Antoine Kahn

List of Publications by Year in Descending Order

266 papers	27,368 citations	94 h-index	161 g-index
275 ext. papers	29,139 ext. citations	8.9 avg, IF	7.19 L-index

#	Paper	IF	Citations
266	Electrochemically n-Doped CsPbBr3 Nanocrystal Thin Films. *ACS Energy Letters*, **2022**, 7, 211-216	20.1	1
265	Design of UV-Absorbing Donor Molecules for Nearly Imperceptible Organic Solar Cells. *ACS Energy Letters*, **2022**, 7, 180-188	20.1	5
264	Controlled n-Doping of Naphthalene Diimide-Based Two-Dimensional Polymers. *Advanced Materials*, **2021**, e2101932	24	5
263	Direct Probing of Gap States and Their Passivation in Halide Perovskites by High-Sensitivity, Variable Energy Ultraviolet Photoelectron Spectroscopy. *Journal of Physical Chemistry C*, **2021**, 125, 5217-5225	3.8	4
262	Adduct-based p-doping of organic semiconductors. *Nature Materials*, **2021**, 20, 1248-1254	27	18
261	p-Type molecular doping by charge transfer in halide perovskite. *Materials Advances*, **2021**, 2, 2956-2965	3.3	6
260	Coronene derivatives for transparent organic photovoltaics through inverse materials design. *Journal of Materials Chemistry C*, **2021**, 9, 1310-1317	7.1	5
259	Molecular dopants: Tools to control the electronic structure of metal halide perovskite interfaces. *Applied Physics Reviews*, **2021**, 8, 041301	17.3	3
258	n-Doping of a Low-Electron-Affinity Polymer Used as an Electron-Transport Layer in Organic Light-Emitting Diodes. *Advanced Functional Materials*, **2020**, 30, 2000328	15.6	7
257	Structural and Electronic Impact of an Asymmetric Organic Ligand in Diammonium Lead Iodide Perovskites. *Advanced Energy Materials*, **2020**, 10, 1903900	21.8	8
256	Ultraviolet Photoemission Spectroscopy and Kelvin Probe Measurements on Metal Halide Perovskites: Advantages and Pitfalls. *Advanced Energy Materials*, **2020**, 10, 1903252	21.8	23
255	Elucidating the Role of a Tetrafluoroborate-Based Ionic Liquid at the n-Type Oxide/Perovskite Interface. *Advanced Energy Materials*, **2020**, 10, 1903231	21.8	50
254	Gap States in Methylammonium Lead Halides: The Link to Dimethylsulfoxide?. *Advanced Materials*, **2020**, 32, e2003482	24	16
253	The properties, photovoltaic performance and stability of visible to near-IR all inorganic perovskites. *Materials Advances*, **2020**, 1, 1920-1929	3.3	2
252	Photocurrent deviation from linearity in an organic photodetector due to limited hole transport layer conductivity. *Organic Electronics*, **2020**, 76, 105450	3.5	5
251	Quantum Well Energetics of an n = 2 Ruddlesden–Popper Phase Perovskite. *Advanced Energy Materials*, **2019**, 9, 1901005	21.8	17
250	Molecular-Reductant-Induced Control of a Graphene–Organic Interface for Electron Injection. *Chemistry of Materials*, **2019**, 31, 6624-6632	9.6	8

249	Complexities of Contact Potential Difference Measurements on Metal Halide Perovskite Surfaces. *Journal of Physical Chemistry Letters*, **2019**, 10, 890-896	6.4	16
248	Interfacial charge-transfer doping of metal halide perovskites for high performance photovoltaics. *Energy and Environmental Science*, **2019**, 12, 3063-3073	35.4	77
247	Sensitization of silicon by singlet exciton fission in tetracene. *Nature*, **2019**, 571, 90-94	50.4	143
246	Electrical Doping of Organic Semiconductors with Molecular Oxidants and Reductants **2019**, 21-43		1
245	Halide Perovskites: Is It All about the Interfaces?. *Chemical Reviews*, **2019**, 119, 3349-3417	68.1	287
244	High-Voltage Photogeneration Exclusively via Aggregation-Induced Triplet States in a Heavy-Atom-Free Nonplanar Organic Semiconductor. *Advanced Energy Materials*, **2019**, 9, 1901649	21.8	3
243	What Limits the Open-Circuit Voltage of Bromide Perovskite-Based Solar Cells?. *ACS Energy Letters*, **2019**, 4, 1-7	20.1	58
242	The formation of polymer-dopant aggregates as a possible origin of limited doping efficiency at high dopant concentration. *Organic Electronics*, **2018**, 53, 135-140	3.5	26
241	Characterization of the Valence and Conduction Band Levels of n = 1 2D Perovskites: A Combined Experimental and Theoretical Investigation. *Advanced Energy Materials*, **2018**, 8, 1703468	21.8	48
240	Toward a better understanding of the doping mechanism involved in Mo(tfd-COCF3)3 doped PBDTTT-c. *Journal of Applied Physics*, **2018**, 123, 225501	2.5	3
239	Impact of unintentional oxygen doping on organic photodetectors. *Organic Electronics*, **2018**, 54, 64-71	3.5	9
238	Investigation of the High Electron Affinity Molecular Dopant F6-TCNNQ for Hole-Transport Materials. *Advanced Functional Materials*, **2018**, 28, 1703780	15.6	44
237	Ultrasensitive Heterojunctions of Graphene and 2D Perovskites Reveal Spontaneous Iodide Loss. *Joule*, **2018**, 2, 2133-2144	27.8	27
236	Variable charge transfer state energies at nanostructured pentacene/C60 interfaces. *Applied Physics Letters*, **2018**, 112, 213302	3.4	10
235	Electronic structure of the CsPbBr3/polytriarylamine (PTAA) system. *Journal of Applied Physics*, **2017**, 121, 035304	2.5	74
234	Mixed-Halide Perovskites with Stabilized Bandgaps. *Nano Letters*, **2017**, 17, 6863-6869	11.5	121
233	Beating the thermodynamic limit with photo-activation of n-doping in organic semiconductors. *Nature Materials*, **2017**, 16, 1209-1215	27	120
232	Pairing of near-ultraviolet solar cells with electrochromic windows for smart management of the solar spectrum. *Nature Energy*, **2017**, 2,	62.3	142

231	Fermi level, work function and vacuum level. *Materials Horizons*, **2016**, 3, 7-10	14.4	396
230	Morphological Tuning of the Energetics in Singlet Fission Organic Solar Cells. *Advanced Functional Materials*, **2016**, 26, 6489-6494	15.6	19
229	High-Work-Function Molybdenum Oxide Hole Extraction Contacts in Hybrid Organic-Inorganic Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 31491-31499	9.5	116
228	Electronically Passivated Hole-Blocking Titanium Dioxide/Silicon Heterojunction for Hybrid Silicon Photovoltaics. *Advanced Materials Interfaces*, **2016**, 3, 1600026	4.6	12
227	Determination of Energy Level Alignment within an Energy Cascade Organic Solar Cell. *Chemistry of Materials*, **2016**, 28, 794-801	9.6	47
226	Revisiting the Valence and Conduction Band Size Dependence of PbS Quantum Dot Thin Films. *ACS Nano*, **2016**, 10, 3302-11	16.7	89
225	Solution-Processed p-Dopant as Interlayer in Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 9262-7	9.5	17
224	Contorted Hexabenzocoronenes with Extended Heterocyclic Moieties Improve Visible-Light Absorption and Performance in Organic Solar Cells. *Chemistry of Materials*, **2016**, 28, 673-681	9.6	28
223	Valence and Conduction Band Densities of States of Metal Halide Perovskites: A Combined Experimental-Theoretical Study. *Journal of Physical Chemistry Letters*, **2016**, 7, 2722-9	6.4	264
222	P-doped organic semiconductor: Potential replacement for PEDOT:PSS in organic photodetectors. *Applied Physics Letters*, **2016**, 109, 073301	3.4	16
221	Impact of a Low Concentration of Dopants on the Distribution of Gap States in a Molecular Semiconductor. *Chemistry of Materials*, **2016**, 28, 2677-2684	9.6	27
220	Experimental Characterization of Interfaces of Relevance to Organic Electronics. *Materials and Energy*, **2016**, 159-191		2
219	Titanium dioxide/silicon hole-blocking selective contact to enable double-heterojunction crystalline silicon-based solar cell. *Applied Physics Letters*, **2015**, 106, 123906	3.4	98
218	Investigation of p-dopant diffusion in polymer films and bulk heterojunctions: Stable spatially-confined doping for all-solution processed solar cells. *Organic Electronics*, **2015**, 23, 151-157	3.5	36
217	Halogenation of a Nonplanar Molecular Semiconductor to Tune Energy Levels and Bandgaps for Electron Transport. *Chemistry of Materials*, **2015**, 27, 1892-1900	9.6	46
216	Quantifying the Extent of Contact Doping at the Interface between High Work Function Electrical Contacts and Poly(3-hexylthiophene) (P3HT). *Journal of Physical Chemistry Letters*, **2015**, 6, 1303-9	6.4	32
215	Electronic Level Alignment in Inverted Organometal Perovskite Solar Cells. *Advanced Materials Interfaces*, **2015**, 2, 1400532	4.6	139
214	Low-Temperature Synthesis of a TiO2/Si Heterojunction. *Journal of the American Chemical Society*, **2015**, 137, 14842-5	16.4	59

213	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. *Energy and Environmental Science*, **2015**, 8, 592-601	35.4	88
212	Hybrid Organic-Inorganic Perovskites (HOIPs): Opportunities and Challenges. *Advanced Materials*, **2015**, 27, 5102-12	24	325
211	Dopant controlled trap-filling and conductivity enhancement in an electron-transport polymer. *Applied Physics Letters*, **2015**, 106, 163301	3.4	49
210	Impact of Blend Morphology on Interface State Recombination in Bulk Heterojunction Organic Solar Cells. *Advanced Functional Materials*, **2015**, 25, 1090-1101	15.6	26
209	Impact of Hole Transport Layer Surface Properties on the Morphology of a Polymer-Fullerene Bulk Heterojunction. *Advanced Energy Materials*, **2014**, 4, 1301879	21.8	26
208	Chemically Controlled Reversible and Irreversible Extraction Barriers Via Stable Interface Modification of Zinc Oxide Electron Collection Layer in Polycarbazole-based Organic Solar Cells. *Advanced Functional Materials*, **2014**, 24, 4671-4680	15.6	64
207	Improved Performance in Bulk Heterojunction Organic Solar Cells with a Sol-Gel MgZnO Electron-Collecting Layer. *Advanced Energy Materials*, **2014**, 4, 1400073	21.8	19
206	Enhanced Charge-Carrier Injection and Collection Via Lamination of Doped Polymer Layers p-Doped with a Solution-Processible Molybdenum Complex. *Advanced Functional Materials*, **2014**, 24, 2197-2204	15.6	70
205	Tailoring Electron-Transfer Barriers for Zinc Oxide/C60 Fullerene Interfaces. *Advanced Functional Materials*, **2014**, 24, 7381-7389	15.6	47
204	Interface dipole engineering at buried organic/organic semiconductor heterojunctions. *Organic Electronics*, **2014**, 15, 2360-2366	3.5	14
203	NiOX/MoO3 Bi-Layers as Efficient Hole Extraction Contacts in Organic Solar Cells. *Advanced Functional Materials*, **2014**, 24, 701-706	15.6	59
202	Molecular doping and tuning threshold voltage in 6,13-bis(triisopropylsilylethynyl)pentacene/polymer blend transistors. *Applied Physics Letters*, **2014**, 105, 063301	3.4	27
201	Impact of Functionalized Polystyrenes as the Electron Injection Layer on Gold and Aluminum Surfaces: A Combined Theoretical and Experimental Study. *Israel Journal of Chemistry*, **2014**, 54, 779-788	3.4	2
200	Interface energetics in organo-metal halide perovskite-based photovoltaic cells. *Energy and Environmental Science*, **2014**, 7, 1377	35.4	554
199	Air-Exposure-Induced Gas-Molecule Incorporation into Spiro-MeOTAD Films. *Journal of Physical Chemistry Letters*, **2014**, 5, 1374-9	6.4	81
198	Photoinduced Hole Transfer Becomes Suppressed with Diminished Driving Force in Polymer-Fullerene Solar Cells While Electron Transfer Remains Active. *Advanced Functional Materials*, **2013**, 23, 1238-1249	15.6	100
197	Mechanistic study on the solution-phase n-doping of 1,3-dimethyl-2-aryl-2,3-dihydro-1H-benzoimidazole derivatives. *Journal of the American Chemical Society*, **2013**, 135, 15018-25	16.4	159
196	The effect of structural order on solar cell parameters, as illustrated in a SiC-organic junction model. *Energy and Environmental Science*, **2013**, 6, 3272	35.4	8

195	Gap states in pentacene thin film induced by inert gas exposure. *Physical Review Letters*, **2013**, 110, 267602	7.4	101
194	Electronic structure and carrier transport at laminated polymer homojunctions. *Organic Electronics*, **2013**, 14, 149-155	3.5	13
193	Energy Levels at Molecule Metal Interfaces **2013**, 219-241		4
192	Effect of Doping Density on the Charge Rearrangement and Interface Dipole at the Molecule Silicon Interface. *Journal of Physical Chemistry C*, **2013**, 117, 22422-22427	3.8	12
191	Hole-blocking crystalline-silicon/titanium-oxide heterojunction with very low interface recombination velocity **2013**,		19
190	(Invited) Wide Bandgap Heterojunctions on Crystalline Silicon. *ECS Transactions*, **2013**, 58, 97-105	1	2
189	Hole-blocking titanium-oxide/silicon heterojunction and its application to photovoltaics. *Applied Physics Letters*, **2013**, 102, 203901	3.4	146
188	Nature of the Interfaces Between Stoichiometric and Under-Stoichiometric MoO3 and 4,4?-N,N?-dicarbazole-biphenyl: A Combined Theoretical and Experimental Study. *Advanced Functional Materials*, **2013**, 23, 6091-6099	15.6	24
187	Energy level alignment in PCDTBT:PC70BM solar cells: Solution processed NiOx for improved hole collection and efficiency. *Organic Electronics*, **2012**, 13, 744-749	3.5	127
186	n-Doping of organic electronic materials using air-stable organometallics. *Advanced Materials*, **2012**, 24, 699-703	24	138
185	Solution doping of organic semiconductors using air-stable n-dopants. *Applied Physics Letters*, **2012**, 100, 083305	3.4	76
184	Passivation of trap states in unpurified and purified C60 and the influence on organic field-effect transistor performance. *Applied Physics Letters*, **2012**, 101, 253303	3.4	52
183	Low-temperature, solution-processed molybdenum oxide hole-collection layer for organic photovoltaics. *Journal of Materials Chemistry*, **2012**, 22, 3249		136
182	Ultralow doping in organic semiconductors: evidence of trap filling. *Physical Review Letters*, **2012**, 109, 176601	7.4	192
181	A universal method to produce low-work function electrodes for organic electronics. *Science*, **2012**, 336, 327-32	33.3	1642
180	Oriented Growth of Al2O3:ZnO Nanolaminates for Use as Electron-Selective Electrodes in Inverted Polymer Solar Cells. *Advanced Functional Materials*, **2012**, 22, 1531-1538	15.6	47
179	Transition metal oxides for organic electronics: energetics, device physics and applications. *Advanced Materials*, **2012**, 24, 5408-27	24	881
178	Photovoltaic efficiency limits and material disorder. *Energy and Environmental Science*, **2012**, 5, 6022	35.4	134

177	Correlation between interface energetics and open circuit voltage in organic photovoltaic cells. *Applied Physics Letters*, **2012**, 101, 233301	3.4	81
176	Polyvinylpyrrolidone-modified indium tin oxide as an electron-collecting electrode for inverted polymer solar cells. *Applied Physics Letters*, **2012**, 101, 073303	3.4	25
175	Charge transport across metal/molecular (alkyl) monolayer-Si junctions is dominated by the LUMO level. *Physical Review B*, **2012**, 85,	3.3	48
174	Electronic structure of the poly(3-hexylthiophene):indene-C60 bisadduct bulk heterojunction. *Journal of Applied Physics*, **2011**, 110, 043719	2.5	41
173	Electronic structure of Vanadium pentoxide: An efficient hole injector for organic electronic materials. *Journal of Applied Physics*, **2011**, 110, 033710	2.5	190
172	Evidence for near-Surface NiOOH Species in Solution-Processed NiOx Selective Interlayer Materials: Impact on Energetics and the Performance of Polymer Bulk Heterojunction Photovoltaics. *Chemistry of Materials*, **2011**, 23, 4988-5000	9.6	283
171	Soluble fullerene derivatives: The effect of electronic structure on transistor performance and air stability. *Journal of Applied Physics*, **2011**, 110, 014506	2.5	18
170	Modular construction of P3HT/PCBM planar-heterojunction solar cells by lamination allows elucidation of processing–structure–function relationships. *Organic Electronics*, **2011**, 12, 1963-1972	3.5	17
169	Filled and empty states of alkanethiol monolayer on Au (111): Fermi level asymmetry and implications for electron transport. *Chemical Physics Letters*, **2011**, 511, 344-347	2.5	44
168	Inverted Organic Solar Cells with Sol–Gel Processed High Work-Function Vanadium Oxide Hole-Extraction Layers. *Advanced Functional Materials*, **2011**, 21, 4776-4783	15.6	186
167	MoO3 films spin-coated from a nanoparticle suspension for efficient hole-injection in organic electronics. *Advanced Materials*, **2011**, 23, 70-3	24	297
166	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiOx Interlayers. *Advanced Energy Materials*, **2011**, 1, 813-820	21.8	273
165	Device Characteristics of Bulk-Heterojunction Polymer Solar Cells are Independent of Interfacial Segregation of Active Layers. *Chemistry of Materials*, **2011**, 23, 2020-2023	9.6	71
164	Annealing sequence dependent open-circuit voltage of inverted polymer solar cells attributable to interfacial chemical reaction between top electrodes and photoactive layers. *Langmuir*, **2011**, 27, 11265-71	4	13
163	Electronic structure and band alignment of 9,10-phenanthrenequinone passivated silicon surfaces. *Surface Science*, **2011**, 605, 1308-1312	1.8	12
162	Remote doping of a pentacene transistor: Control of charge transfer by molecular-level engineering. *Applied Physics Letters*, **2010**, 97, 123305	3.4	33
161	The origin of low water vapor transmission rates through Al2O3/ZrO2 nanolaminate gas-diffusion barriers grown by atomic layer deposition. *Applied Physics Letters*, **2010**, 96, 243308	3.4	94
160	Charge generation layers comprising transition metal-oxide/organic interfaces: Electronic structure and charge generation mechanism. *Applied Physics Letters*, **2010**, 96, 193302	3.4	157

159	Surface and interface states of gallium-polar versus nitrogen-polar GaN: Impact of thin organic semiconductor overlayers. *Journal of Applied Physics*, **2010**, 107, 113707	2.5	16
158	Electronic Structure and Dynamics at Organic Donor/Acceptor Interfaces. *MRS Bulletin*, **2010**, 35, 443-448	3.2	36
157	Molecular-scale properties of MoO3-doped pentacene. *Physical Review B*, **2010**, 82,	3.3	26
156	A Molybdenum Dithiolene Complex as p-Dopant for Hole-Transport Materials: A Multitechnique Experimental and Theoretical Investigation. *Chemistry of Materials*, **2010**, 22, 524-531	9.6	60
155	Effect of contamination on the electronic structure and hole-injection properties of MoO3/organic semiconductor interfaces. *Applied Physics Letters*, **2010**, 96, 133308	3.4	163
154	Hg/Molecular Monolayer/Si Junctions: Electrical Interplay between Monolayer Properties and Semiconductor Doping Density. *Journal of Physical Chemistry C*, **2010**, 114, 10270-10279	3.8	51
153	Phosphine Oxide Derivatives as Hosts for Blue Phosphors: A Joint Theoretical and Experimental Study of Their Electronic Structure. *Chemistry of Materials*, **2010**, 22, 247-254	9.6	89
152	Silicon surface passivation by an organic overlayer of 9,10-phenanthrenequinone. *Applied Physics Letters*, **2010**, 96, 222109	3.4	37
151	The Role of Transition Metal Oxides in Charge-Generation Layers for Stacked Organic Light-Emitting Diodes. *Advanced Functional Materials*, **2010**, 20, 1762-1766	15.6	138
150	The Influence of Film Morphology in High-Mobility Small-Molecule:Polymer Blend Organic Transistors. *Advanced Functional Materials*, **2010**, 20, 2330-2337	15.6	110
149	Molecules on si: electronics with chemistry. *Advanced Materials*, **2010**, 22, 140-59	24	197
148	Modification of gold source and drain electrodes by self-assembled monolayer in staggered n- and p-channel organic thin film transistors. *Organic Electronics*, **2010**, 11, 227-237	3.5	96
147	Direct determination of the electronic structure of the poly(3-hexylthiophene):phenyl-[6,6]-C61 butyric acid methyl ester blend. *Organic Electronics*, **2010**, 11, 1779-1785	3.5	200
146	Electronic band structure and ensemble effect in monolayers of linear molecules investigated by photoelectron spectroscopy. *Physical Review B*, **2009**, 79,	3.3	16
145	Role of the deep-lying electronic states of MoO3 in the enhancement of hole-injection in organic thin films. *Applied Physics Letters*, **2009**, 95, 123301	3.4	547
144	Isolated molecular dopants in pentacene observed by scanning tunneling microscopy. *Physical Review B*, **2009**, 80,	3.3	33
143	Influence of chemical doping on the performance of organic photovoltaic cells. *Applied Physics Letters*, **2009**, 94, 203306	3.4	38
142	Charge transfer at n-doped organic-organic heterojunctions. *Journal of Applied Physics*, **2009**, 105, 123711	2.5	53

141	Hole Injection in a Model Fluorene–Triarylamine Copolymer. *Advanced Functional Materials*, **2009**, 19, 304-310	15.6	32
140	N-doping of pentacene by decamethylcobaltocene. *Applied Physics A: Materials Science and Processing*, **2009**, 95, 7-13	2.6	45
139	Energetics of metal–organic interfaces: New experiments and assessment of the field. *Materials Science and Engineering Reports*, **2009**, 64, 1-31	30.9	526
138	P-type doping of organic wide band gap materials by transition metal oxides: A case-study on Molybdenum trioxide. *Organic Electronics*, **2009**, 10, 932-938	3.5	368
137	Electrical Transport and Photoemission Experiments of Alkylphosphonate Monolayers on GaAs. *Journal of Physical Chemistry C*, **2009**, 113, 3313-3321	3.8	23
136	Use of a high electron-affinity molybdenum dithiolene complex to p-dope hole-transport layers. *Journal of the American Chemical Society*, **2009**, 131, 12530-1	16.4	81
135	Improving charge injection in organic thin-film transistors with thiol-based self-assembled monolayers. *Organic Electronics*, **2008**, 9, 419-424	3.5	107
134	Fluorenyl-substituted silole molecules: geometric, electronic, optical, and device properties. *Journal of Materials Chemistry*, **2008**, 18, 3157		40
133	Enhancement of electron injection into a light-emitting polymer from an aluminum oxide cathode modified by a self-assembled monolayer. *Applied Physics Letters*, **2008**, 93, 103305	3.4	36
132	Commensurate growth and diminishing substrate influence in a multilayer film of a tris(thieno)hexaazatriphenylene derivative on Au(111) studied by scanning tunneling microscopy. *Physical Review B*, **2008**, 77,	3.3	11
131	Measurements of the Einstein relation in doped and undoped molecular thin films. *Physical Review B*, **2008**, 77,	3.3	16
130	Substrate-dependent electronic structure of an organic heterojunction. *Physical Review B*, **2008**, 77,	3.3	28
129	Doping Molecular Monolayers: Effects on Electrical Transport Through Alkyl Chains on Silicon. *Advanced Functional Materials*, **2008**, 18, 2102-2113	15.6	29
128	Electronic Current Transport through Molecular Monolayers: Comparison between Hg/Alkoxy and Alkyl Monolayer/Si(100) Junctions. *Advanced Materials*, **2008**, 20, 3931-3936	24	41
127	Decamethylcobaltocene as an efficient n-dopant in organic electronic materials and devices. *Organic Electronics*, **2008**, 9, 575-581	3.5	89
126	Effect of doping on electronic transport through molecular monolayer junctions. *Journal of the American Chemical Society*, **2007**, 129, 7494-5	16.4	25
125	Photoelectron Spectroscopic Study of the Electronic Band Structure of Polyfluorene and Fluorene-Arylamine Copolymers at Interfaces. *Journal of Physical Chemistry C*, **2007**, 111, 1378-1384	3.8	110
124	Synthesis, ionisation potentials and electron affinities of hexaazatrinaphthylene derivatives. *Chemistry - A European Journal*, **2007**, 13, 3537-47	4.8	74

123	What is the Barrier for Tunneling Through Alkyl Monolayers? Results from n- and p-Si–Alkyl/Hg Junctions. *Advanced Materials*, **2007**, 19, 445-450	24	118
122	Electron spectra of a self-assembled monolayer on gold: Inverse photoemission and two-photon photoemission spectroscopy. *Chemical Physics Letters*, **2007**, 446, 359-364	2.5	12
121	Induced Density of States model for weakly-interacting organic semiconductor interfaces. *Organic Electronics*, **2007**, 8, 241-248	3.5	128
120	Energy level alignment between 9-phosphonoanthracene self-assembled monolayers and pentacene. *Applied Physics Letters*, **2007**, 90, 012109	3.4	28
119	Incorporation of cobaltocene as an n-dopant in organic molecular films. *Journal of Applied Physics*, **2007**, 102, 014906	2.5	33
118	Doping-induced realignment of molecular levels at organic–organic heterojunctions. *Chemical Physics*, **2006**, 325, 129-137	2.3	77
117	Molecular n-Type Doping of 1,4,5,8-Naphthalene Tetracarboxylic Dianhydride by Pyronin B Studied Using Direct and Inverse Photoelectron Spectroscopies. *Advanced Functional Materials*, **2006**, 16, 831-837	15.6	119
116	Wet Chemical Cleaning of Germanium Surfaces for Growth of High-k Dielectrics. *Materials Research Society Symposia Proceedings*, **2006**, 917, 1		10
115	Threshold voltage as a measure of molecular level shift in organic thin-film transistors. *Applied Physics Letters*, **2006**, 88, 043509	3.4	24
114	Radiation damage to alkyl chain monolayers on semiconductor substrates investigated by electron spectroscopy. *Journal of Physical Chemistry B*, **2006**, 110, 21826-32	3.4	33
113	Electronic structure of Si(111)-bound alkyl monolayers: Theory and experiment. *Physical Review B*, **2006**, 74,	3.3	102
112	Energy level and band alignment for GaAs-alkylthiol monolayer-Hg junctions from electrical transport and photoemission experiments. *Journal of Physical Chemistry B*, **2006**, 110, 14363-71	3.4	66
111	N-type doping of an electron-transport material by controlled gas-phase incorporation of cobaltocene. *Chemical Physics Letters*, **2006**, 431, 67-71	2.5	86
110	Spectroscopic study on sputtered PEDOT–PSS: Role of surface PSS layer. *Organic Electronics*, **2006**, 7, 387-396	3.5	209
109	Electron affinities of 1,1-diaryl-2,3,4,5-tetraphenylsiloles: direct measurements and comparison with experimental and theoretical estimates. *Journal of the American Chemical Society*, **2005**, 127, 9021-9	16.4	148
108	Hydrogen passivation of germanium (100) surface using wet chemical preparation. *Applied Physics Letters*, **2005**, 87, 253101	3.4	128
107	Energy level alignment at organic heterojunctions: Role of the charge neutrality level. *Physical Review B*, **2005**, 71,	3.3	242
106	Direct determination of the hole density of states in undoped and doped amorphous organic films with high lateral resolution. *Physical Review Letters*, **2005**, 95, 256405	7.4	139

105	Impact of electrode contamination on the α-NPD/Au hole injection barrier. *Organic Electronics*, **2005**, 6, 47-54	3.5	168
104	Polarization at the gold/pentacene interface. *Organic Electronics*, **2005**, 6, 85-91	3.5	229
103	Energetics of molecular interfaces. *Materials Today*, **2005**, 8, 32-41	21.8	290
102	Molecular and solid-state (8-hydroxy-quinoline)aluminum interaction with magnesium: A first-principles study. *Journal of Applied Physics*, **2005**, 98, 023707	2.5	15
101	How do electronic carriers cross Si-bound alkyl monolayers?. *Physical Review Letters*, **2005**, 95, 266807	7.4	119
100	Enhancement of iridium-based organic light-emitting diodes by spatial doping of the hole transport layer. *Applied Physics Letters*, **2005**, 87, 193501	3.4	9
99	Nanoscale Measurements of Electronic Properties in Organic Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **2005**, 871, 1		
98	Contact potential difference measurements of doped organic molecular thin films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 1488-1492	2.9	9
97	Impact of an interface dipole layer on molecular level alignment at an organic-conductor interface studied by ultraviolet photoemission spectroscopy. *Physical Review B*, **2004**, 70,	3.3	145
96	Dipole formation at metal/PTCDA interfaces: Role of the Charge Neutrality Level. *Europhysics Letters*, **2004**, 65, 802-808	1.6	210
95	Barrier formation at metal–organic interfaces: dipole formation and the charge neutrality level. *Applied Surface Science*, **2004**, 234, 107-112	6.7	159
94	Electrical doping: the impact on interfaces of π-conjugated molecular films. *Journal of Physics Condensed Matter*, **2003**, 15, S2757-S2770	1.8	62
93	Metal vs. Polymer Electrodes in Organic Devices: Energy Level Alignment, Hole Injection, and Structure. *Materials Research Society Symposia Proceedings*, **2003**, 771, 361		4
92	Electron Energetics at Surfaces and Interfaces: Concepts and Experiments. *Advanced Materials*, **2003**, 15, 271-277	24	564
91	Optically induced electron transfer from conjugated organic molecules to charged metal clusters. *Thin Solid Films*, **2003**, 441, 145-149	2.2	28
90	Electronic structure and electrical properties of interfaces between metals and π-conjugated molecular films. *Journal of Polymer Science, Part B: Polymer Physics*, **2003**, 41, 2529-2548	2.6	733
89	Chemistry between magnesium and multiple molecules in tris(8-hydroxyquinoline) aluminum films. *Journal of the American Chemical Society*, **2003**, 125, 7808-9	16.4	31
88	Conjugated organic molecules on metal versus polymer electrodes: Demonstration of a key energy level alignment mechanism. *Applied Physics Letters*, **2003**, 82, 70-72	3.4	456

87	Effect of electrical doping on molecular level alignment at organic□organic heterojunctions. *Applied Physics Letters*, **2003**, 82, 4815-4817	3.4	76
86	Dynamic scaling, island size distribution, and morphology in the aggregation regime of submonolayer pentacene films. *Physical Review Letters*, **2003**, 91, 136102	7.4	164
85	Direct and inverse photoemission spectroscopy studies of potassium intercalated films of two organic semiconductors. *Applied Physics Letters*, **2003**, 83, 500-502	3.4	31
84	Controlled p doping of the hole-transport molecular material N,N?-diphenyl-N,N?-bis(1-naphthyl)-1,1?-biphenyl-4,4?-diamine with tetrafluorotetracyanoquinodimethane. *Journal of Applied Physics*, **2003**, 94, 359-366	2.5	244
83	Interplay between morphology, structure, and electronic properties at diindenoperylene-gold interfaces. *Physical Review B*, **2003**, 68,	3.3	112
82	Organic molecular films on gold versus conducting polymer: Influence of injection barrier height and morphology on current□oltage characteristics. *Applied Physics Letters*, **2003**, 82, 2281-2283	3.4	91
81	Lack of thermodynamic equilibrium in conjugated organic molecular thin films. *Physical Review B*, **2003**, 67,	3.3	28
80	Electronic structure and current injection in zinc phthalocyanine doped with tetrafluorotetracyanoquinodimethane: Interface versus bulk effects. *Organic Electronics*, **2002**, 3, 53-63	3.5	237
79	Electronic polarization at surfaces and thin films of organic molecular crystals: PTCDA. *Chemical Physics Letters*, **2002**, 360, 47-52	2.5	237
78	Physisorption-like Interaction at the Interfaces Formed by Pentacene and Samarium. *Journal of Physical Chemistry B*, **2002**, 106, 4192-4196	3.4	56
77	The vibrational reorganization energy in pentacene: molecular influences on charge transport. *Journal of the American Chemical Society*, **2002**, 124, 7918-9	16.4	376
76	The role of interface states in controlling the electronic structure of Alq3/reactive metal contacts. *Organic Electronics*, **2001**, 2, 89-95	3.5	75
75	Controlled p-doping of zinc phthalocyanine by coevaporation with tetrafluorotetracyanoquinodimethane: A direct and inverse photoemission study. *Applied Physics Letters*, **2001**, 79, 4040-4042	3.4	307
74	Electronic structure, diffusion, and p-doping at the Au/F16CuPc interface. *Journal of Applied Physics* , **2001**, 90, 4549-4554	2.5	103
73	Role of metal□olecule chemistry and interdiffusion on the electrical properties of an organic interface: The Al□16CuPc case. *Journal of Applied Physics*, **2001**, 90, 6236-6242	2.5	47
72	Lithium doping of semiconducting organic charge transport materials. *Journal of Applied Physics*, **2001**, 89, 4986-4992	2.5	295
71	Chemical and electrical properties of interfaces between magnesium and aluminum and tris-(8-hydroxy quinoline) aluminum. *Journal of Applied Physics*, **2001**, 89, 449-459	2.5	134
70	Interaction and Energy Level Alignment at Interfaces between Pentacene and Low Work Function Metals. *Materials Research Society Symposia Proceedings*, **2001**, 708, 241		2

69	Charge-separation energy in films of π-conjugated organic molecules. *Chemical Physics Letters*, **2000**, 327, 181-188	2.5	665
68	Metal-dependent charge transfer and chemical interaction at interfaces between 3,4,9,10-perylenetetracarboxylic bisimidazole and gold, silver and magnesium. *Organic Electronics*, **2000**, 1, 5-13	3.5	144
67	Organic semiconductor interfaces: electronic structure and transport properties. *Applied Surface Science*, **2000**, 166, 354-362	6.7	255
66	Occupied and unoccupied electronic levels in organic π-conjugated molecules: comparison between experiment and theory. *Chemical Physics Letters*, **2000**, 317, 444-450	2.5	119
65	The Influence of Steps on the Orientation of Copper Phthalocyanine Monolayers on Au(111). *Langmuir*, **2000**, 16, 4358-4361	4	105
64	Organometallic Chemistry at the Magnesium−Tris(8-hydroxyquinolino)aluminum Interface. *Journal of the American Chemical Society*, **2000**, 122, 5391-5392	16.4	60
63	Surface oxidation activates indium tin oxide for hole injection. *Journal of Applied Physics*, **2000**, 87, 572-576	2.5	254
62	Transparent stacked organic light emitting devices. I. Design principles and transparent compound electrodes. *Journal of Applied Physics*, **1999**, 86, 4067-4075	2.5	73
61	Negative electron affinity at the Cs/AlN(0001) surface. *Applied Physics Letters*, **1999**, 74, 1433-1435	3.4	28
60	Role of Electrode Contamination in Electron Injection at Mg:Ag/Alq3 Interfaces. *Advanced Materials* , **1999**, 11, 1523-1527	24	29
59	Combined photoemission/in vacuo transport study of the indium tin oxide/copper phthalocyanine/N,N?-diphenyl-N,N?-bis(l-naphthyl)-1,1?biphenyl-4,4?diamine molecular organic semiconductor system. *Journal of Applied Physics*, **1999**, 86, 2116-2122	2.5	136
58	Electronic states at aluminum nitride (0001)-1×1 surfaces. *Applied Physics Letters*, **1999**, 74, 546-548	3.4	61
57	Band alignment at organic-inorganic semiconductor interfaces: α-NPD and CuPc on InP(110). *Journal of Applied Physics*, **1999**, 85, 6589-6592	2.5	107
56	Electronic states and effective negative electron affinity at cesiated p-GaN surfaces. *Journal of Applied Physics*, **1999**, 86, 3209-3212	2.5	95
55	Organic semiconductor heterointerfaces containing bathocuproine. *Journal of Applied Physics*, **1999** , 86, 4515-4519	2.5	141
54	Molecular-Level Offset at the PTCDA/Alq3 Heterojunction. *Advanced Materials*, **1998**, 10, 140-144	24	56
53	Energy level offset at organic semiconductor heterojunctions. *Journal of Applied Physics*, **1998**, 83, 2649-2655	2.5	162
52	Molecular level alignment at organic semiconductor-metal interfaces. *Applied Physics Letters*, **1998**, 73, 662-664	3.4	402

51	Energy level alignment at interfaces of organic semiconductor heterostructures. *Journal of Applied Physics*, **1998**, 84, 5583-5586	2.5	138
50	Energy-level alignment at interfaces between metals and the organic semiconductor 4,4?-N,N?-dicarbazolyl-biphenyl. *Journal of Applied Physics*, **1998**, 84, 3236-3241	2.5	101
49	GaN (0001)-(1□1) surfaces: Composition and electronic properties. *Journal of Applied Physics*, **1998**, 83, 4249-4252	2.5	112
48	Photoemission spectroscopy investigation of magnesium□Alq3 interfaces. *Journal of Applied Physics*, **1998**, 84, 355-358	2.5	156
47	Structural and Spectroscopic Investigation of the In-Terminated InAs(100) (4 □2)/c(8 □2) Reconstruction. *Surface Review and Letters*, **1998**, 05, 229-234	1.1	1
46	Growth of the Organic Molecular Semiconductor PTCDA on Se-Passivated GaAs(100): An STM Study. *Surface Review and Letters*, **1998**, 05, 289-293	1.1	13
45	Electronic Properties of Metal-Organic Interfaces with Application to Electroluminescent Devices. *Molecular Crystals and Liquid Crystals*, **1998**, 322, 245-252		7
44	Self-passivated copper gates for amorphous silicon thin-film transistors. *IEEE Electron Device Letters*, **1997**, 18, 388-390	4.4	37
43	Surface modification of indium tin oxide by plasma treatment: An effective method to improve the efficiency, brightness, and reliability of organic light emitting devices. *Applied Physics Letters*, **1997**, 70, 1348-1350	3.4	616
42	Electron-hole interaction energy in the organic molecular semiconductor PTCDA. *Chemical Physics Letters*, **1997**, 272, 43-47	2.5	123
41	Chemistry and electronic properties of metal-organic semiconductor interfaces: Al, Ti, In, Sn, Ag, and Au on PTCDA. *Physical Review B*, **1996**, 54, 13748-13758	3.3	286
40	Self-Passivated Copper Gates For Thin Film Silicon Transistors. *Materials Research Society Symposia Proceedings*, **1996**, 446, 59		2
39	Chemistry, diffusion, and electronic properties of a metal/organic semiconductor contact: In/perylenetetracarboxylic dianhydride. *Applied Physics Letters*, **1996**, 68, 217-219	3.4	124
38	ATOMIC STRUCTURE OF (100) SURFACES OF ZINCBLENDE COMPOUND SEMICONDUCTORS. *Surface Review and Letters*, **1996**, 03, 1579-1595	1.1	10
37	Ordered, quasiepitaxial growth of an organic thin film on Se-passivated GaAs(100). *Applied Physics Letters*, **1995**, 66, 944-946	3.4	42
36	Surface relaxation of PbTe(100). *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1995**, 13, 1378-1381	2.9	8
35	Band lineup at an organic-inorganic semiconductor heterointerface: perylenetetracarboxylic dianhydride/GaAs(100). *Applied Physics Letters*, **1994**, 64, 3482-3484	3.4	69
34	Growth of GaAs / Ca0.5Sr0 5F2 / (100) GaAs by Molecular Beam Epitaxy. *Materials Research Society Symposia Proceedings*, **1991**, 221, 175		

33	High-resolution synchrotron-radiation core-level spectroscopy of decapped GaAs(100) surfaces. *Physical Review B*, **1991**, 43, 14301-14304	3.3	122
32	Synchrotron-radiation-induced surface photovoltage on GaAs studied by contact-potential-difference measurements. *Physical Review B*, **1990**, 42, 3228-3230	3.3	42
31	Adsorption geometry and overlayer morphology in the formation of interfaces between metals and (110) III□V surfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1990**, 8, 2068-2073	2.9	7
30	Overlayer morphology and metallicity: Formation of In/GaSb(110) barriers at room and low temperature. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1990**, 8, 1988-1992	2.9	7
29	Formation of the Ca/GaAs(110) interface. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1989**, 7, 744-748	2.9	5
28	Structural studies of (331) GaAs surface. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1989**, 7, 2039-2043	2.9	5
27	Elastic electron fine-structure investigation of oxygen interaction with the Si(111) surface. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1989**, 7, 1841-1844	2.9	4
26	Mbe Growth pf Ca5Sr5F2 on (100), (111), (511), and (711) GaAs Surfaces. *Materials Research Society Symposia Proceedings*, **1989**, 148, 185		1
25	Correlation between EF pinning and development of metallic character in Ag overlayers on GaAs(110). *Physical Review Letters*, **1988**, 60, 440-443	7.4	145
24	Overlayer metallicity and Fermi-level pinning at the Ca-GaAs(110) interface. *Journal of Applied Physics*, **1988**, 64, 4777-4780	2.5	6
23	Elastic electron fine structure: Application to the study of local order. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1988**, 6, 2085-2088	2.9	7
22	Summary Abstract: Low-energy electron diffraction, Auger electron spectroscopy, and electron energy-loss spectroscopy studies of (511) and (711) GaAs surfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1987**, 5, 654-655	2.9	3
21	Electron energy loss spectroscopy and work function measurements on Sb/GaAs(110): Example of an unpinned interface?. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1986**, 4, 958-961	2.9	23
20	Atomic and electronic structure of the (311) surfaces of GaAs. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1986**, 4, 947-952	2.9	18
19	Summary Abstract: Aluminum deposition on low-temperature GaAs. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1986**, 4, 882-883	2.9	5
18	ZnSe□and Se□GaAs interfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1985**, 3, 922-925	2.9	68
17	Surface order and stoichiometry of sputter-cleaned and annealed CuInSe2. *Journal of Applied Physics*, **1985**, 57, 2967-2969	2.5	37
16	Summary Abstract: GaAs(110)□Al interfaces formed at low temperature. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1984**, 2, 566-567	2.9	3

15	LEED and AES characterization of the GaAs(110)/ZnSe interface. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1984**, 2, 511-514	2.9	10
14	The atomic geometries of GaP(110) and ZnS(110) revisited: A structural ambiguity and its resolution. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1984**, 2, 515-518	2.9	39
13	Semiconductor surface structures. *Surface Science Reports*, **1983**, 3, 193-300	12.9	243
12	An AES/LEED study of the Al/GaP(110) interface. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1983**, 1, 588-591	2.9	5
11	Atomic geometries of compound semiconductor surfaces and interfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1983**, 1, 684-691	2.9	26
10	Comparison of the atomic geometries of GaSb(110) and ZnTe(110): Failure of ionicity-structure correlations. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1983**, 1, 672-675	2.9	23
9	Dynamical analysis of low-energy electron diffraction intensities from GaAs(110)-p(1×1)-Sb(1 ML). *Physical Review B*, **1982**, 26, 803-814	3.3	162
8	Summary Abstract: Surface atomic geometry of CdTe(110). *Journal of Vacuum Science and Technology*, **1982**, 20, 778-779		11
7	Analysis of low-energy electron diffraction intensities from ZnS(110). *Journal of Vacuum Science and Technology*, **1981**, 18, 866-870		27
6	Surface atomic geometry of covalently bonded semiconductors: InSb(110) and its comparison with GaAs(110) and ZnTe(110). *Journal of Vacuum Science and Technology*, **1980**, 17, 501-505		23
5	The structure, chemistry, and spectroscopy of the surfaces of tetrahedrally coordinated semiconductors. *Critical Reviews in Solid State and Materials Sciences*, **1979**, 8, 317-381	10.1	11
4	Structure determination for the (110) surface of zincblende structure compound semiconductors. *Journal of Vacuum Science and Technology*, **1979**, 16, 1252-1257		46
3	Dynamical calculation of low-energy electron diffraction intensities from GaAs(110): Influence of boundary conditions, exchange potential, lattice vibrations, and multilayer reconstructions. *Physical Review B*, **1979**, 19, 5194-5205	3.3	134
2	Atomic structure of the annealed Ge(111) surface. *Journal of Vacuum Science and Technology*, **1978**, 15, 1143-1145		20
1	Nonradiative Recombination via Charge-Transfer-Exciton to Polaron Energy Transfer Limits Photocurrent in Organic Solar Cells. *Advanced Energy Materials*,2200551	21.8	1