Hendrik Faber

List of Publications by Year in Descending Order

59 papers	3,645 citations	32 h-index	60 g-index
65 ext. papers	4,360 ext. citations	14.4 avg, IF	5.35 L-index

#	Paper	IF	Citations
59	14 GHz Schottky Diodes using a p-Doped Organic Polymer.. *Advanced Materials*, **2022**, e2108524	24	1
58	A Tri-Channel Oxide Transistor Concept for the Rapid Detection of Biomolecules Including the SARS-CoV-2 Spike Protein. *Advanced Materials*, **2021**, e2104608	24	6
57	Oligoethylene Glycol Side Chains Increase Charge Generation in Organic Semiconductor Nanoparticles for Enhanced Photocatalytic Hydrogen Evolution. *Advanced Materials*, **2021**, e2105007	24	6
56	18.4 % Organic Solar Cells Using a High Ionization Energy Self-Assembled Monolayer as Hole-Extraction Interlayer. *ChemSusChem*, **2021**, 14, 3569-3578	8.3	54
55	N-Doping improves charge transport and morphology in the organic non-fullerene acceptor O-IDTBR. *Journal of Materials Chemistry C*, **2021**, 9, 4486-4495	7.1	5
54	Ruddlesden-Popper-Phase Hybrid Halide Perovskite/Small-Molecule Organic Blend Memory Transistors. *Advanced Materials*, **2021**, 33, e2003137	24	17
53	Low-Voltage Heterojunction Metal Oxide Transistors via Rapid Photonic Processing. *Advanced Electronic Materials*, **2020**, 6, 2000028	6.4	12
52	Water stable molecular n-doping produces organic electrochemical transistors with high transconductance and record stability. *Nature Communications*, **2020**, 11, 3004	17.4	51
51	Rapid Photonic Processing of High-Electron-Mobility PbS Colloidal Quantum Dot Transistors. *ACS Applied Materials & Interfaces*, **2020**, 12, 31591-31600	9.5	9
50	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	7.1	46
49	17.1% Efficient Single-Junction Organic Solar Cells Enabled by n-Type Doping of the Bulk-Heterojunction. *Advanced Science*, **2020**, 7, 1903419	13.6	110
48	Recent Progress in Photonic Processing of Metal-Oxide Transistors. *Advanced Functional Materials*, **2020**, 30, 1906022	15.6	33
47	A universal solution processed interfacial bilayer enabling ohmic contact in organic and hybrid optoelectronic devices. *Energy and Environmental Science*, **2020**, 13, 268-276	35.4	26
46	Colossal Tunneling Electroresistance in Co-Planar Polymer Ferroelectric Tunnel Junctions. *Advanced Electronic Materials*, **2020**, 6, 1901091	6.4	9
45	Low-Temperature Cross-Linking Benzocyclobutene Based Polymer Dielectric for Organic Thin Film Transistors on Plastic Substrates. *Journal of Organic Chemistry*, **2020**, 85, 277-283	4.2	5
44	100 GHz zinc oxide Schottky diodes processed from solution on a wafer scale. *Nature Electronics*, **2020**, 3, 718-725	28.4	18
43	Quantum Confinement and Thickness-Dependent Electron Transport in Solution-Processed In2O3 Transistors. *Advanced Electronic Materials*, **2020**, 6, 2000682	6.4	6

42	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. *ACS Energy Letters*, **2020**, 5, 3663-3671	20.1	175
41	A Multilayered Electron Extracting System for Efficient Perovskite Solar Cells. *Advanced Functional Materials*, **2020**, 30, 2004273	15.6	8
40	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
39	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	20.1	244
38	Stretchable and Transparent Conductive PEDOT:PSS-Based Electrodes for Organic Photovoltaics and Strain Sensors Applications. *Advanced Functional Materials*, **2020**, 30, 2001251	15.6	46
37	Use of the Phen-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	15.6	30
36	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
35	Impact of the Gate Dielectric on Contact Resistance in High-Mobility Organic Transistors. *Advanced Electronic Materials*, **2019**, 5, 1800723	6.4	31
34	On the Role of Contact Resistance and Electrode Modification in Organic Electrochemical Transistors. *Advanced Materials*, **2019**, 31, e1902291	24	31
33	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS as a Replacement for PEDOT:PSS. *Advanced Materials*, **2019**, 31, e1902965	24	384
32	Hybrid organic metal oxide multilayer channel transistors with high operational stability. *Nature Electronics*, **2019**, 2, 587-595	28.4	30
31	Electron mobility enhancement in solution-processed low-voltage In2O3 transistors via channel interface planarization. *AIP Advances*, **2018**, 8, 065015	1.5	7
30	Heterojunction oxide thin-film transistors with unprecedented electron mobility grown from solution. *Science Advances*, **2017**, 3, e1602640	14.3	101
29	Exploring the Leidenfrost Effect for the Deposition of High-Quality In2O3 Layers via Spray Pyrolysis at Low Temperatures and Their Application in High Electron Mobility Transistors. *Advanced Functional Materials*, **2017**, 27, 1606407	15.6	35
28	Modulation-Doped In O /ZnO Heterojunction Transistors Processed from Solution. *Advanced Materials*, **2017**, 29, 1605837	24	67
27	Copper(I) Thiocyanate (CuSCN) Hole-Transport Layers Processed from Aqueous Precursor Solutions and Their Application in Thin-Film Transistors and Highly Efficient Organic and Organometal Halide Perovskite Solar Cells. *Advanced Functional Materials*, **2017**, 27, 1701818	15.6	159
26	Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding 13 cm(2) V(-1) s(-1). *Advanced Materials*, **2016**, 28, 7791-8	24	141
25	Exploring and controlling intrinsic defect formation in SnO2 thin films. *Journal of Materials Chemistry C*, **2016**, 4, 758-765	7.1	30

24	Al-Doped ZnO Transistors Processed from Solution at 120 ℃. *Advanced Electronic Materials*, **2016**, 2, 1600070	6.4	37
23	Hybrid Modulation-Doping of Solution-Processed Ultrathin Layers of ZnO Using Molecular Dopants. *Advanced Materials*, **2016**, 28, 3952-9	24	13
22	Metal oxide semiconductor thin-film transistors for flexible electronics. *Applied Physics Reviews*, **2016**, 3, 021303	17.3	380
21	A Novel Alkylated Indacenodithieno[3,2-b]thiophene-Based Polymer for High-Performance Field-Effect Transistors. *Advanced Materials*, **2016**, 28, 3922-7	24	100
20	Air-Stable n-channel Diketopyrrolopyrrole-Diketopyrrolopyrrole Oligomers for High Performance Ambipolar Organic Transistors. *ACS Applied Materials & Interfaces*, **2016**, 8, 25415-27	9.5	32
19	High Electron Mobility Thin-Film Transistors Based on Solution-Processed Semiconducting Metal Oxide Heterojunctions and Quasi-Superlattices. *Advanced Science*, **2015**, 2, 1500058	13.6	107
18	Copper thiocyanate: An attractive hole transport/extraction layer for use in organic photovoltaic cells. *Applied Physics Letters*, **2015**, 107, 013301	3.4	48
17	Indium oxide thin-film transistors processed at low temperature via ultrasonic spray pyrolysis. *ACS Applied Materials & Interfaces*, **2015**, 7, 782-90	9.5	69
16	High-efficiency, solution-processed, multilayer phosphorescent organic light-emitting diodes with a copper thiocyanate hole-injection/hole-transport layer. *Advanced Materials*, **2015**, 27, 93-100	24	146
15	High-Efficiency Organic Photovoltaic Cells Based on the Solution-Processable Hole Transporting Interlayer Copper Thiocyanate (CuSCN) as a Replacement for PEDOT:PSS. *Advanced Energy Materials*, **2015**, 5, 1401529	21.8	115
14	Low-temperature spray-deposited indium oxide for flexible thin-film transistors and integrated circuits. *Applied Physics Letters*, **2015**, 106, 092105	3.4	38
13	Conjugated polymer-porphyrin complexes for organic electronics. *ChemPhysChem*, **2015**, 16, 1223-30	3.2	10
12	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	7.1	26
11	High electron mobility thin-film transistors based on Ga2O3 grown by atmospheric ultrasonic spray pyrolysis at low temperatures. *Applied Physics Letters*, **2014**, 105, 092105	3.4	39
10	High-performance ZnO transistors processed via an aqueous carbon-free metal oxide precursor route at temperatures between 80-180 ℃. *Advanced Materials*, **2013**, 25, 4340-6	24	137
9	Solution-processed ZnO nanoparticle-based transistors via a room-temperature photochemical conversion process. *Applied Physics Letters*, **2013**, 102, 193516	3.4	32
8	Fully Patterned Low-Voltage Transparent Metal Oxide Transistors Deposited Solely by Chemical Spray Pyrolysis. *Advanced Functional Materials*, **2013**, 23, 2828-2834	15.6	40
7	Concept of a thin film memory transistor based on ZnO nanoparticles insulated by a ligand shell. *Nanoscale*, **2012**, 4, 444-7	7.7	24

6	Impact of oxygen plasma treatment on the device performance of zinc oxide nanoparticle-based thin-film transistors. *ACS Applied Materials & Interfaces*, **2012**, 4, 1693-6	9.5	57
5	Morphological impact of zinc oxide layers on the device performance in thin-film transistors. *Nanoscale*, **2011**, 3, 897-9	7.7	40
4	Influence of self-assembled monolayer dielectrics on the morphology and performance of ‡dihexylquaterthiophene in thin film transistors. *Applied Physics Letters*, **2011**, 98, 093302	3.4	32
3	Low-Temperature Solution-Processed Memory Transistors Based on Zinc Oxide Nanoparticles. *Advanced Materials*, **2009**, 21, 3099-3104	24	101
2	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	4.3	12
1	A Low-Power CuSCN Hydrogen Sensor Operating Reversibly at Room Temperature. *Advanced Functional Materials*,2102635	15.6	4