

# Elizabeth von Hauff

## List of Publications by Year in descending order

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86  
papers

3,822  
citations

159585

30  
h-index

123424

61  
g-index

87  
all docs

87  
docs citations

87  
times ranked

6063  
citing authors

#	ARTICLE	IF	CITATIONS
1	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , 2020, 5, 35-49.	39.5	797
2	Impedance Spectroscopy for Emerging Photovoltaics. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11329-11346.	3.1	248
3	Degradation Effects Related to the Hole Transport Layer in Organic Solar Cells. <i>Advanced Functional Materials</i> , 2011, 21, 2705-2711.	14.9	168
4	Structural correlations in the generation of polaron pairs in low-bandgap polymers for photovoltaics. <i>Nature Communications</i> , 2012, 3, 970.	12.8	155
5	Diphenylmethanofullerenes: New and Efficient Acceptors in Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2005, 15, 1979-1987.	14.9	151
6	Procedures and Practices for Evaluating Thin-Film Solar Cell Stability. <i>Advanced Energy Materials</i> , 2015, 5, 1501407.	19.5	137
7	Impact of the Incorporation of Au Nanoparticles into Polymer/Fullerene Solar Cells. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3981-3989.	2.5	130
8	Study of field effect mobility in PCBM films and P3HT:PCBM blends. <i>Solar Energy Materials and Solar Cells</i> , 2005, 87, 149-156.	6.2	122
9	Charge Transfer Excitons in Polymer/Fullerene Blends: The Role of Morphology and Polymer Chain Conformation. <i>Advanced Functional Materials</i> , 2009, 19, 3662-3668.	14.9	116
10	Understanding S-Shaped Current-Voltage Characteristics in Organic Solar Cells Containing a TiO <sub>2</sub> Interlayer with Impedance Spectroscopy and Equivalent Circuit Analysis. <i>Journal of Physical Chemistry C</i> , 2012, 116, 16333-16337.	3.1	107
11	How intermolecular geometrical disorder affects the molecular doping of donor-acceptor copolymers. <i>Nature Communications</i> , 2015, 6, 6460.	12.8	104
12	Plasmon-Enhanced Photocurrent of Photosynthetic Pigment Proteins on Nanoporous Silver. <i>Advanced Functional Materials</i> , 2016, 26, 285-292.	14.9	95
13	Challenges and perspectives in continuous glucose monitoring. <i>Chemical Communications</i> , 2018, 54, 5032-5045.	4.1	95
14	Reduced Charge Transfer Exciton Recombination in Organic Semiconductor Heterojunctions by Molecular Doping. <i>Physical Review Letters</i> , 2011, 107, 127402.	7.8	76
15	Molecular doping of low-bandgap-polymer:fullerene solar cells: Effects on transport and solar cells. <i>Organic Electronics</i> , 2012, 13, 290-296.	2.6	72
16	Impedance spectroscopy for perovskite solar cells: characterisation, analysis, and diagnosis. <i>Journal of Materials Chemistry C</i> , 2022, 10, 742-761.	5.5	68
17	Interpreting the Density of States Extracted from Organic Solar Cells Using Transient Photocurrent Measurements. <i>Journal of Physical Chemistry C</i> , 2013, 117, 12407-12414.	3.1	63
18	Combination of Highly Efficient Electrocatalytic Water Oxidation with Selective Oxygenation of Organic Substrates using Manganese Borophosphates. <i>Advanced Materials</i> , 2021, 33, e2004098.	21.0	52

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19	Correlation between charge transfer exciton recombination and photocurrent in polymer/fullerene solar cells. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	48
20	Influence of Thermal Annealing on PCDTBT:PCBM Composition Profiles. <i>Advanced Energy Materials</i> , 2014, 4, 1300981.	19.5	47
21	The Effect of Ageing on Exciton Dynamics, Charge Separation, and Recombination in P3HT/PCBM Photovoltaic Blends. <i>Advanced Functional Materials</i> , 2012, 22, 1461-1469.	14.9	44
22	ITO-free inverted polymer solar cells with ZnO:Al cathodes and stable top anodes. <i>Solar Energy Materials and Solar Cells</i> , 2012, 98, 52-56.	6.2	44
23	Investigations of the effects of tempering and composition dependence on charge carrier field effect mobilities in polymer and fullerene films and blends. <i>Journal of Applied Physics</i> , 2006, 100, 043702.	2.5	40
24	Solvent additives for tuning the photovoltaic properties of polymer–fullerene solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 3536-3542.	6.2	39
25	Field effect measurements on charge carrier mobilities in various polymer-fullerene blend compositions. <i>Thin Solid Films</i> , 2006, 511-512, 506-511.	1.8	37
26	Loss Mechanisms in High Efficiency Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1501742.	19.5	37
27	High-Permittivity Conjugated Polyelectrolyte Interlayers for High-Performance Bulk Heterojunction Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 6309-6314.	8.0	37
28	N- $\pi$ -B Ladder Polymers Prepared by Postfunctionalization: Tuning of Electron Affinity and Evaluation as Acceptors in All-Polymer Solar Cells. <i>Macromolecules</i> , 2019, 52, 1013-1024.	4.8	37
29	Increasing organic solar cell efficiency with polymer interlayers. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 764-769.	2.8	34
30	ITO-free inverted polymer/fullerene solar cells: Interface effects and comparison of different semi-transparent front contacts. <i>Solar Energy Materials and Solar Cells</i> , 2012, 96, 141-147.	6.2	32
31	Current-limiting mechanisms in polymer diodes. <i>Journal of Applied Physics</i> , 2006, 99, 024506.	2.5	31
32	Influence of hole extraction efficiency on the performance and stability of organic solar Cells. <i>Solar Energy Materials and Solar Cells</i> , 2013, 116, 176-181.	6.2	31
33	Imaging of morphological changes and phase segregation in doped polymeric semiconductors. <i>Synthetic Metals</i> , 2015, 199, 381-387.	3.9	31
34	Pitfalls and prospects of optical spectroscopy to characterize perovskite-transport layer interfaces. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	28
35	Extraordinary Interfacial Stitching between Single All-Inorganic Perovskite Nanocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 5984-5991.	8.0	27
36	Facile Preparation of Chloride-Conducting Membranes: First Step towards a Room-Temperature Solid-State Chloride-Ion Battery. <i>ChemistryOpen</i> , 2016, 5, 525-530.	1.9	26

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37	Air-Stable and Oriented Mixed Lead Halide Perovskite (FA/MA) by the One-Step Deposition Method Using Zinc Iodide and an Alkylammonium Additive. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 17555-17562.	8.0	24
38	Control of Surface Defects in ZnO Nanorod Arrays with Thermally Deposited Au Nanoparticles for Perovskite Photovoltaics. <i>ACS Applied Energy Materials</i> , 2019, 2, 3736-3748.	5.1	23
39	Spectral Signatures of Polarons in Conjugated Co-polymers. <i>Journal of Physical Chemistry B</i> , 2013, 117, 4454-4460.	2.6	22
40	Polymer/cathode interface barrier limiting the open circuit voltage in polymer:fullerene organic bulk heterojunction solar cells: A quantitative analysis. <i>Applied Physics Letters</i> , 2014, 104, 043308.	3.3	21
41	Detailed investigation of the conducting channel in poly(3-hexylthiophene) field effect transistors. <i>Journal of Applied Physics</i> , 2010, 108, 063709.	2.5	19
42	Charge Redistribution and Extraction in Photocatalytically Synthesized Au@ZnO Nanohybrids. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21704-21710.	3.1	19
43	Organic Photovoltaics: Where Are We Headed?. <i>Solar Rrl</i> , 2021, 5, 2100167.	5.8	18
44	Stability of organic solar cells with PCDTBT donor polymer: An interlaboratory study. <i>Journal of Materials Research</i> , 2018, 33, 1909-1924.	2.6	17
45	Biocompatible molecularly imprinted polymers for the voltage regulated uptake and release of l-glutamate in neutral pH solutions. <i>Biosensors and Bioelectronics</i> , 2010, 26, 596-601.	10.1	16
46	Understanding the open circuit voltage in organic solar cells on the basis of a donor-acceptor abrupt (p-n++) heterojunction. <i>Solar Energy</i> , 2019, 184, 610-619.	6.1	16
47	The Effect of Electrostatic Interaction on n-Type Doping Efficiency of Fullerene Derivatives. <i>Advanced Electronic Materials</i> , 2019, 5, 1800959.	5.1	15
48	Influence of different copolymer sequences in low band gap polymers on their performance in organic solar cells. <i>Journal of Polymer Science Part A</i> , 2012, 50, 1622-1635.	2.3	14
49	Theory of Stark spectroscopy transients from thin film organic semiconducting devices. <i>Physical Review B</i> , 2014, 89, .	3.2	13
50	Influence of molecular weight on the short-channel effect in polymer-based field-effect transistors. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 117-124.	2.1	12
51	Investigations of electron injection in a methanofullerene thin film transistor. <i>Journal of Applied Physics</i> , 2006, 100, 073713.	2.5	11
52	Large area plasmonic nanoparticle arrays with well-defined size and shape. <i>Optical Materials Express</i> , 2014, 4, 944.	3.0	11
53	Binding and potential-triggered release of l-glutamate with molecularly imprinted polypyrrole in neutral pH solutions. <i>Sensors and Actuators B: Chemical</i> , 2014, 203, 327-332.	7.8	11
54	Relating Chain Conformation to the Density of States and Charge Transport in Conjugated Polymers: The Role of the $\langle \cos^2 \theta \rangle$ -phase in Poly(9,9-dioctylfluorene). <i>Physical Review X</i> , 2019, 9, .	8.9	11

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55	Thiophene-based copolymers synthesized by electropolymerization for application as hole transport layer in organic solar cells. <i>Journal of Applied Polymer Science</i> , 2013, 127, 585-592.	2.6	10
56	Electrochemical synthesis of polypyrrole layers doped with glutamic ions. <i>Journal of Applied Polymer Science</i> , 2009, 114, 4051-4058.	2.6	9
57	Controlled Morphology of ZnO Nanorods for Electron Transport in Squaraine Bulk-Hetero Junction Solar Cells With Thick Active Layers. <i>Solar Rrl</i> , 2017, 1, 1700132.	5.8	9
58	Thermally evaporated Ag nanoparticle films for plasmonic enhancement in organic solar cells: effects of particle geometry. <i>Physica Status Solidi - Rapid Research Letters</i> , 2015, 9, 161-165.	2.4	8
59	Interplay between Long-Range Crystal Order and Short-Range Molecular Interactions Tunes Carrier Mobility in Liquid Crystal Dyes. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 6228-6236.	8.0	8
60	Charge transfer excitons in a donor-acceptor amphidynamic crystal: the role of dipole orientational order. <i>Materials Horizons</i> , 2020, 7, 2951-2958.	12.2	8
61	The Role of Molecular Structure and Conformation in Polymer Electronics. <i>Semiconductors and Semimetals</i> , 2011, , 231-260.	0.7	7
62	Toward n-type analogues to poly(3-alkylthiophene)s: influence of side-chain variation on bulk-morphology and electron transport characteristics of head-to-tail regioregular poly(4-alkylthiazole)s. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2587-2597.	5.5	7
63	Silica Nanoparticles for Enhanced Carrier Transport in Polymer-Based Short Channel Transistors. <i>Journal of Physical Chemistry C</i> , 2013, 117, 22613-22618.	3.1	5
64	Trap-Induced Dispersive Transport and Dielectric Loss in PbS Nanoparticle Films. <i>Zeitschrift Fur Physikalische Chemie</i> , 2017, 231, 121-134.	2.8	5
65	All-conjugated donor-acceptor block copolymers featuring a pentafulvenyl-polyisocyanide-acceptor. <i>Polymer Chemistry</i> , 2020, 11, 1852-1859.	3.9	5
66	Dynamical theory for the battery's electromotive force. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 9428-9439.	2.8	5
67	Binding and Release of Glutamate from Overoxidized Polypyrrole via an Applied Potential for Application as a Molecular Switch. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2008, 63, 359-363.	1.5	4
68	Charge transport properties in electrically aged organic light-emitting diodes. <i>Journal of Applied Physics</i> , 2013, 113, 023104.	2.5	4
69	Incident photon-to-current efficiency measurements as a helpful tool to analyze luminescence loss mechanisms in organic light-emitting diodes. <i>Applied Physics Letters</i> , 2013, 103, 043311.	3.3	3
70	Emerging Thin-Film Photovoltaics: Stabilize or Perish. <i>Advanced Energy Materials</i> , 2015, 5, .	19.5	3
71	Optoelectronic Properties of PCPDTBT for Photovoltaics: Morphology Control and Molecular Doping. <i>Advances in Polymer Science</i> , 2017, , 109-138.	0.8	3
72	New Materials for Organic Electronics: Improved Properties to Tackle Application Challenges. <i>Advanced Electronic Materials</i> , 2018, 4, 1800621.	5.1	3

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73	In Situ Visualization and Quantification of Electrical Self-Heating in Conjugated Polymer Diodes Using Raman Spectroscopy. <i>Advanced Electronic Materials</i> , 0, , 2101208.	5.1	3
74	Self-dual bending theory for vesicles. <i>Nonlinearity</i> , 2004, 17, 57-66.	1.4	2
75	Device Applications of Organic Materials. , 2006, , 267-305.		2
76	A Gated Four Probe Technique for Field Effect Measurements on Disordered Organic Semiconductors. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2008, 63, 591-595.	1.5	2
77	Correlating Ultrafast Dynamics, Liquid Crystalline Phases, and Ambipolar Transport in Fluorinated Benzothiadiazole Dyes. <i>Advanced Electronic Materials</i> , 2021, 7, 2100186.	5.1	2
78	Voltage Regulated Uptake and Release of L-Glutamate from a Molecularly Selective Switch for Physiological Applications. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2009, 64, 879-880.	1.5	1
79	Dynamics of Charge Transfer Excitons Recombination in Polymer/Fullerene Solar Cells. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1286, 2.	0.1	1
80	Simple One-Pot Syntheses and Characterizations of Free Fluoride- and Bifluoride-Containing Polymers Soluble in Non-Aqueous Solvents. <i>Materials</i> , 2016, 9, 965.	2.9	1
81	Bioelectronics: Plasmon-Enhanced Photocurrent of Photosynthetic Pigment Proteins on Nanoporous Silver ( <i>Adv. Funct. Mater.</i> 2/2016). <i>Advanced Functional Materials</i> , 2016, 26, 284-284.	14.9	1
82	2D or not 2D: Eliminating interfacial losses in perovskite solar cells. <i>CheM</i> , 2021, 7, 1694-1696.	11.7	1
83	Effects of air and light exposure on the opto-electronic properties of polymer:fullerene solar cells. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1286, 61.	0.1	0
84	Improving the photocurrent in low bandgap polymer: fullerene solar cells with molecular doping. <i>Proceedings of SPIE</i> , 2012, , .	0.8	0
85	EU COST Action MP1307 "Unravelling the degradation mechanisms of emerging solar cell technologies. , 2016, , .		0
86	Organic tandem solar cells: How impedance analyses can improve the quality of external quantum efficiency measurements. <i>Progress in Photovoltaics: Research and Applications</i> , 2018, 26, 763-777.	8.1	0