Justin G Connell

List of Publications by Year
in descending order

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46 papers	2,695 citations	236833 25 h-index	254106 43 g-index
47 all docs	47 docs citations	47 times ranked	5016 citing authors

#	Article	IF	Citations
1	Increasing Ionic Conductivity of Poly(ethylene oxide) by Reaction with Metallic Li. Advanced Energy and Sustainability Research, 2022, 3, 2100142.	2.8	15
2	Electrochemically induced amorphous-to-rock-salt phase transformation in niobium oxide electrode for Li-ion batteries. Nature Materials, 2022, 21, 795-803.	13.3	69
3	Communicationâ€"Reduction of DC Resistance of Ni-Rich Lithium Transition Metal Oxide Cathode by Atomic Layer Deposition. Journal of the Electrochemical Society, 2021, 168, 040501.	1.3	6
4	(Invited) Developing Common Descriptors for Plating/Stripping of Divalent Metals in Organic Electrolytes. ECS Meeting Abstracts, 2021, MA2021-01, 418-418.	0.0	0
5	Improved Rate for the Oxygen Reduction Reaction in a Sulfuric Acid Electrolyte using a Pt(111) Surface Modified with Melamine. ACS Applied Materials & Interfaces, 2021, 13, 3369-3376.	4.0	29
6	Alkaline Ethanol Oxidation Reaction on Carbon Supported Ternary PdNiBi Nanocatalyst using Modified Instant Reduction Synthesis Method. Electrocatalysis, 2020, 11, 203-214.	1.5	18
7	Anion Association Strength as a Unifying Descriptor for the Reversibility of Divalent Metal Deposition in Nonaqueous Electrolytes. ACS Applied Materials & Interfaces, 2020, 12, 36137-36147.	4.0	22
8	Kinetic versus Thermodynamic Stability of LLZO in Contact with Lithium Metal. Chemistry of Materials, 2020, 32, 10207-10215.	3.2	68
9	4-(Trimethylsilyl) Morpholine as a Multifunctional Electrolyte Additive in High Voltage Lithium Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 070533.	1.3	12
10	Unusual Reduction of Graphene Oxide by Titanium Dioxide Electrons Produced by Ionizing Radiation: Reaction Products and Mechanism. Journal of Physical Chemistry C, 2020, 124, 5425-5435.	1.5	4
11	Developing Common Descriptors for Plating/Stripping of Divalent Metals in Organic Electrolytes. ECS Meeting Abstracts, 2020, MA2020-01, 172-172.	0.0	0
12	Control of Electrolyte Reactivity: A New Design of Electrolyte Additives for High Voltage Lithium Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 736-736.	0.0	0
13	Tuning the Selectivity and Activity of Electrochemical Interfaces with Defective Graphene Oxide and Reduced Graphene Oxide. ACS Applied Materials & Interfaces, 2019, 11, 34517-34525.	4.0	29
14	Widening Electrochemical Window of Mg Salt by Weakly Coordinating Perfluoroalkoxyaluminate Anion for Mg Battery Electrolyte. Journal of the Electrochemical Society, 2019, 166, A1510-A1519.	1.3	60
15	Dopantâ€Dependent Stability of Garnet Solid Electrolyte Interfaces with Lithium Metal. Advanced Energy Materials, 2019, 9, 1803440.	10.2	217
16	Hydrogen Evolution Reaction on Transition Metals: Promoting Water Dissociation By Tuning the Surface Oxophilicity.. ECS Meeting Abstracts, 2019, , .	0.0	0
17	Electrocatalytic transformation of HF impurity to H2 and LiF in lithium-ion batteries. Nature Catalysis, 2018, 1, 255-262.	16.1	128
18	Crystal Orientation-Dependent Reactivity of Oxide Surfaces in Contact with Lithium Metal. ACS Applied Materials & Interfaces, 2018, 10, 17471-17479.	4.0	9

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19	Role of structural hydroxyl groups in enhancing performance of electrochemically-synthesized bilayer V2O5. Nano Energy, 2018, 53, 449-457.	8.2	21
20	Real-Time Monitoring of Cation Dissolution/Deintercalation Kinetics from Transition-Metal Oxides in Organic Environments. Journal of Physical Chemistry Letters, 2018, 9, 4935-4940.	2.1	15
21	Amorphous boron nanorod as an anode material for lithium-ion batteries at room temperature. Nanoscale, 2017, 9, 10757-10763.	2.8	23
22	Lithium metal protected by atomic layer deposition metal oxide for high performance anodes. Journal of Materials Chemistry A, 2017, 5, 12297-12309.	5.2	150
23	Early Stage Anodic Instability of Glassy Carbon Electrodes in Propylene Carbonate Solvent Containing Lithium Hexafluorophosphate. Langmuir, 2017, 33, 11911-11918.	1.6	3
24	Long term stability of Li-S batteries using high concentration lithium nitrate electrolytes. Nano Energy, 2017, 40, 607-617.	8.2	160
25	Improved performance through tight coupling of redox cycles of sulfur and 2,6-polyanthraquinone in lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 24103-24109.	5.2	6
26	Molecular understanding of polyelectrolyte binders that actively regulate ion transport in sulfur cathodes. Nature Communications, 2017, 8, 2277.	5.8	117
27	Mechanistic Insight in the Function of Phosphite Additives for Protection of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathode in High Voltage Li-Ion Cells. ACS Applied Materials & Interfaces, 2016, 8, 11450-11458.	4.0	121
28	Tuning the Reversibility of Mg Anodes via Controlled Surface Passivation by H₂O/Cl^{â€“} in Organic Electrolytes. Chemistry of Materials, 2016, 28, 8268-8277.	3.2	147
29	Superoxide (Electro)Chemistry on Well-Defined Surfaces in Organic Environments. Journal of Physical Chemistry C, 2016, 120, 15909-15914.	1.5	25
30	Relationships between Atomic Level Surface Structure and Stability/Activity of Platinum Surface Atoms in Aqueous Environments. ACS Catalysis, 2016, 6, 2536-2544.	5.5	196
31	Double layer effects in electrocatalysis: The oxygen reduction reaction and ethanol oxidation reaction on Au(1 1 1), Pt(1 1 1) and Ir(1 1 1) in alkaline media containing Na and Li cations. Catalysis Today, 2016, 262, 41-47.	2.2	67
32	Water as a Promoter and Catalyst for Dioxygen Electrochemistry in Aqueous and Organic Media. ACS Catalysis, 2015, 5, 6600-6607.	5.5	98
33	Activityâ€“stability relationship in the surface electrochemistry of the oxygen evolution reaction. Faraday Discussions, 2014, 176, 125-133.	1.6	83
34	In Situ Electron Microscopy Fourâ€Point Electromechanical Characterization of Freestanding Metallic and Semiconducting Nanowires. Small, 2014, 10, 725-733.	5.2	40
35	Barrier Height Measurement of Metal Contacts to Si Nanowires Using Internal Photoemission of Hot Carriers. Nano Letters, 2013, 13, 6183-6188.	4.5	31
36	Demonstration of an Electrochemical Liquid Cell for Operando Transmission Electron Microscopy Observation of the Lithiation/Delithiation Behavior of Si Nanowire Battery Anodes. Nano Letters, 2013, 13, 6106-6112.	4.5	265

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37	Electron-Rich Driven Electrochemical Solid-State Amorphization in Liâ€“Si Alloys. Nano Letters, 2013, 13, 4511-4516.	4.5	51
38	Identification of an Intrinsic Source of Doping Inhomogeneity in Vaporâ€“Liquidâ€“Solid-Grown Nanowires. Nano Letters, 2013, 13, 199-206.	4.5	54
39	Electron Tomography of Au-Catalyzed Semiconductor Nanowires. Journal of Physical Chemistry C, 2013, 117, 1059-1063.	1.5	12
40	Spatially Resolved Correlation of Active and Total Doping Concentrations in VLS Grown Nanowires. Nano Letters, 2013, 13, 2598-2604.	4.5	40
41	Electronic Origin for the Phase Transition from Amorphous Li_xSi to Crystalline Li₁₅Si₄. ACS Nano, 2013, 7, 6303-6309.	7.3	135
42	Raman concentrators in Ge nanowires with dielectric coatings. Optics Express, 2012, 20, 5127.	1.7	4
43	Atypical Self-Activation of Ga Dopant for Ge Nanowire Devices. Nano Letters, 2011, 11, 3108-3112.	4.5	16
44	Silicon Nanowire Polytypes: Identification by Raman Spectroscopy, Generation Mechanism, and Misfit Strain in Homostructures. ACS Nano, 2011, 5, 8958-8966.	7.3	66
45	Growth of Ge Nanowires from Auâ”Cu Alloy Nanoparticle Catalysts Synthesized from Aqueous Solution. Journal of Physical Chemistry Letters, 2010, 1, 3360-3365.	2.1	23
46	Interaction of Antithrombin with Sulfated, Low Molecular Weight Lignins. Journal of Biological Chemistry, 2009, 284, 20897-20908.	1.6	38