

David Cahen

List of Publications by Year in descending order

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511
papers

36,625
citations

2669

95
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553
docs citations

553
times ranked

27440
citing authors

#	ARTICLE	IF	CITATIONS
1	Hybrid organic-organic perovskites: low-cost semiconductors with intriguing charge-transport properties. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	1,173
2	How Important Is the Organic Part of Lead Halide Perovskite Photovoltaic Cells? Efficient CsPbBr ₃ Cells. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2452-2456.	2.1	938
3	Cesium Enhances Long-Term Stability of Lead Bromide Perovskite-Based Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 167-172.	2.1	833
4	Comparison of Electronic Transport Measurements on Organic Molecules. <i>Advanced Materials</i> , 2003, 15, 1881-1890.	11.1	823
5	Photovoltaic solar cell technologies: analysing the state of the art. <i>Nature Reviews Materials</i> , 2019, 4, 269-285.	23.3	727
6	Nature of Photovoltaic Action in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2000, 104, 2053-2059.	1.2	688
7	Electron Energetics at Surfaces and Interfaces: Concepts and Experiments. <i>Advanced Materials</i> , 2003, 15, 271-277.	11.1	637
8	Interface energetics in organo-metal halide perovskite-based photovoltaic cells. <i>Energy and Environmental Science</i> , 2014, 7, 1377.	15.6	624
9	Physical Chemical Principles of Photovoltaic Conversion with Nanoparticulate, Mesoporous Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2004, 108, 8106-8118.	1.2	584
10	Why Lead Methylammonium Tri-Iodide Perovskite-Based Solar Cells Require a Mesoporous Electron Transporting Scaffold (but Not Necessarily a Hole Conductor). <i>Nano Letters</i> , 2014, 14, 1000-1004.	4.5	533
11	Elucidating the charge carrier separation and working mechanism of CH ₃ NH ₃ PbI ₃ xCl _x perovskite solar cells. <i>Nature Communications</i> , 2014, 5, 3461.	5.8	511
12	High Open-Circuit Voltage Solar Cells Based on Organic-Inorganic Lead Bromide Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 897-902.	2.1	486
13	Advances in Perovskite Solar Cells. <i>Advanced Science</i> , 2016, 3, 1500324.	5.6	482
14	Photoelectrochemical energy conversion and storage using polycrystalline chalcogenide electrodes. <i>Nature</i> , 1976, 261, 403-404.	13.7	435
15	Rain on Methylammonium Lead Iodide Based Perovskites: Possible Environmental Effects of Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1543-1547.	2.1	428
16	Halide Perovskites: Is It All about the Interfaces?. <i>Chemical Reviews</i> , 2019, 119, 3349-3417.	23.0	404
17	Crystallization of Methyl Ammonium Lead Halide Perovskites: Implications for Photovoltaic Applications. <i>Journal of the American Chemical Society</i> , 2014, 136, 13249-13256.	6.6	388
18	Preparation of Single-Phase Films of CH ₃ NH ₃ Pb(I _{1-x} Br _x) ₃ with Sharp Optical Band Edges. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2501-2505.	2.1	385

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19	Hybrid Organic-Inorganic Perovskites (HOIPs): Opportunities and Challenges. <i>Advanced Materials</i> , 2015, 27, 5102-5112.	11.1	372
20	Chemical bath deposited CdS/CdSe-sensitized porous TiO ₂ solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 181, 306-313.	2.0	368
21	Chloride Inclusion and Hole Transport Material Doping to Improve Methyl Ammonium Lead Bromide Perovskite-Based High Open-Circuit Voltage Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 429-433.	2.1	342
22	Tungsten trioxide as a photoanode for a photoelectrochemical cell (PEC). <i>Nature</i> , 1976, 260, 312-313.	13.7	341
23	Valence and Conduction Band Densities of States of Metal Halide Perovskites: A Combined Experimental-Theoretical Study. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2722-2729.	2.1	333
24	Surface Photovoltage Spectroscopy of Dye-Sensitized Solar Cells with TiO ₂ , Nb ₂ O ₅ , and SrTiO ₃ Nanocrystalline Photoanodes: An Indication for Electron Injection from Higher Excited Dye States. <i>Journal of Physical Chemistry B</i> , 2001, 105, 6347-6352.	1.2	332
25	Molecular control over Au/GaAs diodes. <i>Nature</i> , 2000, 404, 166-168.	13.7	331
26	Electrocatalytic Electrodes for the Polysulfide Redox System. <i>Journal of the Electrochemical Society</i> , 1980, 127, 544-549.	1.3	329
27	Low-Temperature Solution-Grown CsPbBr ₃ Single Crystals and Their Characterization. <i>Crystal Growth and Design</i> , 2016, 16, 5717-5725.	1.4	329
28	Molecular Adjustment of the Electronic Properties of Nanoporous Electrodes in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18907-18913.	1.2	327
29	Effects of Sodium on Polycrystalline Cu(In,Ga)Se ₂ and Its Solar Cell Performance. <i>Advanced Materials</i> , 1998, 10, 31-36.	11.1	319
30	Stability of CdTe/CdS thin-film solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2000, 62, 295-325.	3.0	315
31	Energetics of molecular interfaces. <i>Materials Today</i> , 2005, 8, 32-41.	8.3	312
32	Molecular Engineering of Semiconductor Surfaces and Devices. <i>Accounts of Chemical Research</i> , 2002, 35, 121-128.	7.6	304
33	Large-Area, Ensemble Molecular Electronics: Motivation and Challenges. <i>Chemical Reviews</i> , 2017, 117, 4248-4286.	23.0	298
34	Understanding how excess lead iodide precursor improves halide perovskite solar cell performance. <i>Nature Communications</i> , 2018, 9, 3301.	5.8	271
35	Mechanical properties of APbX ₃ (A = Cs or CH ₃ NH ₃ ; X = I or Br) perovskite single crystals. <i>MRS Communications</i> , 2015, 5, 623-629.	0.8	270
36	CsSnBr ₃ , A Lead-Free Halide Perovskite for Long-Term Solar Cell Application: Insights on SnF ₂ Addition. <i>ACS Energy Letters</i> , 2016, 1, 1028-1033.	8.8	259

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37	Nanocrystalline Mesoporous Strontium Titanate as Photoelectrode Material for Photosensitized Solar Devices: Increasing Photovoltage through Flatband Potential Engineering. <i>Journal of Physical Chemistry B</i> , 1999, 103, 9328-9332.	1.2	258
38	A model for the successful growth of polycrystalline films of CuInSe ₂ by multisource physical vacuum evaporation. <i>Advanced Materials</i> , 1993, 5, 114-119.	11.1	254
39	Tetragonal CH ₃ NH ₃ PbI ₃ is ferroelectric. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E5504-E5512.	3.3	240
40	Stability Issues of Cu(In,Ga)Se ₂ -Based Solar Cells. <i>Journal of Physical Chemistry B</i> , 2000, 104, 4849-4862.	1.2	235
41	What Remains Unexplained about the Properties of Halide Perovskites?. <i>Advanced Materials</i> , 2018, 30, e1800691.	11.1	231
42	Molecules on Si: Electronics with Chemistry. <i>Advanced Materials</i> , 2010, 22, 140-159.	11.1	207
43	Are Mobilities in Hybrid Organic-Inorganic Halide Perovskites Actually High?. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4754-4757.	2.1	197
44	Molecular Control over Semiconductor Surface Electronic Properties: Dicarboxylic Acids on CdTe, CdSe, GaAs, and InP. <i>Journal of the American Chemical Society</i> , 1999, 121, 10545-10553.	6.6	185
45	Chemical Modification of Semiconductor Surfaces for Molecular Electronics. <i>Chemical Reviews</i> , 2017, 117, 4624-4666.	23.0	181
46	Protein bioelectronics: a review of what we do and do not know. <i>Reports on Progress in Physics</i> , 2018, 81, 026601.	8.1	180
47	Making contact: Connecting molecules electrically to the macroscopic world. <i>Progress in Surface Science</i> , 2008, 83, 217-261.	3.8	179
48	How SnF ₂ Impacts the Material Properties of Lead-Free Tin Perovskites. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13926-13936.	1.5	179
49	How Polycrystalline Devices Can Outperform Single-Crystal Ones: Thin Film CdTe/CdS Solar Cells. <i>Advanced Materials</i> , 2004, 16, 879-883.	11.1	176
50	Electronic Transport via Proteins. <i>Advanced Materials</i> , 2014, 26, 7142-7161.	11.1	175
51	Oxygenation and air-annealing effects on the electronic properties of Cu(In,Ga)Se ₂ films and devices. <i>Journal of Applied Physics</i> , 1999, 86, 497-505.	1.1	174
52	Defect chemical explanation for the effect of air anneal on CdS/CuInSe ₂ solar cell performance. <i>Applied Physics Letters</i> , 1989, 54, 558-560.	1.5	173
53	Temperature-Dependent Optical Band Gap in CsPbBr ₃ , MAPbBr ₃ , and FAPbBr ₃ Single Crystals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2490-2496.	2.1	173
54	The Importance of Chemical Bonding to the Contact for Tunneling through Alkyl Chains. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10432-10439.	1.2	169

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55	Photovoltaic efficiency limits and material disorder. <i>Energy and Environmental Science</i> , 2012, 5, 6022.	15.6	166
56	Stone Tools, Toolkits, and Human Behavior in Prehistory [and Comments and Reply]. <i>Current Anthropology</i> , 1979, 20, 661-683.	0.8	165
57	Understanding the Beneficial Role of Grain Boundaries in Polycrystalline Solar Cells from Single-Grain-Boundary Scanning Probe Microscopy. <i>Advanced Functional Materials</i> , 2006, 16, 649-660.	7.8	165
58	The Cooperative Molecular Field Effect. <i>Advanced Functional Materials</i> , 2005, 15, 1571-1578.	7.8	164
59	Photoacoustic measurements of photosynthetic activities in whole leaves. <i>Photochemistry and gas exchange. Biochimica Et Biophysica Acta - Bioenergetics</i> , 1982, 679, 452-465.	0.5	162
60	Subsurface movements of stone artefacts and their implications for the prehistory of Central Africa. <i>Nature</i> , 1977, 266, 812-815.	13.7	159
61	Proteins as Electronic Materials: Electron Transport through Solid-State Protein Monolayer Junctions. <i>Journal of the American Chemical Society</i> , 2010, 132, 4131-4140.	6.6	156
62	Guide for the perplexed to the Shockley-Queisser model for solar cells. <i>Nature Photonics</i> , 2019, 13, 501-505.	15.6	153
63	High-Work-Function Molybdenum Oxide Hole Extraction Contacts in Hybrid Organic-Inorganic Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 31491-31499.	4.0	151
64	Effects of Light and Electron Beam Irradiation on Halide Perovskites and Their Solar Cells. <i>Accounts of Chemical Research</i> , 2016, 49, 347-354.	7.6	150
65	Self-Healing Inside APbBr ₃ Halide Perovskite Crystals. <i>Advanced Materials</i> , 2018, 30, 1706273.	11.1	149
66	Molecules and Electronic Materials. <i>Advanced Materials</i> , 2002, 14, 789.	11.1	148
67	X-ray photoelectron and Auger electron spectroscopic analysis of surface treatments and electrochemical decomposition of CuInSe ₂ photoelectrodes. <i>Journal of Applied Physics</i> , 1985, 57, 4761-4771.	1.1	145
68	Perovskite cells roll forward. <i>Nature Photonics</i> , 2014, 8, 87-88.	15.6	142
69	Photoacoustic detection of photosynthetic oxygen evolution from leaves. Quantitative analysis by phase and amplitude measurements. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1983, 724, 433-446.	0.5	139
70	Importance of Monolayer Quality for Interpreting Current Transport through Organic Molecules: Alkyls on Oxide-Free Si. <i>Langmuir</i> , 2006, 22, 6915-6922.	1.6	136
71	Contacting Organic Molecules by Soft Methods: Towards Molecule-Based Electronic Devices. <i>Accounts of Chemical Research</i> , 2008, 41, 359-366.	7.6	126
72	How Do Electronic Carriers Cross Si-Bound Alkyl Monolayers?. <i>Physical Review Letters</i> , 2005, 95, 266807.	2.9	124

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73	What is the Barrier for Tunneling Through Alkyl Monolayers? Results from n- and p-Si-Alkyl/Hg Junctions. <i>Advanced Materials</i> , 2007, 19, 445-450.	11.1	122
74	Assessing Possibilities and Limits for Solar Cells. <i>Advanced Materials</i> , 2011, 23, 2870-2876.	11.1	122
75	Phase segregation, Cu migration and junction formation in Cu(In,Ga)Se ₂ . <i>EPJ Applied Physics</i> , 1999, 6, 131-139.	0.3	121
76	Proteins as Solid-State Electronic Conductors. <i>Accounts of Chemical Research</i> , 2010, 43, 945-953.	7.6	118
77	Interface-Dependent Ion Migration/Accumulation Controls Hysteresis in MAPbI ₃ Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016, 120, 16399-16411.	1.5	118
78	Copper sulfide as a light absorber in wet-chemical synthesized extremely thin absorber (ETA) solar cells. <i>Energy and Environmental Science</i> , 2009, 2, 220-223.	15.6	111
79	How organic molecules can control electronic devices. <i>Trends in Biotechnology</i> , 2002, 20, 22-29.	4.9	106
80	Hybrids of Organic Molecules and Flat, Oxide-Free Silicon: High-Density Monolayers, Electronic Properties, and Functionalization. <i>Langmuir</i> , 2012, 28, 9920-9929.	1.6	105
81	Effect of Molecule-Metal Electronic Coupling on Through-Bond Hole Tunneling across Metal-Organic Monolayer-Semiconductor Junctions. <i>Journal of the American Chemical Society</i> , 2002, 124, 2886-2887.	6.6	104
82	Current routes in polycrystalline CuInSe ₂ and Cu(In,Ga)Se ₂ films. <i>Solar Energy Materials and Solar Cells</i> , 2007, 91, 85-90.	3.0	104
83	Cu(In,Ga)Se ₂ Solar Cells: Device Stability Based on Chemical Flexibility. <i>Advanced Materials</i> , 1999, 11, 957-961.	11.1	103
84	Electron Tunneling at the TiO ₂ /Substrate Interface Can Determine Dye-Sensitized Solar Cell Performance. <i>Journal of Physical Chemistry B</i> , 2004, 108, 17946-17951.	1.2	103
85	Electronic structure of Si(111)-bound alkyl monolayers: Theory and experiment. <i>Physical Review B</i> , 2006, 74, .	1.1	103
86	Controlling Semiconductor/Metal Junction Barriers by Incomplete, Nonideal Molecular Monolayers. <i>Journal of the American Chemical Society</i> , 2006, 128, 6854-6869.	6.6	102
87	Soft Contact Deposition onto Molecularly Modified GaAs. Thin Metal Film Flotation: Principles and Electrical Effects. <i>Advanced Functional Materials</i> , 2002, 12, 795-807.	7.8	101
88	Updated Assessment of Possibilities and Limits for Solar Cells. <i>Advanced Materials</i> , 2014, 26, 1622-1628.	11.1	101
89	Electronic Transport via Homopeptides: The Role of Side Chains and Secondary Structure. <i>Journal of the American Chemical Society</i> , 2015, 137, 9617-9626.	6.6	101
90	The Dependence of Electron Transfer Efficiency on the Conformational Order in Organic Monolayers. <i>Science</i> , 1994, 263, 948-950.	6.0	100

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91	Painted, Polycrystalline Thin Film Photoelectrodes for Photoelectrochemical Solar Cells. Journal of the Electrochemical Society, 1980, 127, 2252-2254.	1.3	99
92	All-Solid-State, Semiconductor-Sensitized Nanoporous Solar Cells. Accounts of Chemical Research, 2012, 45, 705-713.	7.6	99
93	Polar Ligand Adsorption Controls Semiconductor Surface Potentials. Journal of the American Chemical Society, 1994, 116, 2972-2977.	6.6	98
94	Direct evidence for grain-boundary depletion in polycrystalline CdTe from nanoscale-resolved measurements. Applied Physics Letters, 2003, 82, 556-558.	1.5	98
95	Direct evidence for diffusion and electromigration of Cu in CuInSe ₂ . Journal of Applied Physics, 1997, 82, 4282-4285.	1.1	96
96	Interface redox engineering of Cu(In,Ga)Se ₂ based solar cells: oxygen, sodium, and chemical bath effects. Thin Solid Films, 2000, 361-362, 353-359.	0.8	96
97	Direct Detection of Low-Concentration NO in Physiological Solutions by a New GaAs-Based Sensor. Chemistry - A European Journal, 2001, 7, 1743-1749.	1.7	96
98	Synergistic Effect of Charge Generation and Separation in Epitaxially Grown BiOCl/Bi ₂ S ₃ Nano-Heterostructure. ACS Applied Materials & Interfaces, 2018, 10, 15304-15313.	4.0	95
99	Bacteriorhodopsin as an electronic conduction medium for biomolecular electronics. Chemical Society Reviews, 2008, 37, 2422.	18.7	93
100	Electronic structure of the CsPbBr ₃ /polytriarylamine (PTAA) system. Journal of Applied Physics, 2017, 121, .	1.1	93
101	Electroplated CuInS ₂ and CuInSe ₂ layers: Preparation and physical and photovoltaic characterization. Thin Solid Films, 1985, 128, 93-106.	0.8	91
102	Room-temperature detection of mobile impurities in compound semiconductors by transient ion drift. Journal of Applied Physics, 1997, 81, 6684-6691.	1.1	91
103	Bacteriorhodopsin (bR) as an electronic conduction medium: Current transport through bR-containing monolayers. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8601-8606.	3.3	91
104	Light-Induced Increase of Electron Diffusion Length in a p-n Junction Type CH ₃ NH ₃ PbBr ₃ Perovskite Solar Cell. Journal of Physical Chemistry Letters, 2015, 6, 2469-2476.	2.1	91
105	Surface Photovoltage Spectroscopy Study of Organo-Lead Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 2408-2413.	2.1	90
106	Defect level identification in copper indium selenide (CuInSe ₂) from photoluminescence studies. Chemistry of Materials, 1990, 2, 286-293.	3.2	89
107	Simultaneous Control of Surface Potential and Wetting of Solids with Chemisorbed Multifunctional Ligands. Journal of the American Chemical Society, 1997, 119, 5720-5728.	6.6	89
108	Energy, the global challenge, and materials. Materials Today, 2008, 11, 16-20.	8.3	87

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109	Fine Tuning of Au/SiO ₂ /Si Diodes by Varying Interfacial Dipoles Using Molecular Monolayers. <i>Advanced Materials</i> , 2001, 13, 508-511.	11.1	86
110	Molecular Electronics at Metal/Semiconductor Junctions. Si Inversion by Sub-Nanometer Molecular Films. <i>Nano Letters</i> , 2009, 9, 2390-2394.	4.5	86
111	Molecular electronic tuning of Si surfaces. <i>Chemical Physics Letters</i> , 1997, 279, 270-274.	1.2	84
112	Molecular Metal Polarization at Rectifying GaAs Interfaces. <i>Journal of Physical Chemistry B</i> , 2003, 107, 6360-6376.	1.2	83
113	Controlling the Work Function of GaAs by Chemisorption of Benzoic Acid Derivatives. <i>Journal of Physical Chemistry B</i> , 1997, 101, 2678-2684.	1.2	82
114	Impedance Spectroscopic Indication for Solid State Electrochemical Reaction in (CH ₃) ₃ NH ₃ PbI ₃ Films. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 191-197.	2.1	81
115	Tunneling explains efficient electron transport via protein junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E4577-E4583.	3.3	81
116	Can up- and down-conversion and multi-exciton generation improve photovoltaics?. <i>Solar Energy Materials and Solar Cells</i> , 2008, 92, 1541-1546.	3.0	80
117	Solid-State Electron Transport across Azurin: From a Temperature-Independent to a Temperature-Activated Mechanism. <i>Journal of the American Chemical Society</i> , 2011, 133, 2421-2423.	6.6	78
118	Factors Affecting the Stability of CdTe/CdS Solar Cells Deduced from Stress Tests at Elevated Temperature. <i>Advanced Functional Materials</i> , 2003, 13, 289-299.	7.8	77
119	Tuning electronic transport via hepta-alanine peptides junction by tryptophan doping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 10785-10790.	3.3	77
120	Electroplated cadmium chalcogenide layers: Characterization and use in photoelectrochemical solar cells. <i>Thin Solid Films</i> , 1982, 90, 433-438.	0.8	76
121	Conversion of Single Crystalline PbI ₂ to (CH ₃) ₃ NH ₃ PbI ₃ : Structural Relations and Transformation Dynamics. <i>Chemistry of Materials</i> , 2016, 28, 6501-6510.	3.2	76
122	Photoacoustic detection of photosynthetic activities in isolated broken chloroplasts. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1980, 593, 330-341.	0.5	75
123	Photoelectrochemical Energy Conversion and Storage: The Polycrystalline Cell with Different Storage Modes. <i>Journal of the Electrochemical Society</i> , 1977, 124, 532-534.	1.3	74
124	Free energies and enthalpies of possible gas phase and surface reactions for preparation of. <i>Journal of Physics and Chemistry of Solids</i> , 1992, 53, 991-1005.	1.9	74
125	Controlling the Work Function of CdSe by Chemisorption of Benzoic Acid Derivatives and Chemical Etching. <i>The Journal of Physical Chemistry</i> , 1995, 99, 8368-8373.	2.9	73
126	Electrochemical, solid state, photochemical and technological aspects of photoelectrochemical energy converters. <i>Nature</i> , 1976, 263, 97-100.	13.7	72

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127	Mode-selective vibrational modulation of charge transport in organic electronic devices. Nature Communications, 2015, 6, 7880.	5.8	72
128	Structural and Solar Conversion Characteristics of the $(\text{Cu}_2\text{Se})_x(\text{In}_2\text{Se}_3)_{1-x}$ System. Electrochemical Society, 1985, 132, 1319-1327.	1.3	71
129	Perovskite Solar Cells: Do We Know What We Do Not Know?. Journal of Physical Chemistry Letters, 2015, 6, 279-282.	2.1	71
130	What Limits the Open-Circuit Voltage of Bromide Perovskite-Based Solar Cells?. ACS Energy Letters, 2019, 4, 1-7.	8.8	71
131	Photoacoustic determination of photovoltaic energy conversion efficiency. Applied Physics Letters, 1978, 33, 810-811.	1.5	70
132	Electrodeposition of CuInSe_2 and CuInS_2 films. Solar Cells, 1986, 16, 245-254.	0.6	70
133	Electrical Contacts to Organic Molecular Films by Metal Evaporation: Effect of Contacting Details. Journal of Physical Chemistry C, 2007, 111, 2318-2329.	1.5	70
134	How Important Is the Interfacial Chemical Bond for Electron Transport through Alkyl Chain Monolayers?. Nano Letters, 2006, 6, 2873-2876.	4.5	68
135	What Is the Mechanism of MAPbI_3 p-Doping by I_2 ? Insights from Optoelectronic Properties. ACS Energy Letters, 2017, 2, 2408-2414.	8.8	68
136	Photoacoustic spectroscopy of chloroplast membranes; listening to photosynthesis. FEBS Letters, 1978, 91, 339-342.	1.3	67
137	Ion migration in chalcopyrite semiconductors. The Journal of Physical Chemistry, 1992, 96, 11009-11017.	2.9	67
138	Energy Level and Band Alignment for $\text{GaAs}/\text{Alkylthiol Monolayer}/\text{Hg}$ Junctions from Electrical Transport and Photoemission Experiments. Journal of Physical Chemistry B, 2006, 110, 14363-14371.	1.2	66
139	Stable Room-Temperature Molecular Negative Differential Resistance Based on Molecule-Electrode Interface Chemistry. Journal of the American Chemical Society, 2004, 126, 11648-11657.	6.6	65
140	Deleterious Effect of Negative Capacitance on the Performance of Halide Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 2007-2013.	8.8	65
141	Photo-electrochemical energy conversion: electrocatalytic sulphur electrodes. Journal of Applied Electrochemistry, 1977, 7, 181-182.	1.5	64
142	High efficiency $\text{Cd}(\text{Se},\text{Te})/\text{S}$ -photoelectrochemical cell resulting from solution chemistry control. Applied Physics Letters, 1985, 46, 608-610.	1.5	64
143	Molecular Length, Monolayer Density, and Charge Transport: Lessons from $\text{AlOx}/\text{AlkylPhosphonate}/\text{Hg}$ Junctions. Langmuir, 2012, 28, 404-415.	1.6	64
144	S/Se Substitution in Polycrystalline CdSe Photoelectrodes: Photoelectrochemical Energy Conversion. Journal of the Electrochemical Society, 1978, 125, 1623-1628.	1.3	63

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145	Temperature and Force Dependence of Nanoscale Electron Transport <i>via</i> the Cu Protein Azurin. ACS Nano, 2012, 6, 10816-10824.	7.3	63
146	Separating Charges at Organic Interfaces: Effects of Disorder, Hot States, and Electric Field. Journal of Physical Chemistry Letters, 2013, 4, 1707-1717.	2.1	63
147	Contacting organic molecules by metal evaporation. Physical Chemistry Chemical Physics, 2004, 6, 4538.	1.3	62
148	Molecular modification of an ionic semiconductor-metal interface: ZnO/molecule/Au diodes. Applied Physics Letters, 2003, 82, 1051-1053.	1.5	61
149	Organic Inversion Layer Interfaces: A Low Temperature Deposition Method for Forming a p-n Homo Junction in Si. Advanced Energy Materials, 2014, 4, 1301724.	10.2	61
150	Platinum bronzes. IV. Preparation, crystal chemistry, and physical properties. Inorganic Chemistry, 1974, 13, 1377-1388.	1.9	60
151	Molecular control of a GaAs transistor. Chemical Physics Letters, 1998, 283, 301-306.	1.2	60
152	Voltage-Driven Changes in Molecular Dipoles Yield Negative Differential Resistance at Room Temperature We thank Prof. D. Mandler (HU Jerusalem) for making the hanging Hg drop electrode available to us, Prof. A. Shanzer and Ms. R. Lazar for synthesizing and providing the cyclic disulfide molecules, and Prof. J. M. L. Martin (all from the Organic Chemistry department, WIS), for guidance with the dipole moment calculations. We thank the Israel Science Foundation for partial support. Y.S. thanks the Clor fund f. Angewandte Chemie - International Edition, 2002, 41, 827.	7.2	59
153	Toward metal-organic insulator-semiconductor solar cells, based on molecular monolayer self-assembly on n-Si. Applied Physics Letters, 2009, 94, 043308.	1.5	59
154	Temperature-Dependent Solid-State Electron Transport through Bacteriorhodopsin: Experimental Evidence for Multiple Transport Paths through Proteins. Journal of the American Chemical Society, 2012, 134, 4169-4176.	6.6	59
155	Effect of photoelectrode crystal structure on output stability of Cd(Se,Te)/polysulfide photoelectrochemical cells. Journal of the American Chemical Society, 1980, 102, 5962-5964.	6.6	58
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