CH₂)_nM(CH₂)_mT//Ga₂O₃</sup> Junctions. Journal of the American Chemical Society, 2014, 136, 16-19.	13.7	113
74	Influence of Environment on the Measurement of Rates of Charge Transport across Ag^{TS}/SAM//Ga₂O₃/EGaIn Junctions. Chemistry of Materials, 2014, 26, 3938-3947.	6.7	53
75	Charging of Multiple Interacting Particles by Contact Electrification. Journal of the American Chemical Society, 2014, 136, 13348-13354.	13.7	28
76	Defining the Value of Injection Current and Effective Electrical Contact Area for EGaIn-Based Molecular Tunneling Junctions. Journal of the American Chemical Society, 2013, 135, 18131-18144.	13.7	229
77	Replacing â^'CH₂CH₂â€“ with â^'CONHâ€“ Does Not Significantly Change Rates of Charge Transport through Ag^{TS}-SAM//Ga₂O₃/EGaIn Junctions. Journal of the American Chemical Society, 2012, 134, 10876-10884.	13.7	71
78	The Rate of Charge Tunneling through Selfâ€Assembled Monolayers Is Insensitive to Many Functional Group Substitutions. Angewandte Chemie - International Edition, 2012, 51, 4658-4661.	13.8	108
79	New Encoding Schemes with Infofuses. Advanced Materials, 2011, 23, 4851-4856.	21.0	5
80	Allosteric Supramolecular Triple-Layer Catalysts. Science, 2010, 330, 66-69.	12.6	290
81	Pseudo-allosteric regulation of the anion binding affinity of a macrocyclic coordination complex. Chemical Communications, 2009, , 4557.	4.1	22
82	PCR-like Cascade Reactions in the Context of an Allosteric Enzyme Mimic. Journal of the American Chemical Society, 2008, 130, 11590-11591.	13.7	117
83	Dihydroxylation of 2-vinylaziridine: efficient synthesis ofd-ribo-phytosphingosine. Chemical Communications, 2007, , 79-81.	4.1	41
84	Allosteric Regulation of Phosphate Diester Transesterification Based upon a Dinuclear Zinc Catalyst Assembled via the Weak-Link Approach. Journal of the American Chemical Society, 2007, 129, 14182-14183.	13.7	82
85	Preparation of 2,3-diaminopropionate from ring opening of aziridine-2-carboxylate. Tetrahedron Letters, 2005, 46, 4407-4409.	1.4	40
86	Synthesis of Functionalized Bicyclic Triazoles from Chiral Aziridines. Synlett, 2005, 2005, 2187-2190.	1.8	1