Muhammad R Niazi

List of Publications by Citations

33 papers	1,660 citations	18 h-index	37 g-index
37 ext. papers	1,933 ext. citations	12.2 avg, IF	4.53 L-index

#	Paper	IF	Citations
33	Molecular Design of Semiconducting Polymers for High-Performance Organic Electrochemical Transistors. *Journal of the American Chemical Society*, **2016**, 138, 10252-9	16.4	189
32	Solution-printed organic semiconductor blends exhibiting transport properties on par with single crystals. *Nature Communications*, **2015**, 6, 8598	17.4	188
31	Single crystal hybrid perovskite field-effect transistors. *Nature Communications*, **2018**, 9, 5354	17.4	177
30	N-type organic electrochemical transistors with stability in water. *Nature Communications*, **2016**, 7, 13066	17.4	170
29	Blade-Coated Hybrid Perovskite Solar Cells with Efficiency > 17%: An In Situ Investigation. *ACS Energy Letters*, **2018**, 3, 1078-1085	20.1	132
28	A thieno[3,2-b][1]benzothiophene isoindigo building block for additive- and annealing-free high-performance polymer solar cells. *Advanced Materials*, **2015**, 27, 4702-7	24	113
27	Vertical Phase Separation in Small Molecule:Polymer Blend Organic Thin Film Transistors Can Be Dynamically Controlled. *Advanced Functional Materials*, **2016**, 26, 1737-1746	15.6	85
26	Crossover from band-like to thermally activated charge transport in organic transistors due to strain-induced traps. *Proceedings of the National Academy of Sciences of the United States of America* , **2017**, 114, E6739-E6748	11.5	62
25	Contact-Induced Nucleation in High-Performance Bottom-Contact Organic Thin Film Transistors Manufactured by Large-Area Compatible Solution Processing. *Advanced Functional Materials*, **2016**, 26, 2371-2378	15.6	60
24	In situ UV-visible absorption during spin-coating of organic semiconductors: a new probe for organic electronics and photovoltaics. *Journal of Materials Chemistry C*, **2014**, 2, 3373	7.1	59
23	Overcoming the Ambient Manufacturability-Scalability-Performance Bottleneck in Colloidal Quantum Dot Photovoltaics. *Advanced Materials*, **2018**, 30, e1801661	24	58
22	The Impact of Molecular p-Doping on Charge Transport in High-Mobility Small-Molecule/Polymer Blend Organic Transistors. *Advanced Electronic Materials*, **2018**, 4, 1700464	6.4	52
21	Late stage crystallization and healing during spin-coating enhance carrier transport in small-molecule organic semiconductors. *Journal of Materials Chemistry C*, **2014**, 2, 5681-5689	7.1	51
20	Addition of the Lewis Acid Zn(C F) Enables Organic Transistors with a Maximum Hole Mobility in Excess of 20 cm V s. *Advanced Materials*, **2019**, 31, e1900871	24	48
19	Conducting and Stretchable PEDOT:PSS Electrodes: Role of Additives on Self-Assembly, Morphology, and Transport. *ACS Applied Materials & Interfaces*, **2019**, 11, 17570-17582	9.5	41
18	Impact of the Gate Dielectric on Contact Resistance in High-Mobility Organic Transistors. *Advanced Electronic Materials*, **2019**, 5, 1800723	6.4	31
17	Strong Enhancement of Electron Donor/Acceptor Ability by Complementary DD/AA Hydrogen Bonding. *Angewandte Chemie - International Edition*, **2019**, 58, 17312-17321	16.4	31

16	Programmable and coherent crystallization of semiconductors. *Science Advances*, **2017**, 3, e1602462	14.3	27
15	Impact of p-type doping on charge transport in blade-coated small-molecule:polymer blend transistors. *Journal of Materials Chemistry C*, **2020**, 8, 15368-15376	7.1	14
14	Laser-Printed Organic Thin-Film Transistors. *Advanced Materials Technologies*, **2017**, 2, 1700167	6.8	12
13	Bistetracene Thin Film Polymorphic Control to Unravel the Effect of Molecular Packing on Charge Transport. *Advanced Materials Interfaces*, **2018**, 5, 1701607	4.6	10
12	A macrocyclic oligofuran: synthesis, solid state structure and electronic properties. *Chemical Science*, **2019**, 10, 8527-8532	9.4	9
11	Strong Enhancement of Electron Donor/Acceptor Ability by Complementary DD/AA Hydrogen Bonding. *Angewandte Chemie*, **2019**, 131, 17473-17482	3.6	9
10	Nitroaromatics as n-type organic semiconductors for field effect transistors. *Chemical Communications*, **2020**, 56, 6432-6435	5.8	7
9	Mechanism of the Photodegradation of A-D-A Acceptors for Organic Photovoltaics*. *Angewandte Chemie - International Edition*, **2021**, 60, 24833-24837	16.4	6
8	Controlling Structural and Energetic Disorder in High-Mobility Polymer Semiconductors via Doping with Nitroaromatics. *Chemistry of Materials*, **2021**, 33, 2937-2947	9.6	5
7	Star-shaped triarylamine-based hole-transport materials in perovskite solar cells. *Sustainable Energy and Fuels*, **2020**, 4, 779-787	5.8	4
6	Systematic Study on the Morphological Development of Blade-Coated Conjugated Polymer Thin Films via In Situ Measurements. *ACS Applied Materials & Interfaces*, **2020**, 12, 36417-36427	9.5	3
5	Solar Cells: Overcoming the Ambient Manufacturability-Scalability-Performance Bottleneck in Colloidal Quantum Dot Photovoltaics (Adv. Mater. 35/2018). *Advanced Materials*, **2018**, 30, 1870260	24	3
4	Conjugated polymers with controllable interfacial order and energetics enable tunable heterojunctions in organic and colloidal quantum dot photovoltaics. *Journal of Materials Chemistry A*, **2022**, 10, 1788-1801	13	2
3	A Universal Cosolvent Evaporation Strategy Enables Direct Printing of Perovskite Single Crystals for Optoelectronic Device Applications.. *Advanced Materials*, **2022**, e2109862	24	1
2	Thin Film Transistors: Contact-Induced Nucleation in High-Performance Bottom-Contact Organic Thin Film Transistors Manufactured by Large-Area Compatible Solution Processing (Adv. Funct. Mater. 14/2016). *Advanced Functional Materials*, **2016**, 26, 2396-2396	15.6	1
1	Solvent Vapor Annealing: Bistetracene Thin Film Polymorphic Control to Unravel the Effect of Molecular Packing on Charge Transport (Adv. Mater. Interfaces 9/2018). *Advanced Materials Interfaces*, **2018**, 5, 1870040	4.6	