

William J I Debenedetti

List of Publications by Year in descending order

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26
papers

882
citations

687220

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552653

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docs citations

27
times ranked

1560
citing authors

#	ARTICLE	IF	CITATIONS
1	Photochemical Fluorination of TiO ₂ (110) Produces an Atomically Thin Passivating Layer. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4899-4906.	1.5	1
2	Single-Crystal Alkali Antimonide Photocathodes: High Efficiency in the Ultrathin Limit. <i>Physical Review Letters</i> , 2022, 128, 114801.	2.9	20
3	Reduction of surface roughness emittance of Cs ₃ Sb photocathodes grown via codeposition on single crystal substrates. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	11
4	The Intricate Love Affairs between MoS ₂ and Metallic Substrates. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001324.	1.9	15
5	The effects of oxygen-induced phase segregation on the interfacial electronic structure and quantum efficiency of Cs ₃ Sb photocathodes. <i>Journal of Chemical Physics</i> , 2020, 153, 144705.	1.2	11
6	Breaking H ₂ O Interactions in Carboxylic Acid Monolayers on Rutile TiO ₂ (110) Leads to Unexpected Long-Range Ordering. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8836-8842.	1.5	5
7	Atomic-Scale Understanding of Catalyst Activation: Carboxylic Acid Solutions, but Not the Acid Itself, Increase the Reactivity of Anatase (001) Faceted Nanocatalysts. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4307-4314.	1.5	14
8	Mechanism of Gold-Assisted Exfoliation of Centimeter-Sized Transition-Metal Dichalcogenide Monolayers. <i>ACS Nano</i> , 2018, 12, 10463-10472.	7.3	203
9	High-affinity adsorption leads to molecularly ordered interfaces on TiO ₂ in air and solution. <i>Science</i> , 2018, 361, 786-789.	6.0	190
10	Half-flat vs. atomically flat: Alkyl monolayers on morphologically controlled Si(100) and Si(111) have very similar structure, density, and chemical stability. <i>Journal of Chemical Physics</i> , 2017, 146, 052804.	1.2	5
11	Solution Deposition of Phenylphosphinic Acid Leads to Highly Ordered, Covalently Bound Monolayers on TiO ₂ (110) Without Annealing. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14213-14221.	1.5	14
12	Cartesian Decomposition of Infrared Spectra Reveals the Structure of Solution-Deposited, Self-Assembled Benzoate and Alkanoate Monolayers on Rutile (110). <i>Journal of Physical Chemistry C</i> , 2016, 120, 24866-24876.	1.5	4
13	Communication: Visualization and spectroscopy of defects induced by dehydrogenation in individual silicon nanocrystals. <i>Journal of Chemical Physics</i> , 2016, 144, 241102.	1.2	3
14	Nanoscale Solvation Leads to Spontaneous Formation of a Bicarbonate Monolayer on Rutile (110) under Ambient Conditions: Implications for CO ₂ Photoreduction. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9326-9333.	1.5	36
15	Solution Deposition of Self-Assembled Benzoate Monolayers on Rutile (110): Effect of H ₂ O Interactions on Monolayer Structure. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11581-11589.	1.5	12
16	Frustrated Etching during H/Si(111) Methoxylation Produces Fissured Fluorinated Surfaces, Whereas Direct Fluorination Preserves the Atomically Flat Morphology. <i>Journal of Physical Chemistry C</i> , 2015, 119, 26029-26037.	1.5	6
17	Conversion from Red to Blue Photoluminescence in Alcohol Dispersions of Alkyl-Capped Silicon Nanoparticles: Insight into the Origins of Visible Photoluminescence in Colloidal Nanocrystalline Silicon. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9595-9608.	1.5	32
18	A Blackboard for the 21st Century: An Inexpensive Light Board Projection System for Classroom Use. <i>Journal of Chemical Education</i> , 2015, 92, 1754-1756.	1.1	17

#	ARTICLE	IF	CITATIONS
19	Morphology and chemical termination of HF-etched Si ₃ N ₄ surfaces. Applied Physics Letters, 2014, 105, .	1.5	10
20	Lowering the density of electronic defects on organic-functionalized Si(100) surfaces. Applied Physics Letters, 2014, 104, .	1.5	16
21	Efficient Directed Energy Transfer through Size-Gradient Nanocrystal Layers into Silicon Substrates. Advanced Functional Materials, 2014, 24, 5002-5010.	7.8	13
22	Detailed Mechanistic Studies into the Reactivities of Thiourea and Substituted Thiourea Oxoacids: Decompositions and Hydrolyses of Dioxides in Basic Media. Journal of Physical Chemistry A, 2014, 118, 11145-11154.	1.1	5
23	Visible to Near-Infrared Sensitization of Silicon Substrates via Energy Transfer from Proximal Nanocrystals: Further Insights for Hybrid Photovoltaics. ACS Nano, 2013, 7, 3236-3245.	7.3	33
24	Functionalization of oxide-free silicon surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	29
25	Aqueous red-emitting silicon nanoparticles for cellular imaging: Consequences of protecting against surface passivation by hydroxide and water for stable red emission. Journal of Materials Research, 2013, 28, 216-230.	1.2	17
26	Structural Diversity and Thermo-chromic Properties of Iodobismuthate Materials Containing d-Metal Coordination Cations: Observation of a High Symmetry [Bi ₃ I ₁₁] ²⁻ Anion and of Isolated I ⁻ Anions. Journal of the American Chemical Society, 2011, 133, 603-612.	6.6	160