

Barbara Stadlober

List of Publications by Year in descending order

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111
papers

3,632
citations

168829

31
h-index

156644

58
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114
all docs

114
docs citations

114
times ranked

4984
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite Element Simulations of Filling and Demolding in Roll-to-Roll UV Nanoimprinting of Micro- and Nanopatterns. <i>ACS Applied Nano Materials</i> , 2022, 5, 3434-3449.	2.4	3
2	Smart Core-Shell Nanostructures for Force, Humidity, and Temperature Multi-Stimuli Responsiveness. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	10
3	A printed proximity-sensing surface based on organic pyroelectric sensors and organic thin-film transistor electronics. <i>Nature Electronics</i> , 2022, 5, 289-299.	13.1	21
4	Self-Reducing Silver Ink on Polyurethane Elastomers for the Manufacture of Thin and Highly Stretchable Electrical Circuits. <i>Chemistry of Materials</i> , 2021, 33, 2742-2755.	3.2	18
5	Imperceptible energy harvesting device and biomedical sensor based on ultraflexible ferroelectric transducers and organic diodes. <i>Nature Communications</i> , 2021, 12, 2399.	5.8	101
6	Lab-on-a-foil devices with integrated retro-reflective structures for multiplexed DNA testing. <i>MRS Advances</i> , 2021, 6, 463-466.	0.5	0
7	Heterogeneous Functional Dielectric Patterns for Charge-Carrier Modulation in Ultraflexible Organic Integrated Circuits. <i>Advanced Materials</i> , 2021, 33, e2104446.	11.1	10
8	Solvent-free, transparent, high-refractive index ZrO ₂ nanoparticle composite resin for scalable roll to roll UV-nanoimprint lithography. <i>Optics and Laser Technology</i> , 2021, 141, 107101.	2.2	4
9	Microstructured single-layer electrodes embedded in P(VDF-TrFE) for flexible and self-powered direction-sensitive strain sensors. <i>Smart Materials and Structures</i> , 2020, 29, 085040.	1.8	12
10	Screen-Printed Ferroelectric P(VDF-TrFE)- <i>co</i> -PbTiO ₃ and P(VDF-TrFE)- <i>co</i> -NaBiTi ₂ O ₆ Nanocomposites for Selective Temperature and Pressure Sensing. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38614-38625.	4.0	9
11	High-throughput roll-to-roll production of polymer biochips for multiplexed DNA detection in point-of-care diagnostics. <i>Lab on A Chip</i> , 2020, 20, 4106-4117.	3.1	15
12	Piezoelectric Properties of Zinc Oxide Thin Films Grown by Plasma-Enhanced Atomic Layer Deposition. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 2000319.	0.8	20
13	Interfacial Band Engineering of MoS ₂ /Gold Interfaces Using Pyrimidine-Containing Self-Assembled Monolayers: Toward Contact-Resistance-Free Bottom-Contacts. <i>Advanced Electronic Materials</i> , 2020, 6, 2000110.	2.6	18
14	Stability of Selected Hydrogen Bonded Semiconductors in Organic Electronic Devices. <i>Chemistry of Materials</i> , 2019, 31, 6315-6346.	3.2	55
15	Flexible Single-Substrate Integrated Active-Matrix Pyroelectric Sensor. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1900277.	1.2	14
16	Up-scalable ITO-free organic light emitting diodes based on embedded inkjet-printed copper grids. <i>Flexible and Printed Electronics</i> , 2019, 4, 025004.	1.5	12
17	Critical Evaluation of Organic Thin-Film Transistor Models. <i>Crystals</i> , 2019, 9, 85.	1.0	20
18	Route towards sustainable smart sensors: ferroelectric polyvinylidene fluoride-based materials and their integration in flexible electronics. <i>Chemical Society Reviews</i> , 2019, 48, 1787-1825.	18.7	226

#	ARTICLE	IF	CITATIONS
19	R2R-UV-nanoimprinting as a powerful mean for large-area fabrication of freeform micro-optical elements. , 2019, , .		2
20	Organic Pressure-Sensing Surfaces Fabricated by Lamination of Flexible Substrates. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 1159-1166.	1.4	10
21	Understanding the Properties of Tailor-Made Self-Assembled Monolayers with Embedded Dipole Moments for Interface Engineering. Journal of Physical Chemistry C, 2018, 122, 28757-28774.	1.5	38
22	Embedded Dipole Self-Assembled Monolayers for Contact Resistance Tuning in p-Type and n-Type Organic Thin Film Transistors and Flexible Electronic Circuits. Advanced Functional Materials, 2018, 28, 1804462.	7.8	66
23	Characterization and Compact Modeling of Self-Aligned Short-Channel Organic Transistors. IEEE Transactions on Electron Devices, 2018, 65, 4563-4570.	1.6	7
24	Screen Printed Tactile Sensing Arrays for Prosthetic Applications. , 2018, , .		6
25	Dicyano- and tetracyanopentacene: foundation of an intriguing new class of easy-to-synthesize organic semiconductors. Journal of Materials Chemistry C, 2017, 5, 2603-2610.	2.7	17
26	Paper-based printed impedance sensors for water sorption and humidity analysis. Flexible and Printed Electronics, 2017, 2, 014005.	1.5	25
27	Flexible pressure and proximity sensor surfaces manufactured with organic materials. , 2017, , .		4
28	High-Speed Plastic Integrated Circuits: Process Integration, Design, and Test. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2017, 7, 133-146.	2.7	6
29	Multilength Scale Patterning of Functional Layers by Roll-to-Roll Ultraviolet-Light-Assisted Nanoimprint Lithography. ACS Nano, 2016, 10, 4926-4941.	7.3	94
30	Efficiency of the Switching Process in Organic Electrochemical Transistors. ACS Applied Materials & Interfaces, 2016, 8, 14071-14076.	4.0	20
31	Experiments towards establishing of design rules for R2R-UV-NIL with polymer working shims. , 2016, , .		4
32	Switching from weakly to strongly limited injection in self-aligned, nano-patterned organic transistors. Scientific Reports, 2016, 6, 31387.	1.6	4
33	Temperature and layer thickness dependent in situ investigations on epindolidione organic thin-film transistors. Synthetic Metals, 2016, 218, 64-74.	2.1	7
34	Ambipolar inverters with natural origin organic materials as gate dielectric and semiconducting layer. Physica Status Solidi - Rapid Research Letters, 2015, 9, 358-361.	1.2	8
35	Electrical in situ characterisation of interface stabilised organic thin film transistors. Physica Status Solidi - Rapid Research Letters, 2015, 9, 420-424.	1.2	2
36	Organic Transistors: Self-Aligned Megahertz Organic Transistors Solution-Processed on Plastic (Adv.) Tj ETQq0 0,0 rgBT /Qverlock 10		2,6

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37	Celluloseâ€Derivativeâ€Based Gate Dielectric for Highâ€Performance Organic Complementary Inverters. <i>Advanced Materials</i> , 2015, 27, 7645-7656.	11.1	69
38	Nature as microelectronic fab: Bioelectronics: Materials, transistors and circuits. , 2015, , .		6
39	Nature as microelectronic fab: Bioelectronics: Materials, transistors and circuits. , 2015, , .		0
40	Optimizing pentacene thin-film transistor performance: Temperature and surface condition induced layer growth modification. <i>Organic Electronics</i> , 2015, 26, 420-428.	1.4	13
41	Photolithographic patterning of cellulose: a versatile dual-tone photoresist for advanced applications. <i>Cellulose</i> , 2015, 22, 717-727.	2.4	49
42	Self-aligned flexible organic thin-film transistors with gates patterned by nano-imprint lithography. <i>Organic Electronics</i> , 2015, 22, 140-146.	1.4	32
43	Selfâ€Aligned Megahertz Organic Transistors Solutionâ€Processed on Plastic. <i>Advanced Electronic Materials</i> , 2015, 1, 1500024.	2.6	24
44	All Screen-Printed Logic Gates Based on Organic Electrochemical Transistors. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 4231-4236.	1.6	41
45	In situ preparation, electrical and surface analytical characterization of pentacene thin film transistors. <i>Journal of Applied Physics</i> , 2014, 116, 114508.	1.1	14
46	Nanoimprint Lithography-Structured Organic Electrochemical Transistors and Logic Circuits. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 1515-1519.	1.6	15
47	Diatom-inspired templates for 3D replication: natural diatoms versus laser written artificial diatoms. <i>Bioinspiration and Biomimetics</i> , 2014, 9, 016004.	1.5	17
48	Channel length variation in self-aligned, nanoimprint lithography structured OTFTs. <i>Organic Electronics</i> , 2014, 15, 3274-3281.	1.4	10
49	Design and modeling of self-aligned nano-imprinted sub-micrometer pentacene-based organic thin-film transistors. <i>Organic Electronics</i> , 2013, 14, 2756-2761.	1.4	16
50	Influence of geometry variations on the response of organic electrochemical transistors. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	35
51	High performance p-type organic thin film transistors with an intrinsically photopatternable, ultrathin polymer dielectric layer. <i>Organic Electronics</i> , 2013, 14, 3070-3082.	1.4	30
52	PyzoFlex: a printed piezoelectric pressure sensing foil for human machine interfaces. <i>Proceedings of SPIE</i> , 2013, , .	0.8	14
53	Organic electronics: Material aspects, devices and microelectronic applications. , 2013, , .		1
54	Paper No 8.3: Nanoimprinted Organic Electrochemical Transistors. <i>Digest of Technical Papers SID International Symposium</i> , 2013, 44, 179-180.	0.1	1

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55	Cellulose as biodegradable high- κ dielectric layer in organic complementary inverters. Applied Physics Letters, 2013, 103, .	1.5	65
56	All printed touchless human-machine interface based on only five functional materials. , 2012, , .		2
57	Scanning pyroelectric microscopy for characterizing large-area printed ferroelectric sensors on the nanoscale. Proceedings of SPIE, 2012, , .	0.8	1
58	Detailed simulation of structural color generation inspired by the Morpho butterfly. Optics Express, 2012, 20, 21485.	1.7	38
59	Large area piezoelectric impact sensors. , 2012, , .		3
60	Mechanism of surface proton transfer doping in pentacene based organic thin-film transistors. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 181-192.	0.8	14
61	Grazing-incidence in-plane X-ray diffraction on ultra-thin organic films using standard laboratory equipment. Journal of Applied Crystallography, 2012, 45, 367-370.	1.9	18
62	An All-Printed Ferroelectric Active Matrix Sensor Network Based on Only Five Functional Materials Forming a Touchless Control Interface. Advanced Materials, 2011, 23, 2069-2074.	11.1	215
63	Nanoimprinted complementary organic electronics: Single transistors and inverters. Journal of Materials Research, 2011, 26, 2470-2478.	1.2	15
64	PbTiO ₃ P(VDF-TrFE) Nanocomposites for Pressure and Temperature Sensitive Skin. Ferroelectrics, 2011, 419, 23-27.	0.3	10
65	Pyroelectric scanning probe microscopy: A method for local measurement of the pyroelectric effect in ferroelectric thin films. Physical Review B, 2010, 82, .	1.1	19
66	Fabrication of n- and p-type Organic Thin Film Transistors with Minimized Gate Overlaps by Self-Aligned Nanoimprinting. Advanced Materials, 2010, 22, 5115-5119.	11.1	51
67	Tuning the Threshold Voltage in Organic Thin-Film Transistors by Local Channel Doping Using Photoreactive Interfacial Layers. Advanced Materials, 2010, 22, 5361-5365.	11.1	44
68	Fully printed, flexible, large area organic optothermal sensors for human-machine-interfaces. Procedia Engineering, 2010, 5, 725-729.	1.2	8
69	Design and validation of a novel master-making process chain for organic and large area electronics on flexible substrates. Microelectronic Engineering, 2010, 87, 2139-2145.	1.1	18
70	High-performing submicron organic thin-film transistors fabricated by residue-free embossing. Organic Electronics, 2010, 11, 552-557.	1.4	32
71	Photochemical control of the carrier mobility in pentacene-based organic thin-film transistors. Applied Physics Letters, 2010, 96, 213303.	1.5	17
72	Performance and parameter variation of flexible organic thin film transistors in multicomponent organic sensors. Proceedings of SPIE, 2010, , .	0.8	0

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73	Optochemical sensor based on screenprinted fluorescent sensorspots surrounded by organic photodiodes for multianalyte detection. Proceedings of SPIE, 2010, , .	0.8	1
74	Evaluation of organic sub-monolayers by X-ray based measurements under gracing incident conditions. EPJ Applied Physics, 2009, 46, 20403.	0.3	8
75	Fully printable, flexible, large area organic optothermal sensors for human-machine-interfaces. , 2009, , .		2
76	Residue-free room temperature UV-nanoimprinting of submicron organic thin film transistors. Organic Electronics, 2009, 10, 1466-1472.	1.4	47
77	Fabrication, characterization and modeling of PVDF based organic IR-sensors for human body recognition. , 2009, , .		1
78	Flexible active-matrix cells with selectively poled bifunctional polymer-ceramic nanocomposite for pressure and temperature sensing skin. Journal of Applied Physics, 2009, 106, .	1.1	181
79	AFM, ellipsometry, XPS and TEM on ultra-thin oxide/polymer nanocomposite layers in organic thin film transistors. Analytical and Bioanalytical Chemistry, 2008, 390, 1455-1461.	1.9	15
80	Full X-ray pattern analysis of vacuum deposited pentacene thin films. European Physical Journal B, 2008, 66, 455-459.	0.6	32
81	PbTiO ₃ /P(VDF-TrFE) nanocomposites for flexible skin. , 2008, , .		1
82	Scanning pyroelectric detection of changes in the spontaneous polarization of P(VDF-TrFE) thin films. , 2008, , .		0
83	Pyroelectric polymer sensors: Fabrication, characterization and application in organic electronics. , 2008, , .		0
84	Submicron pentacene-based organic thin film transistors on flexible substrates. Applied Physics Letters, 2007, 91, .	1.5	36
85	Synthesis of Ferroelectric Poly(Vinylidene Fluoride) Copolymer Films and their Application in Integrated Full Organic Pyroelectric Sensors. Ferroelectrics, 2007, 353, 173-185.	0.3	15
86	Orders of Magnitude Reduction of the Contact Resistance in Short-Channel Hot Embossed Organic Thin Film Transistors by Oxidative Treatment of Au Electrodes. Advanced Functional Materials, 2007, 17, 2687-2692.	7.8	117
87	Low-Voltage Organic Thin-Film Transistors with High-k Nanocomposite Gate Dielectrics for Flexible Electronics and Optothermal Sensors. Advanced Materials, 2007, 19, 2241-2245.	11.1	193
88	Transparent pyroelectric sensors and organic field-effect transistors with fluorinated polymers: steps towards organic infrared detectors. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1087-1092.	1.8	15
89	Transparent pyroelectric sensors and organic field-effect transistors with fluorinated polymers: steps towards organic infrared detectors. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1087-1092.	1.8	5
90	Nanoimprinted devices for integrated organic electronics. Microelectron Engineering, 2006, 83, 831-838.	1.1	42

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91	Hybrid polymers as tunable and directly-patternable gate dielectrics in organic thin-film transistors. Physical Review B, 2006, 73, .	1.1	33
92	Growth model of pentacene on inorganic and organic dielectrics based on scaling and rate-equation theory. Physical Review B, 2006, 74, .	1.1	118
93	High-mobility pentacene organic field-effect transistors with a high-dielectric-constant fluorinated polymer film gate dielectric. Applied Physics Letters, 2005, 86, 242902.	1.5	115
94	Influence of grain sizes on the mobility of organic thin-film transistors. Applied Physics Letters, 2005, 86, 263501.	1.5	208
95	Sexithiophene films on clean and oxidized Si(111) surfaces: Growth and electronic structure. Journal of Applied Physics, 2004, 96, 2716-2724.	1.1	41
96	Structural and electrical properties of polymorphic pentacene thin films. , 2003, , .		13
97	About long-term effects of hot-carrier stress on n-MOSFETS. Microelectronics Reliability, 2000, 40, 1485-1490.	0.9	5
98	A study of critical and thermal pair breaking in differently doped $\text{Cu}\tilde{\text{a}}\text{O}$ superconductors by electronic Raman scattering. European Physical Journal D, 1996, 46, 1107-1108.	0.4	0
99	Electronic Raman scattering in CuO_2 superconductors. Journal of Low Temperature Physics, 1996, 105, 733-742.	0.6	23
100	Study of k -dependent electronic properties in cuprate superconductors using Raman spectroscopy. Journal of Physics and Chemistry of Solids, 1995, 56, 1841-1842.	1.9	4
101	Is $\text{Nd}_{2\tilde{\text{a}}}\text{x}\text{CexCuO}_4$ a High-Temperature Superconductor?. Physical Review Letters, 1995, 74, 4911-4914.	2.9	116
102	Electronic Raman scattering in high- T_c superconductors: A probe of $d_{x^2-y^2}$ pairing. Physical Review Letters, 1994, 72, 396-399.	2.9	298
103	Devereaux et al. reply. Physical Review Letters, 1994, 72, 3291-3291.	2.9	41
104	Investigation of the low energy Raman Cross section in superconductors. Physica B: Condensed Matter, 1994, 194-196, 1487-1488.	1.3	1
105	Electronic Raman scattering in differently doped high- T_c materials. Physica B: Condensed Matter, 1994, 194-196, 1539-1540.	1.3	5
106	Electronic Raman scattering in high- T_c superconductors. Physica C: Superconductivity and Its Applications, 1994, 235-240, 57-58.	0.6	0
107	Inelastic light scattering from electronic and phononic excitations in normal and superconducting $\text{Tl}_2\text{Ba}_2\text{CuO}_6$ single crystals. Physical Review B, 1993, 47, 3450-3453.	1.1	41
108	Investigations of the vibrational modes of single crystals and ceramic superconductors. Physica C: Superconductivity and Its Applications, 1989, 162-164, 1097-1098.	0.6	5

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109	High-Tc phase stabilization in Bi ²⁺ —Ca ²⁺ —Sr ²⁺ —Cu ²⁺ —O systems by lead doping. Journal of the Less Common Metals, 1989, 150, 261-267.	0.9	4
110	Growth process control of pentacene thin films and its application in full organic thin film transistors. , 0, , .		0
111	High dielectric constant fluorinated polymer film gate electrets for organic field effect transistors. , 0, , .		0