

Nrup Balar

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8733337/publications.pdf>

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18
papers

1,059
citations

623734

14
h-index

839539

18
g-index

18
all docs

18
docs citations

18
times ranked

1161
citing authors

#	ARTICLE	IF	CITATIONS
1	A molecular interactionâ€‘diffusion framework for predicting organic solar cell stability. Nature Materials, 2021, 20, 525-532.	27.5	212
2	The performance-stability conundrum of BTP-based organic solar cells. Joule, 2021, 5, 2129-2147.	24.0	133
3	Precise Manipulation of Multilength Scale Morphology and Its Influence on Ecoâ€‘Friendly Printed Allâ€‘Polymer Solar Cells. Advanced Functional Materials, 2017, 27, 1702016.	14.9	99
4	Modulation of Morphological, Mechanical, and Photovoltaic Properties of Ternary Organic Photovoltaic Blends for Optimum Operation. Advanced Energy Materials, 2021, 11, 2003506.	19.5	92
5	High Performance Organic Solar Cells Processed by Blade Coating in Air from a Benign Food Additive Solution. Chemistry of Materials, 2016, 28, 7451-7458.	6.7	91
6	The Importance of Entanglements in Optimizing the Mechanical and Electrical Performance of All-Polymer Solar Cells. Chemistry of Materials, 2019, 31, 5124-5132.	6.7	88
7	Highly Efficient, Stable, and Ductile Ternary Nonfullerene Organic Solar Cells from a Twoâ€‘Donor Polymer Blend. Advanced Materials, 2019, 31, e1808279.	21.0	79
8	Correlating Crack Onset Strain and Cohesive Fracture Energy in Polymer Semiconductor Films. Macromolecules, 2017, 50, 8611-8618.	4.8	58
9	Strong polymer molecular weight-dependent material interactions: impact on the formation of the polymer/fullerene bulk heterojunction morphology. Journal of Materials Chemistry A, 2017, 5, 13176-13188.	10.3	49
10	Role of Polymer Segregation on the Mechanical Behavior of All-Polymer Solar Cell Active Layers. ACS Applied Materials & Interfaces, 2017, 9, 43886-43892.	8.0	40
11	Role of Secondary Thermal Relaxations in Conjugated Polymer Film Toughness. Chemistry of Materials, 2020, 32, 6540-6549.	6.7	27
12	Unveiling the Stressâ€‘Strain Behavior of Conjugated Polymer Thin Films for Stretchable Device Applications. Macromolecules, 2020, 53, 1988-1997.	4.8	25
13	Impact of Substrate Characteristics on Stretchable Polymer Semiconductor Behavior. ACS Applied Materials & Interfaces, 2019, 11, 3280-3289.	8.0	20
14	Morphological considerations of organic electronic films for flexible and stretchable devices. MRS Bulletin, 2017, 42, 108-114.	3.5	16
15	Resolving the Molecular Origin of Mechanical Relaxations in Donorâ€‘Acceptor Polymer Semiconductors. Advanced Functional Materials, 2022, 32, 2105597.	14.9	15
16	Upper and Apparent Lower Critical Solution Temperature Branches in the Phase Diagram of Polymer:Small Molecule Semiconducting Systems. Journal of Physical Chemistry Letters, 2021, 12, 10845-10853.	4.6	7
17	Dynamic Mechanical Analysis of Polymer Thin Films Using a Kirigami-Inspired Support. ACS Macro Letters, 2021, 10, 1107-1112.	4.8	6
18	Bio-inspired spectropolarimetric sensor based on tandem organic photodetectors and multi-twist liquid crystals. Optics Express, 2021, 29, 43953.	3.4	2