Ryan T Pekarek

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8853813/publications.pdf

Version: 2024-02-01

17 papers	329 citations	933447 10 h-index	940533 16 g-index
17	17	17	532
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Molecular Functionalization of Semiconductor Surfaces. Springer Handbooks, 2022, , 923-964.	0.6	2
2	Understanding why poly(acrylic acid) works: decarbonylation and cross-linking provide an ionically conductive passivation layer in silicon anodes. Journal of Materials Chemistry A, 2021, 9, 21929-21938.	10.3	6
3	Examining CO ₂ as an Additive for Solid Electrolyte Interphase Formation on Silicon Anodes. Journal of the Electrochemical Society, 2021, 168, 030534.	2.9	16
4	Lowering the Activation Barriers for Lithium-Ion Conductivity through Orientational Disorder in the Cyanide Argyrodite Li ₆ PS ₅ CN. Chemistry of Materials, 2021, 33, 5127-5136.	6.7	17
5	Transient Evolution of the Built-in Field at Junctions of GaAs. ACS Applied Materials & Samp; Interfaces, 2020, 12, 40339-40346.	8.0	10
6	Decoupling Kinetics and Thermodynamics of Interfacial Catalysis at a Chemically Modified Black Silicon Semiconductor Photoelectrode. ACS Energy Letters, 2020, 5, 1848-1855.	17.4	8
7	Intrinsic chemical reactivity of solid-electrolyte interphase components in silicon–lithium alloy anode batteries probed by FTIR spectroscopy. Journal of Materials Chemistry A, 2020, 8, 7897-7906.	10.3	49
8	Energetic Tugâ€ofâ€War between Pt and Leaky TiO 2 : Positive and Negative Effects on the Function of Molecularlyâ€Modified p â€Si(111) TiO 2 Pt Photocathodes. ChemElectroChem, 2020, 7, 1048-1056.	3.4	2
9	Energetic effects of hybrid organic/inorganic interfacial architecture on nanoporous black silicon photoelectrodes. Sustainable Energy and Fuels, 2019, 3, 1660-1667.	4.9	8
10	Disentangling Thermodynamic and Kinetic Effects at Photoelectrochemical Interfaces Via Intensity-Modulated High-Frequency Resistivity (IMHFR). ECS Meeting Abstracts, 2019, , .	0.0	0
11	Identifying Charge Transfer Mechanisms across Semiconductor Heterostructures via Surface Dipole Modulation and Multiscale Modeling. Journal of the American Chemical Society, 2018, 140, 13223-13232.	13.7	19
12	Synthetic Insights into Surface Functionalization of Si(111)–R Photoelectrodes: Steric Control and Deprotection of Molecular Passivating Layers. Langmuir, 2018, 34, 6328-6337.	3.5	12
13	Silicon Photoelectrode Thermodynamics and Hydrogen Evolution Kinetics Measured by Intensity-Modulated High-Frequency Resistivity Impedance Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 5253-5258.	4.6	16
14	Photoelectrochemical operation of a surface-bound, nickel-phosphine $H < sub > 2 < sub > evolution$ catalyst on p-Si(111): a molecular semiconductor catalyst construct. Chemical Communications, 2015, 51, 13264-13267.	4.1	66
15	Hybrid Organic/Inorganic Band-Edge Modulation of <i>p</i> -Si(111) Photoelectrodes: Effects of R, Metal Oxide, and Pt on H ₂ Generation. Journal of the American Chemical Society, 2015, 137, 3173-3176.	13.7	47
16	Platinum-Enhanced Electron Transfer and Surface Passivation through Ultrathin Film Aluminum Oxide (Al ₂ O ₃) on Si(111)–CH ₃ Photoelectrodes. ACS Applied Materials & Diterraces, 2015, 7, 8572-8584.	8.0	30
17	Steric Spacing of Molecular Linkers on Passivated Si(111) Photoelectrodes. ACS Applied Materials & Interfaces, 2014, 6, 20557-20568.	8.0	21