

Laura M Herz

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2213187/laura-m-herz-publications-by-year.pdf>
Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

189 papers	33,391 citations	68 h-index	182 g-index
226 ext. papers	37,853 ext. citations	12.7 avg, IF	7.74 L-index

#	Paper	IF	Citations
189	Atomically Resolved Electrically Active Intragrain Interfaces in Perovskite Semiconductors.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	7
188	Optoelectronic Properties of Mixed Iodide-Bromide Perovskites from First-Principles Computational Modeling and Experiment.. <i>Journal of Physical Chemistry Letters</i> , 2022 , 4184-4192	6.4	2
187	Chemical Control of the Dimensionality of the Octahedral Network of Solar Absorbers from the CuI-AgI-BiI Phase Space by Synthesis of 3D CuAgBiI. <i>Inorganic Chemistry</i> , 2021 , 60, 18154-18167	5.1	0
186	Phase segregation in mixed-halide perovskites affects charge-carrier dynamics while preserving mobility. <i>Nature Communications</i> , 2021 , 12, 6955	17.4	16
185	Roadmap on organic/inorganic hybrid perovskite semiconductors and devices. <i>APL Materials</i> , 2021 , 9, 109202	5.7	28
184	Nanotechnology for catalysis and solar energy conversion. <i>Nanotechnology</i> , 2021 , 32, 042003	3.4	24
183	Ultrafast Excited-State Localization in CsAgBiBr Double Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 3352-3360	6.4	25
182	Crystallization of CsPbBr single crystals in water for X-ray detection. <i>Nature Communications</i> , 2021 , 12, 1531	17.4	55
181	Highly Absorbing Lead-Free Semiconductor CuAgBiI for Photovoltaic Applications from the Quaternary CuI-AgI-BiI Phase Space. <i>Journal of the American Chemical Society</i> , 2021 , 143, 3983-3992	16.4	16
180	Charge-Carrier Mobility and Localization in Semiconducting CuAgBiI for Photovoltaic Applications. <i>ACS Energy Letters</i> , 2021 , 6, 1729-1739	20.1	14
179	Limits to Electrical Mobility in Lead-Halide Perovskite Semiconductors. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 3607-3617	6.4	14
178	Polarons and Charge Localization in Metal-Halide Semiconductors for Photovoltaic and Light-Emitting Devices. <i>Advanced Materials</i> , 2021 , 33, e2007057	24	15
177	Optoelectronic Properties of Tin-Lead Halide Perovskites. <i>ACS Energy Letters</i> , 2021 , 6, 2413-2426	20.1	26
176	Halide Segregation in Mixed-Halide Perovskites: Influence of A-Site Cations. <i>ACS Energy Letters</i> , 2021 , 6, 799-808	20.1	46
175	The atomic-scale microstructure of metal halide perovskite elucidated via low-dose electron microscopy. <i>Microscopy and Microanalysis</i> , 2021 , 27, 966-968	0.5	
174	Revealing Ultrafast Charge-Carrier Thermalization in Tin-Iodide Perovskites through Novel Pump-Push-Probe Terahertz Spectroscopy. <i>ACS Photonics</i> , 2021 , 8, 2509-2518	6.3	5
173	Ultrafast photo-induced phonon hardening due to Pauli blocking in MAPbI ₃ single-crystal and polycrystalline perovskites. <i>JPhys Materials</i> , 2021 , 4, 044017	4.2	0

172	Preventing phase segregation in mixed-halide perovskites: a perspective. <i>Energy and Environmental Science</i> , 2020 , 13, 2024-2046	35.4	107
171	Understanding the Performance-Limiting Factors of Cs ₂ AgBiBr ₆ Double-Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2200-2207	20.1	84
170	CsPbBr ₃ Nanocrystal Films: Deviations from Bulk Vibrational and Optoelectronic Properties. <i>Advanced Functional Materials</i> , 2020 , 30, 1909904	15.6	17
169	Trap States, Electric Fields, and Phase Segregation in Mixed-Halide Perovskite Photovoltaic Devices. <i>Advanced Energy Materials</i> , 2020 , 10, 1903488	21.8	39
168	Three-dimensional cross-nanowire networks recover full terahertz state. <i>Science</i> , 2020 , 368, 510-513	33.3	36
167	Metal composition influences optoelectronic quality in mixed-metal lead-free triiodide perovskite solar absorbers. <i>Energy and Environmental Science</i> , 2020 , 13, 1776-1787	35.4	50
166	Postpassivation of Multication Perovskite with Rubidium Butyrate. <i>ACS Photonics</i> , 2020 , 7, 2282-2291	6.3	8
165	Control over Crystal Size in Vapor Deposited Metal-Halide Perovskite Films. <i>ACS Energy Letters</i> , 2020 , 5, 710-717	20.1	42
164	Terahertz Conductivity Analysis for Highly Doped Thin-Film Semiconductors. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2020 , 41, 1431-1449	2.2	12
163	Efficient energy transfer mitigates parasitic light absorption in molecular charge-extraction layers for perovskite solar cells. <i>Nature Communications</i> , 2020 , 11, 5525	17.4	6
162	Atomic-scale microstructure of metal halide perovskite. <i>Science</i> , 2020 , 370,	33.3	86
161	Impact of Tin Fluoride Additive on the Properties of Mixed Tin-Lead Iodide Perovskite Semiconductors. <i>Advanced Functional Materials</i> , 2020 , 30, 2005594	15.6	26
160	Intrinsic quantum confinement in formamidinium lead triiodide perovskite. <i>Nature Materials</i> , 2020 , 19, 1201-1206	27	10
159	Charge-Carrier Trapping and Radiative Recombination in Metal Halide Perovskite Semiconductors. <i>Advanced Functional Materials</i> , 2020 , 30, 2004312	15.6	27
158	Charge-Carrier Trapping Dynamics in Bismuth-Doped Thin Films of MAPbBr Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 3681-3688	6.4	27
157	Light Absorption and Recycling in Hybrid Metal Halide Perovskite Photovoltaic Devices. <i>Advanced Energy Materials</i> , 2020 , 10, 1903653	21.8	17
156	Charge-Carrier Cooling and Polarization Memory Loss in Formamidinium Tin Triiodide. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 6038-6047	6.4	12
155	Effect of Ultraviolet Radiation on Organic Photovoltaic Materials and Devices. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 21543-21551	9.5	19

154	Charge-Carrier Dynamics, Mobilities, and Diffusion Lengths of 2D/3D Hybrid Butylammonium/Cesium Formamidinium Lead Halide Perovskites. <i>Advanced Functional Materials</i> , 2019 , 29, 1902656	15.6	22
153	Heterogeneous Photon Recycling and Charge Diffusion Enhance Charge Transport in Quasi-2D Lead-Halide Perovskite Films. <i>Nano Letters</i> , 2019 , 19, 3953-3960	11.5	50
152	Tuning the Circumference of Six-Porphyrin Nanorings. <i>Journal of the American Chemical Society</i> , 2019 , 141, 7965-7971	16.4	17
151	How π -Phase Content Moderates Chain Conjugation and Energy Transfer in Polyfluorene Films. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 1729-1736	6.4	19
150	Aromaticity and Antiaromaticity in the Excited States of Porphyrin Nanorings. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2017-2022	6.4	25
149	Impurity Tracking Enables Enhanced Control and Reproducibility of Hybrid Perovskite Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 28851-28857	9.5	28
148	Growth modes and quantum confinement in ultrathin vapour-deposited MAPbI ₃ films. <i>Nanoscale</i> , 2019 , 11, 14276-14284	7.7	29
147	Dual-Source Coevaporation of Low-Bandgap FA _{1-x} Cs _x SnI ₃ /PbI ₃ Perovskites for Photovoltaics. <i>ACS Energy Letters</i> , 2019 , 4, 2748-2756	20.1	37
146	Unveiling Temperature-Dependent Scattering Mechanisms in Semiconductor Nanowires Using Optical-Pump Terahertz-Probe Spectroscopy 2019 ,		2
145	Structural and Optical Properties of Cs ₂ AgBiBr ₆ Double Perovskite. <i>ACS Energy Letters</i> , 2019 , 4, 299-305	20.1	78
144	Electronic Traps and Phase Segregation in Lead Mixed-Halide Perovskite. <i>ACS Energy Letters</i> , 2019 , 4, 75-84	20.1	134
143	Solution-Processed All-Perovskite Multi-junction Solar Cells. <i>Joule</i> , 2019 , 3, 387-401	27.8	109
142	Template-Directed Synthesis of a Conjugated Zinc Porphyrin Nanoball. <i>Journal of the American Chemical Society</i> , 2018 , 140, 5352-5355	16.4	50
141	Hybrid Perovskites: Prospects for Concentrator Solar Cells. <i>Advanced Science</i> , 2018 , 5, 1700792	13.6	54
140	Bimolecular recombination in methylammonium lead triiodide perovskite is an inverse absorption process. <i>Nature Communications</i> , 2018 , 9, 293	17.4	175
139	Photocurrent Spectroscopy of Perovskite Solar Cells Over a Wide Temperature Range from 15 to 350 K. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 263-268	6.4	17
138	High Electron Mobility and Insights into Temperature-Dependent Scattering Mechanisms in InAsSb Nanowires. <i>Nano Letters</i> , 2018 , 18, 3703-3710	11.5	22
137	Highly Crystalline Methylammonium Lead Tribromide Perovskite Films for Efficient Photovoltaic Devices. <i>ACS Energy Letters</i> , 2018 , 3, 1233-1240	20.1	43

136	Interplay of Structural and Optoelectronic Properties in Formamidinium Mixed TinLead Triiodide Perovskites. <i>Advanced Functional Materials</i> , 2018 , 28, 1802803	15.6	45
135	High irradiance performance of metal halide perovskites for concentrator photovoltaics. <i>Nature Energy</i> , 2018 , 3, 855-861	62.3	140
134	Impact of the Organic Cation on the Optoelectronic Properties of Formamidinium Lead Triiodide. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 4502-4511	6.4	34
133	Modification of the fluorinated tin oxide/electron-transporting material interface by a strong reductant and its effect on perovskite solar cell efficiency. <i>Molecular Systems Design and Engineering</i> , 2018 , 3, 741-747	4.6	7
132	Temperature-Dependent Refractive Index of Quartz at Terahertz Frequencies. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2018 , 39, 1236-1248	2.2	37
131	How Lattice Dynamics Moderate the Electronic Properties of Metal-Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 6853-6863	6.4	92
130	The Effects of Doping Density and Temperature on the Optoelectronic Properties of Formamidinium Tin Triiodide Thin Films. <i>Advanced Materials</i> , 2018 , 30, e1804506	24	94
129	Raman Spectrum of the OrganicInorganic Halide Perovskite CH ₃ NH ₃ PbI ₃ from First Principles and High-Resolution Low-Temperature Raman Measurements. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 21703-21717	3.8	53
128	CsInAgCl: A New Lead-Free Halide Double Perovskite with Direct Band Gap. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 772-778	6.4	494
127	The influence of surfaces on the transient terahertz conductivity and electron mobility of GaAs nanowires. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 224001	3	17
126	Towards higher electron mobility in modulation doped GaAs/AlGaAs core shell nanowires. <i>Nanoscale</i> , 2017 , 9, 7839-7846	7.7	10
125	Crystallization Kinetics and Morphology Control of Formamidinium-Cesium Mixed-Cation Lead Mixed-Halide Perovskite via Tunability of the Colloidal Precursor Solution. <i>Advanced Materials</i> , 2017 , 29, 1607039	24	197
124	Charge-Carrier Mobilities in Metal Halide Perovskites: Fundamental Mechanisms and Limits. <i>ACS Energy Letters</i> , 2017 , 2, 1539-1548	20.1	621
123	Influence of Interface Morphology on Hysteresis in Vapor-Deposited Perovskite Solar Cells. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600470	6.4	53
122	Photovoltaic mixed-cation lead mixed-halide perovskites: links between crystallinity, photo-stability and electronic properties. <i>Energy and Environmental Science</i> , 2017 , 10, 361-369	35.4	362
121	The entangled triplet pair state in acene and heteroacene materials. <i>Nature Communications</i> , 2017 , 8, 15953	17.4	133
120	Near-Infrared and Short-Wavelength Infrared Photodiodes Based on DyePerovskite Composites. <i>Advanced Functional Materials</i> , 2017 , 27, 1702485	15.6	43
119	Photon Reabsorption Masks Intrinsic Bimolecular Charge-Carrier Recombination in CHNHPbI Perovskite. <i>Nano Letters</i> , 2017 , 17, 5782-5789	11.5	108

118	Efficient ambient-air-stable solar cells with 2D/3D heterostructured butylammonium-caesium-formamidinium lead halide perovskites. <i>Nature Energy</i> , 2017 , 2, 1860	62.3	901
117	Large-Area, Highly Uniform Evaporated Formamidinium Lead Triiodide Thin Films for Solar Cells. <i>ACS Energy Letters</i> , 2017 , 2, 2799-2804	20.1	86
116	Band-Tail Recombination in Hybrid Lead Iodide Perovskite. <i>Advanced Functional Materials</i> , 2017 , 27, 1700860	18.6	94
115	Electron-phonon coupling in hybrid lead halide perovskites. <i>Nature Communications</i> , 2016 , 7, 11611	17.4	668
114	Perovskite-perovskite tandem photovoltaics with optimized band gaps. <i>Science</i> , 2016 , 354, 861-865	33.3	865
113	Synthesis of Five-Porphyrin Nanorings by Using Ferrocene and Corannulene Templates. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 8358-62	16.4	42
112	Structured Organic-Inorganic Perovskite toward a Distributed Feedback Laser. <i>Advanced Materials</i> , 2016 , 28, 923-9	24	209
111	Formation Dynamics of CH ₃ NH ₃ PbI ₃ Perovskite Following Two-Step Layer Deposition. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 96-102	6.4	82
110	Hybrid Perovskites for Photovoltaics: Charge-Carrier Recombination, Diffusion, and Radiative Efficiencies. <i>Accounts of Chemical Research</i> , 2016 , 49, 146-54	24.3	645
109	Effect of Structural Phase Transition on Charge-Carrier Lifetimes and Defects in CH ₃ NH ₃ SnI ₃ Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 1321-6	6.4	105
108	Charge-Carrier Dynamics in Organic-Inorganic Metal Halide Perovskites. <i>Annual Review of Physical Chemistry</i> , 2016 , 67, 65-89	15.7	466
107	Increased Photoconductivity Lifetime in GaAs Nanowires by Controlled n-Type and p-Type Doping. <i>ACS Nano</i> , 2016 , 10, 4219-27	16.7	51
106	A mixed-cation lead mixed-halide perovskite absorber for tandem solar cells. <i>Science</i> , 2016 , 351, 151-5	33.3	2024
105	Breaking the Symmetry in Molecular Nanorings. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 332-8	6.4	19
104	Synthesis of Five-Porphyrin Nanorings by Using Ferrocene and Corannulene Templates. <i>Angewandte Chemie</i> , 2016 , 128, 8498-8502	3.6	18
103	Preface for Special Topic: Perovskite solar cells: A research update. <i>APL Materials</i> , 2016 , 4, 091201	5.7	
102	Size-Independent Energy Transfer in Biomimetic Nanoring Complexes. <i>ACS Nano</i> , 2016 , 10, 5933-40	16.7	18
101	Charge-Carrier Dynamics in 2D Hybrid Metal-Halide Perovskites. <i>Nano Letters</i> , 2016 , 16, 7001-7007	11.5	327

100	Radiative Monomolecular Recombination Boosts Amplified Spontaneous Emission in HC(NH)SnI Perovskite Films. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 4178-4184	6.4	78
99	Structure-Directed Exciton Dynamics in Templated Molecular Nanorings. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 6414-6420	3.8	23
98	Enhanced Amplified Spontaneous Emission in Perovskites Using a Flexible Cholesteric Liquid Crystal Reflector. <i>Nano Letters</i> , 2015 , 15, 4935-41	11.5	97
97	Fast Charge-Carrier Trapping in TiO ₂ Nanotubes. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 9159-9168	3.8	42
96	Charge selective contacts, mobile ions and anomalous hysteresis in organic/inorganic perovskite solar cells. <i>Materials Horizons</i> , 2015 , 2, 315-322	14.4	338
95	A Molecular Nanotube with Three-Dimensional π -Conjugation. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 7344-8	16.4	77
94	Self-Assembly of Russian Doll Concentric Porphyrin Nanorings. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12713-8	16.4	87
93	Vibrational Properties of the Organic/Inorganic Halide Perovskite CH ₃ NH ₃ PbI ₃ from Theory and Experiment: Factor Group Analysis, First-Principles Calculations, and Low-Temperature Infrared Spectra. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 25703-25718	3.8	220
92	Low ensemble disorder in quantum well tube nanowires. <i>Nanoscale</i> , 2015 , 7, 20531-8	7.7	11
91	Six-Coordinate Zinc Porphyrins for Template-Directed Synthesis of Spiro-Fused Nanorings. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14256-9	16.4	67
90	Ultrafast delocalization of excitation in synthetic light-harvesting nanorings. <i>Chemical Science</i> , 2015 , 6, 181-189	9.4	90
89	Charge-Carrier Dynamics and Mobilities in Formamidinium Lead Mixed-Halide Perovskites. <i>Advanced Materials</i> , 2015 , 27, 7938-44	24	276
88	A Molecular Nanotube with Three-Dimensional π -Conjugation. <i>Angewandte Chemie</i> , 2015 , 127, 7452-7456	3.6	27
87	Temperature-Dependent Charge-Carrier Dynamics in CH ₃ NH ₃ PbI ₃ Perovskite Thin Films. <i>Advanced Functional Materials</i> , 2015 , 25, 6218-6227	15.6	645
86	Rapid Energy Transfer Enabling Control of Emission Polarization in Perylene Bisimide Donor-Acceptor Triads. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1170-6	6.4	21
85	Identification of a triplet pair intermediate in singlet exciton fission in solution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 7656-61	11.5	151
84	Modulation doping of GaAs/AlGaAs core-shell nanowires with effective defect passivation and high electron mobility. <i>Nano Letters</i> , 2015 , 15, 1336-42	11.5	69
83	High charge carrier mobilities and lifetimes in organolead trihalide perovskites. <i>Advanced Materials</i> , 2014 , 26, 1584-9	24	2282

82	Lead-free organic/inorganic tin halide perovskites for photovoltaic applications. <i>Energy and Environmental Science</i> , 2014 , 7, 3061-3068	35.4	1635
81	Homogeneous Emission Line Broadening in the Organo Lead Halide Perovskite CH ₃ NH ₃ PbI _{3-x} Cl _x . <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1300-6	6.4	286
80	Formamidinium lead trihalide: a broadly tunable perovskite for efficient planar heterojunction solar cells. <i>Energy and Environmental Science</i> , 2014 , 7, 982	35.4	2706
79	Impact of Molecular Charge-Transfer States on Photocurrent Generation in Solid State Dye-Sensitized Solar Cells Employing Low-Band-Gap Dyes. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 16825-16830	3.8	10
78	Effect of Nanocrystalline Domains in Photovoltaic Devices with Benzodithiophene-Based Donor/Acceptor Copolymers. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 17351-17361	3.8	8
77	Charge carrier recombination channels in the low-temperature phase of organic-inorganic lead halide perovskite thin films. <i>APL Materials</i> , 2014 , 2, 081513	5.7	170
76	Electron mobilities approaching bulk limits in "surface-free" GaAs nanowires. <i>Nano Letters</i> , 2014 , 14, 5989-94	11.5	64
75	Charge-carrier dynamics in vapour-deposited films of the organolead halide perovskite CH ₃ NH ₃ PbI _{3-x} Cl _x . <i>Energy and Environmental Science</i> , 2014 , 7, 2269-2275	35.4	378
74	Dichroic Perylene Bisimide Triad Displaying Energy Transfer in Switchable Luminescent Solar Concentrators. <i>Chemistry of Materials</i> , 2014 , 26, 3876-3878	9.6	37
73	Ultrafast energy transfer in biomimetic multistrand nanorings. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8217-20	16.4	67
72	Combining Positive and Negative Dichroic Fluorophores for Advanced Light Management in Luminescent Solar Concentrators. <i>Advanced Optical Materials</i> , 2014 , 2, 687-693	8.1	22
71	An ultrafast carbon nanotube terahertz polarisation modulator. <i>Journal of Applied Physics</i> , 2014 , 115, 203108	2.5	25
70	Chromophores in Molecular Nanorings: When Is a Ring a Ring?. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 4356-61	6.4	59
69	Ultrafast transient terahertz conductivity of monolayer MoS ₂ and WSe ₂ grown by chemical vapor deposition. <i>ACS Nano</i> , 2014 , 8, 11147-53	16.7	161
68	Dependence of Dye Regeneration and Charge Collection on the Pore-Filling Fraction in Solid-State Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , 2014 , 24, 668-677	15.6	27
67	Electron-hole diffusion lengths exceeding 1 micrometer in an organometal trihalide perovskite absorber. <i>Science</i> , 2013 , 342, 341-4	33.3	7280
66	Optimizing the Energy Offset between Dye and Hole-Transporting Material in Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 19850-19858	3.8	18
65	Electronic properties of GaAs, InAs and InP nanowires studied by terahertz spectroscopy. <i>Nanotechnology</i> , 2013 , 24, 214006	3.4	205

64	Side chains control dynamics and self-sorting in fluorescent organic nanoparticles. <i>ACS Nano</i> , 2013 , 7, 408-16	16.7	52
63	Direct observation of charge-carrier heating at WZ-ZB InP nanowire heterojunctions. <i>Nano Letters</i> , 2013 , 13, 4280-7	11.5	22
62	Strong carrier lifetime enhancement in GaAs nanowires coated with semiconducting polymer. <i>Nano Letters</i> , 2012 , 12, 6293-301	11.5	52
61	Energy transfer processes along a supramolecular chain of π -conjugated molecules. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2012 , 370, 3787-801	3	9
60	Extreme sensitivity of graphene photoconductivity to environmental gases. <i>Nature Communications</i> , 2012 , 3, 1228	17.4	94
59	The origin of an efficiency improving light soaking effect in SnO ₂ based solid-state dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2012 , 5, 9566	35.4	56
58	Ultralow surface recombination velocity in InP nanowires probed by terahertz spectroscopy. <i>Nano Letters</i> , 2012 , 12, 5325-30	11.5	127
57	Morphology-dependent energy transfer dynamics in fluorene-based amphiphile nanoparticles. <i>ACS Nano</i> , 2012 , 6, 4777-87	16.7	37
56	Unraveling the Function of an MgO Interlayer in Both Electrolyte and Solid-State SnO ₂ Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 22840-22846	3.8	52
55	Noncontact measurement of charge carrier lifetime and mobility in GaN nanowires. <i>Nano Letters</i> , 2012 , 12, 4600-4	11.5	51
54	Nanoengineering coaxial carbon nanotube-dual-polymer heterostructures. <i>ACS Nano</i> , 2012 , 6, 6058-66	16.7	32
53	Ultrafast dynamics of exciton formation in semiconductor nanowires. <i>Small</i> , 2012 , 8, 1725-31	11	15
52	Surface Energy Relay Between Cosensitized Molecules in Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 23204-23208	3.8	28
51	Electron mobility and injection dynamics in mesoporous ZnO, SnO ₂ and TiO ₂ films used in dye-sensitized solar cells. <i>ACS Nano</i> , 2011 , 5, 5158-66	16.7	602
50	Energy Transfer in Single-Stranded DNA-Templated Stacks of Naphthalene Chromophores. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 10550-10560	3.8	11
49	Belt-shaped π -systems: relating geometry to electronic structure in a six-porphyrin nanoring. <i>Journal of the American Chemical Society</i> , 2011 , 133, 17262-73	16.4	181
48	Directing energy transfer in discrete one-dimensional oligonucleotide-templated assemblies. <i>Chemical Communications</i> , 2011 , 47, 884-6	5.8	33
47	Ultrafast charge separation at a polymer-single-walled carbon nanotube molecular junction. <i>Nano Letters</i> , 2011 , 11, 66-72	11.5	76

46	Ultrafast Charge Separation at a Single-walled Carbon Nanotube [Polymer Interface. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1286, 7		
45	Dynamic terahertz polarization in single-walled carbon nanotubes. <i>Physical Review B</i> , 2010 , 82,	3.3	21
44	Impact of nuclear lattice relaxation on the excitation energy transfer along a chain of π -conjugated molecules. <i>Physical Review B</i> , 2010 , 81,	3.3	11
43	Ultrafast Terahertz Conductivity Dynamics in Mesoporous TiO ₂ : Influence of Dye Sensitization and Surface Treatment in Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1365-1371	3.8	73
42	Role of Ultrafast Torsional Relaxation in the Emission from Polythiophene Aggregates. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 2788-2792	6.4	84
41	Terahertz Excitonic Response of Isolated Single-Walled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 18106-18109	3.8	34
40	Analyzing the molecular weight distribution in supramolecular polymers. <i>Journal of the American Chemical Society</i> , 2009 , 131, 17696-704	16.4	33
39	Carrier lifetime and mobility enhancement in nearly defect-free core-shell nanowires measured using time-resolved terahertz spectroscopy. <i>Nano Letters</i> , 2009 , 9, 3349-53	11.5	216
38	Dynamics of excited-state conformational relaxation and electronic delocalization in conjugated porphyrin oligomers. <i>Journal of the American Chemical Society</i> , 2008 , 130, 10171-8	16.4	84
37	Conductivity of nanoporous InP membranes investigated using terahertz spectroscopy. <i>Nanotechnology</i> , 2008 , 19, 395704	3.4	13
36	Mesoscopic order and the dimensionality of long-range resonance energy transfer in supramolecular semiconductors. <i>Journal of Chemical Physics</i> , 2008 , 129, 104701	3.9	16
35	Exciton dissociation in polymer field-effect transistors studied using terahertz spectroscopy. <i>Physical Review B</i> , 2008 , 77,	3.3	10
34	Efficient generation of charges via below-gap photoexcitation of polymer-fullerene blend films investigated by terahertz spectroscopy. <i>Physical Review B</i> , 2008 , 78,	3.3	88
33	Polarization anisotropy dynamics for thin films of a conjugated polymer aligned by nanoimprinting. <i>Physical Review B</i> , 2008 , 77,	3.3	27
32	Enhanced π conjugation around a porphyrin[6] nanoring. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 4993-6	16.4	166
31	Monte Carlo Simulation of Exciton Bimolecular Annihilation Dynamics in Supramolecular Semiconductor Architectures. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 19111-19119	3.8	13
30	Theory of non-Condon emission from the interchain exciton in conjugated polymer aggregates. <i>Journal of Chemical Physics</i> , 2007 , 126, 191102	3.9	22
29	Intermolecular interaction effects on the ultrafast depolarization of the optical emission from conjugated polymers. <i>Physical Review Letters</i> , 2007 , 98, 027402	7.4	52

28	Dimensionality-dependent energy transfer in polymer-intercalated SnS ₂ nanocomposites. <i>Physical Review B</i> , 2007 , 75,	3.3	18
27	Transient Terahertz Conductivity of GaAs Nanowires. <i>Nano Letters</i> , 2007 , 7, 2162-2165	11.5	156
26	Charge trapping in polymer transistors probed by terahertz spectroscopy and scanning probe potentiometry. <i>Applied Physics Letters</i> , 2006 , 89, 112101	3.4	13
25	Influence of copolymer interface orientation on the optical emission of polymeric semiconductor heterojunctions. <i>Physical Review Letters</i> , 2006 , 96, 117403	7.4	63
24	Photoexcitation dynamics in thin films of insulated molecular wires. <i>Applied Physics Letters</i> , 2006 , 89, 232110	3.4	14
23	Influence of mesoscopic ordering on the photoexcitation transfer dynamics in supramolecular assemblies of oligo-p-phenylenevinylene. <i>Chemical Physics Letters</i> , 2006 , 418, 196-201	2.5	32
22	Excitation migration along oligophenylenevinylene-based chiral stacks: delocalization effects on transport dynamics. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 10594-604	3.4	77
21	Exciton migration in rigid-rod conjugated polymers: an improved Förster model. <i>Journal of the American Chemical Society</i> , 2005 , 127, 4744-62	16.4	245
20	Chirality-dependent boron-mediated growth of nitrogen-doped single-walled carbon nanotubes. <i>Physical Review B</i> , 2005 , 72,	3.3	31
19	Exciton diffusion dynamics in an organic semiconductor nanostructure. <i>Springer Series in Chemical Physics</i> , 2005 , 281-283	0.3	
18	The effects of supramolecular assembly on exciton decay rates in organic semiconductors. <i>Journal of Chemical Physics</i> , 2005 , 123, 084902	3.9	15
17	Morphology-dependent energy transfer within polyfluorene thin films. <i>Physical Review B</i> , 2004 , 69,	3.3	201
16	Time-dependent energy transfer rates in a conjugated polymer guest-host system. <i>Physical Review B</i> , 2004 , 70,	3.3	61
15	Efficient energy transfer in mixed columnar stacks of hydrogen-bonded oligo(p-phenylene vinylene)s in solution. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 1976-9	16.4	94
14	Towards supramolecular electronics. <i>Synthetic Metals</i> , 2004 , 147, 43-48	3.6	43
13	Resonance energy transfer dynamics in hydrogen-bonded oligo-p-phenylenevinylene nanostructures. <i>Synthetic Metals</i> , 2004 , 147, 29-35	3.6	11
12	Exciton regeneration at polymeric semiconductor heterojunctions. <i>Physical Review Letters</i> , 2004 , 92, 247402	7.4	375
11	Low-energy vibrational modes in phenylene oligomers studied by THz time-domain spectroscopy. <i>Chemical Physics Letters</i> , 2003 , 377, 256-262	2.5	78

10	Exciton dynamics in supramolecular assemblies of p-phenylenevinylene oligomers. <i>Synthetic Metals</i> , 2003 , 139, 839-842	3.6	8
9	Exciton bimolecular annihilation dynamics in supramolecular nanostructures of conjugated oligomers. <i>Physical Review B</i> , 2003 , 68,	3.3	44
8	Fast exciton diffusion in chiral stacks of conjugated p-phenylene vinylene oligomers. <i>Physical Review B</i> , 2003 , 68,	3.3	66
7	Exciton and polaron dynamics in a step-ladder polymeric semiconductor: the influence of interchain order. <i>Journal of Physics Condensed Matter</i> , 2002 , 14, 9803-9824	1.8	37
6	Interchain vs. intrachain energy transfer in acceptor-capped conjugated polymers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 10982-7	11.5	328
5	Effects of interchain interactions, polarization anisotropy, and photo-oxidation on the ultrafast photoluminescence decay from a polyfluorene. <i>Physical Review B</i> , 2000 , 61, 13691-13697	3.3	84
4	Understanding and suppressing non-radiative losses in methylammonium-free wide-bandgap perovskite solar cells. <i>Energy and Environmental Science</i> ,	35.4	15
3	Interplay of Structure, Charge-Carrier Localization and Dynamics in Copper-Silver-Bismuth-Halide Semiconductors. <i>Advanced Functional Materials</i> , 2108392	15.6	0
2	Solvent-Free Method for Defect Reduction and Improved Performance of p-i-n Vapor-Deposited Perovskite Solar Cells. <i>ACS Energy Letters</i> , 1903-1911	20.1	8
1	Air-Degradation Mechanisms in Mixed Lead-Tin Halide Perovskites for Solar Cells. <i>Advanced Energy Materials</i> , 2200847	21.8	4