William J I Debenedetti

List of Publications by Year
in descending order

26	882	687220	552653
papers	citations	13 h-index	26 g-index

27	27	27	1560
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mechanism of Gold-Assisted Exfoliation of Centimeter-Sized Transition-Metal Dichalcogenide Monolayers. ACS Nano, 2018, 12, 10463-10472.	7.3	203
2	High-affinity adsorption leads to molecularly ordered interfaces on TiO ₂ in air and solution. Science, 2018, 361, 786-789.	6.0	190
3	Structural Diversity and Thermochromic Properties of Iodobismuthate Materials Containing d-Metal Coordination Cations: Observation of a High Symmetry [Bi₃I₁₁]^{2â^'} Anion and of Isolated I^{â^'} Anions. Journal of the American Chemical Society, 2011, 133, 603-612.	6.6	160
4	Nanoscale Solvation Leads to Spontaneous Formation of a Bicarbonate Monolayer on Rutile (110) under Ambient Conditions: Implications for CO₂ Photoreduction. Journal of Physical Chemistry C, 2016, 120, 9326-9333.	1.5	36
5	Visible to Near-Infrared Sensitization of Silicon SubstratesviaEnergy Transfer from Proximal Nanocrystals: Further Insights for Hybrid Photovoltaics. ACS Nano, 2013, 7, 3236-3245.	7.3	33
6	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. Journal of Physical Chemistry C, 2015, 119, 9595-9608.	1.5	32
7	Functionalization of oxide-free silicon surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	29
8	Single-Crystal Alkali Antimonide Photocathodes: High Efficiency in the Ultrathin Limit. Physical Review Letters, 2022, 128, 114801.	2.9	20
9	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
10	A Blackboard for the 21st Century: An Inexpensive Light Board Projection System for Classroom Use. Journal of Chemical Education, 2015, 92, 1754-1756.	1.1	17
11	Lowering the density of electronic defects on organic-functionalized Si(100) surfaces. Applied Physics Letters, 2014, 104, .	1.5	16
12	The Intricate Love Affairs between MoS₂ and Metallic Substrates. Advanced Materials Interfaces, 2020, 7, 2001324.	1.9	15
13	Solution Deposition of Phenylphosphinic Acid Leads to Highly Ordered, Covalently Bound Monolayers on TiO₂ (110) Without Annealing. Journal of Physical Chemistry C, 2017, 121, 14213-14221.	1.5	14
14	Atomic-Scale Understanding of Catalyst Activation: Carboxylic Acid Solutions, but Not the Acid Itself, Increase the Reactivity of Anatase (001) Faceted Nanocatalysts. Journal of Physical Chemistry C, 2018, 122, 4307-4314.	1.5	14
15	Efficient Directed Energy Transfer through Sizeâ€Gradient Nanocrystal Layers into Silicon Substrates. Advanced Functional Materials, 2014, 24, 5002-5010.	7.8	13
16	Solution Deposition of Self-Assembled Benzoate Monolayers on Rutile (110): Effect of Ï€â€“Ï€ Interactions on Monolayer Structure. Journal of Physical Chemistry C, 2016, 120, 11581-11589.	1.5	12
17	The effects of oxygen-induced phase segregation on the interfacial electronic structure and quantum efficiency of Cs3Sb photocathodes. Journal of Chemical Physics, 2020, 153, 144705.	1.2	11
18	Reduction of surface roughness emittance of Cs3Sb photocathodes grown via codeposition on single crystal substrates. Applied Physics Letters, 2021, 118, .	1.5	11

#	Article	IF	Citations
19	Morphology and chemical termination of HF-etched Si3N4 surfaces. Applied Physics Letters, 2014, 105, .	1.5	10
20	Frustrated Etching during H/Si(111) Methoxylation Produces Fissured Fluorinated Surfaces, Whereas Direct Fluorination Preserves the Atomically Flat Morphology. Journal of Physical Chemistry C, 2015, 119, 26029-26037.	1.5	6
21	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
22	Half-flat vs. atomically flat: Alkyl monolayers on morphologically controlled Si(100) and Si(111) have very similar structure, density, and chemical stability. Journal of Chemical Physics, 2017, 146, 052804.	1.2	5
23	Breaking Ï€â€“Ï€ Interactions in Carboxylic Acid Monolayers on Rutile TiO₂(110) Leads to Unexpected Long-Range Ordering. Journal of Physical Chemistry C, 2019, 123, 8836-8842.	1.5	5
24	Cartesian Decomposition of Infrared Spectra Reveals the Structure of Solution-Deposited, Self-Assembled Benzoate and Alkanoate Monolayers on Rutile (110). Journal of Physical Chemistry C, 2016, 120, 24866-24876.	1.5	4
25	Communication: Visualization and spectroscopy of defects induced by dehydrogenation in individual silicon nanocrystals. Journal of Chemical Physics, 2016, 144, 241102.	1.2	3
26	Photochemical Fluorination of TiO₂(110) Produces an Atomically Thin Passivating Layer. Journal of Physical Chemistry C, 2022, 126, 4899-4906.	1.5	1