

# Carl Poelking

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11034279/publications.pdf>

Version: 2024-02-01

15  
papers

1,773  
citations

567281

15  
h-index

996975

15  
g-index

15  
all docs

15  
docs citations

15  
times ranked

2880  
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning unifies the modeling of materials and molecules. <i>Science Advances</i> , 2017, 3, e1701816.	10.3	488
2	Band structure engineering in organic semiconductors. <i>Science</i> , 2016, 352, 1446-1449.	12.6	239
3	Impact of mesoscale order on open-circuit voltage in organic solar cells. <i>Nature Materials</i> , 2015, 14, 434-439.	27.5	184
4	Electrostatic phenomena in organic semiconductors: fundamentals and implications for photovoltaics. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 433002.	1.8	131
5	Effect of Polymorphism, Regioregularity and Paracrystallinity on Charge Transport in Poly(3-hexylthiophene) [P3HT] Nanofibers. <i>Macromolecules</i> , 2013, 46, 8941-8956.	4.8	130
6	Impact of molecular quadrupole moments on the energy levels at organic heterojunctions. <i>Nature Communications</i> , 2019, 10, 2466.	12.8	101
7	Design Rules for Organic Donor-Acceptor Heterojunctions: Pathway for Charge Splitting and Detrapping. <i>Journal of the American Chemical Society</i> , 2015, 137, 6320-6326.	13.7	97
8	Characterization of Charge-Carrier Transport in Semicrystalline Polymers: Electronic Couplings, Site Energies, and Charge-Carrier Dynamics in Poly(bithiophene-alt-thienothiophene) [PBTTT]. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1633-1640.	3.1	92
9	Morphology and Charge Transport in P3HT: A Theorist's Perspective. <i>Advances in Polymer Science</i> , 2014, , 139-180.	0.8	61
10	Nematic Ordering, Conjugation, and Density of States of Soluble Polymeric Semiconductors. <i>Macromolecules</i> , 2013, 46, 5762-5774.	4.8	56
11	Stochastic modeling of molecular charge transport networks. <i>Physical Review B</i> , 2012, 86, .	3.2	48
12	Long-Range Embedding of Molecular Ions and Excitations in a Polarizable Molecular Environment. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 4516-4523.	5.3	46
13	Chemical Design Rules for Non-Fullerene Acceptors in Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021, 11, 2102363.	19.5	38
14	Effect of Mesoscale Ordering on the Density of States of Polymeric Semiconductors. <i>Macromolecular Rapid Communications</i> , 2015, 36, 1047-1053.	3.9	35
15	Influence of orientation mismatch on charge transport across grain boundaries in tri-isopropylsilylethynyl (TIPS) pentacene thin films. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 10854-10862.	2.8	27