Hendrik Faber

List of Publications by Year
in descending order

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63	5,078	101543	118850
papers	citations	36 h-index	62 g-index

65	65	65	6461
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Metal oxide semiconductor thin-film transistors for flexible electronics. Applied Physics Reviews, 2016, 3, 021303.	11.3	511
2	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS₂ as a Replacement for PEDOT:PSS. Advanced Materials, 2019, 31, e1902965.	21.0	500
3	Self-Assembled Monolayer Enables Hole Transport Layer-Free Organic Solar Cells with 18% Efficiency and Improved Operational Stability. ACS Energy Letters, 2020, 5, 2935-2944.	17.4	425
4	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. ACS Energy Letters, 2020, 5, 3663-3671.	17.4	253
5	Copper(I) Thiocyanate (CuSCN) Holeâ€Transport Layers Processed from Aqueous Precursor Solutions and Their Application in Thinâ€Film Transistors and Highly Efficient Organic and Organometal Halide Perovskite Solar Cells. Advanced Functional Materials, 2017, 27, 1701818.	14.9	208
6	Highâ€Efficiency, Solutionâ€Processed, Multilayer Phosphorescent Organic Lightâ€Emitting Diodes with a Copper Thiocyanate Holeâ€Injection/Holeâ€Transport Layer. Advanced Materials, 2015, 27, 93-100.	21.0	178
7	17.1% Efficient Singleâ€Junction Organic Solar Cells Enabled by nâ€Type Doping of the Bulkâ€Heterojunction. Advanced Science, 2020, 7, 1903419.	11.2	173
8	Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding 13 cm² V^{â^'1} s^{â^'1}. Advanced Materials, 2016, 28, 7791-7798.	21.0	166
9	Highâ€Performance ZnO Transistors Processed Via an Aqueous Carbonâ€Free Metal Oxide Precursor Route at Temperatures Between 80â€“180 Â°C. Advanced Materials, 2013, 25, 4340-4346.	21.0	156
10	Heterojunction oxide thin-film transistors with unprecedented electron mobility grown from solution. Science Advances, 2017, 3, e1602640.	10.3	148
11	High Electron Mobility Thinâ€Film Transistors Based on Solutionâ€Processed Semiconducting Metal Oxide Heterojunctions and Quasiâ€Superlattices. Advanced Science, 2015, 2, 1500058.	11.2	134
12	Highâ€Efficiency Organic Photovoltaic Cells Based on the Solutionâ€Processable Hole Transporting Interlayer Copper Thiocyanate (CuSCN) as a Replacement for PEDOT:PSS. Advanced Energy Materials, 2015, 5, 1401529.	19.5	133
13	18.4â€‰% Organic Solar Cells Using a High Ionization Energy Selfâ€Assembled Monolayer as Holeâ€Extraction Interlayer. ChemSusChem, 2021, 14, 3569-3578.	6.8	121
14	A Novel Alkylated Indacenodithieno[3,2â€b]thiopheneâ€Based Polymer for Highâ€Performance Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 3922-3927.	21.0	117
15	Lowâ€Temperature Solutionâ€Processed Memory Transistors Based on Zinc Oxide Nanoparticles. Advanced Materials, 2009, 21, 3099-3104.	21.0	112
16	Liquid phase exfoliation of MoS₂ and WS₂ in aqueous ammonia and their application in highly efficient organic solar cells. Journal of Materials Chemistry C, 2020, 8, 5259-5264.	5.5	109
17	Modulationâ€Doped In₂O₃/ZnO Heterojunction Transistors Processed from Solution. Advanced Materials, 2017, 29, 1605837.	21.0	96
18	Stretchable and Transparent Conductive PEDOT:PSSâ€Based Electrodes for Organic Photovoltaics and Strain Sensors Applications. Advanced Functional Materials, 2020, 30, 2001251.	14.9	88

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19	Water stable molecular n-doping produces organic electrochemical transistors with high transconductance and record stability. Nature Communications, 2020, 11, 3004.	12.8	82
20	Indium Oxide Thin-Film Transistors Processed at Low Temperature via Ultrasonic Spray Pyrolysis. ACS Applied Materials & Interfaces, 2015, 7, 782-790.	8.0	79
21	Impact of Oxygen Plasma Treatment on the Device Performance of Zinc Oxide Nanoparticle-Based Thin-Film Transistors. ACS Applied Materials & Interfaces, 2012, 4, 1693-1696.	8.0	64
22	Addition of the Lewis Acid Zn(C₆F₅)₂ Enables Organic Transistors with a Maximum Hole Mobility in Excess of 20 cm² V^{â˜1} s^{â˜1}. Advanced Materials, 2019, 31, e1900871.	21.0	64
23	Recent Progress in Photonic Processing of Metalâ€Oxide Transistors. Advanced Functional Materials, 2020, 30, 1906022.	14.9	58
24	High electron mobility thin-film transistors based on Ga2O3 grown by atmospheric ultrasonic spray pyrolysis at low temperatures. Applied Physics Letters, 2014, 105, .	3.3	56
25	Copper thiocyanate: An attractive hole transport/extraction layer for use in organic photovoltaic cells. Applied Physics Letters, 2015, 107, .	3.3	53
26	On the Role of Contact Resistance and Electrode Modification in Organic Electrochemical Transistors. Advanced Materials, 2019, 31, e1902291.	21.0	52
27	Hybrid organicâ€“metal oxide multilayer channel transistors with high operational stability. Nature Electronics, 2019, 2, 587-595.	26.0	49
28	Low-temperature spray-deposited indium oxide for flexible thin-film transistors and integrated circuits. Applied Physics Letters, 2015, 106, .	3.3	46
29	100â€‰GHz zinc oxide Schottky diodes processed from solution on a wafer scale. Nature Electronics, 2020, 3, 718-725.	26.0	45
30	Fully Patterned Lowâ€Voltage Transparent Metal Oxide Transistors Deposited Solely by Chemical Spray Pyrolysis. Advanced Functional Materials, 2013, 23, 2828-2834.	14.9	44
31	Exploring the Leidenfrost Effect for the Deposition of Highâ€Quality In₂O₃ Layers via Spray Pyrolysis at Low Temperatures and Their Application in High Electron Mobility Transistors. Advanced Functional Materials, 2017, 27, 1606407.	14.9	43
32	Alâ€Doped ZnO Transistors Processed from Solution at 120 Â°C. Advanced Electronic Materials, 2016, 2, 1600070.	5.1	42
33	Use of the Phenâ€NaDPO:Sn(SCN)₂ Blend as Electron Transport Layer Results to Consistent Efficiency Improvements in Organic and Hybrid Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905810.	14.9	41
34	Morphological impact of zinc oxide layers on the device performance in thin-film transistors. Nanoscale, 2011, 3, 897-899.	5.6	40
35	Impact of the Gate Dielectric on Contact Resistance in Highâ€Mobility Organic Transistors. Advanced Electronic Materials, 2019, 5, 1800723.	5.1	40
36	A universal solution processed interfacial bilayer enabling ohmic contact in organic and hybrid optoelectronic devices. Energy and Environmental Science, 2020, 13, 268-276.	30.8	40

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37	Influence of self-assembled monolayer dielectrics on the morphology and performance of Î±,Ï‰-dihexylquaterthiophene in thin film transistors. Applied Physics Letters, 2011, 98, .	3.3	36
38	Air-Stable n-channel Diketopyrrolopyrroleâ^'Diketopyrrolopyrrole Oligomers for High Performance Ambipolar Organic Transistors. ACS Applied Materials & Interfaces, 2016, 8, 25415-25427.	8.0	36
39	Solution-processed ZnO nanoparticle-based transistors via a room-temperature photochemical conversion process. Applied Physics Letters, 2013, 102, .	3.3	35
40	Exploring and controlling intrinsic defect formation in SnO₂ thin films. Journal of Materials Chemistry C, 2016, 4, 758-765.	5.5	35
41	Oligoethylene Glycol Side Chains Increase Charge Generation in Organic Semiconductor Nanoparticles for Enhanced Photocatalytic Hydrogen Evolution. Advanced Materials, 2022, 34, e2105007.	21.0	33
42	Ruddlesdenâ€“Popperâ€Phase Hybrid Halide Perovskite/Smallâ€Molecule Organic Blend Memory Transistors. Advanced Materials, 2021, 33, e2003137.	21.0	32
43	4H-1,2,6-Thiadiazin-4-one-containing small molecule donors and additive effects on their performance in solution-processed organic solar cells. Journal of Materials Chemistry C, 2015, 3, 2358-2365.	5.5	29
44	Concept of a thin film memory transistor based on ZnO nanoparticles insulated by a ligand shell. Nanoscale, 2012, 4, 444-447.	5.6	25
45	Lowâ€Voltage Heterojunction Metal Oxide Transistors via Rapid Photonic Processing. Advanced Electronic Materials, 2020, 6, 2000028.	5.1	25
46	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.	5.5	19
47	A Triâ€Channel Oxide Transistor Concept for the Rapid Detection of Biomolecules Including the SARSâ€CoVâ€2 Spike Protein. Advanced Materials, 2022, 34, e2104608.	21.0	19
48	Low-Temperature Cross-Linking Benzocyclobutene Based Polymer Dielectric for Organic Thin Film Transistors on Plastic Substrates. Journal of Organic Chemistry, 2020, 85, 277-283.	3.2	17
49	A Multilayered Electron Extracting System for Efficient Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2004273.	14.9	17
50	N-Doping improves charge transport and morphology in the organic non-fullerene acceptor O-IDTBR. Journal of Materials Chemistry C, 2021, 9, 4486-4495.	5.5	17
51	Hybrid Modulationâ€Doping of Solutionâ€Processed Ultrathin Layers of ZnO Using Molecular Dopants. Advanced Materials, 2016, 28, 3952-3959.	21.0	16
52	Quantum Confinement and Thicknessâ€Dependent Electron Transport in Solutionâ€Processed In₂O₃ Transistors. Advanced Electronic Materials, 2020, 6, 2000682.	5.1	16
53	Rapid Photonic Processing of High-Electron-Mobility PbS Colloidal Quantum Dot Transistors. ACS Applied Materials & Interfaces, 2020, 12, 31591-31600.	8.0	16
54	Preparation and soft lithographic printing of nano-sized ITO-dispersions for the manufacture of electrodes for TFTs. Journal of Materials Science, 2009, 44, 6011-6019.	3.7	14

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55	Colossal Tunneling Electroresistance in Coâ€Planar Polymer Ferroelectric Tunnel Junctions. Advanced Electronic Materials, 2020, 6, 1901091.	5.1	14
56	Rapid and up-scalable manufacturing of gigahertz nanogap diodes. Nature Communications, 2022, 13, .	12.8	11
57	Conjugated Polymerâ€“Porphyrin Complexes for Organic Electronics. ChemPhysChem, 2015, 16, 1223-1230.	2.1	10
58	Electron mobility enhancement in solution-processed low-voltage In2O3 transistors via channel interface planarization. AIP Advances, 2018, 8, .	1.3	10
59	14ÂGHz Schottky Diodes Using a pâ€Doped Organic Polymer. Advanced Materials, 2022, 34, e2108524.	21.0	9
60	Adding a new layer to â€˜more than Mooreâ€™. Nature Electronics, 2019, 2, 497-498.	26.0	8
61	A Lowâ€Power CuSCN Hydrogen Sensor Operating Reversibly at Room Temperature. Advanced Functional Materials, 2022, 32, 2102635.	14.9	8
62	Touch sensor application of spray deposited ZnO films. , 2017, , .		0
63	Multi-Input Parameter Modulable Memtransistors from Hybrid Perovskite/Conjugated Polymer Heterostructures. , 0, , .		0