

Dago M De Leeuw

List of Publications by Year in descending order

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136
papers

14,604
citations

26630

56
h-index

18130

120
g-index

137
all docs

137
docs citations

137
times ranked

14660
citing authors

#	ARTICLE	IF	CITATIONS
1	Depolarization of multidomain ferroelectric materials. <i>Nature Communications</i> , 2019, 10, 2547.	12.8	93
2	Analysis and experimental validation of the figure of merit for piezoelectric energy harvesters. <i>Materials Horizons</i> , 2018, 5, 444-453.	12.2	52
3	Integrated circuits based on conjugated polymer monolayer. <i>Nature Communications</i> , 2018, 9, 451.	12.8	69
4	Collective electrical oscillations of a diatom population induced by dark stress. <i>Scientific Reports</i> , 2018, 8, 5484.	3.3	9
5	Interfacial conduction in organic ferroelectric memory diodes. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	8
6	Solid-state-processing of $\hat{\Gamma}$ -PVDF. <i>Materials Horizons</i> , 2017, 4, 408-414.	12.2	43
7	Flexible Piezoelectric Touch Sensor by Alignment of Lead-free Alkaline Niobate Microcubes in PDMS. <i>Advanced Functional Materials</i> , 2017, 27, 1700728.	14.9	101
8	Global excitation and local probing of ferroelectric domains. <i>Organic Electronics</i> , 2017, 47, 189-193.	2.6	1
9	Synthesis and characterization of novel Cu ₂ O/PVDF nanocomposites for flexible ferroelectric organic electronic memory devices. <i>Current Applied Physics</i> , 2017, 17, 1181-1188.	2.4	22
10	Evaluation of the spectroscopic ellipsometry and dielectric properties of Cr ₂ O ₃ nanoparticles doped PVDF thin films for future application of organic ferroelectric junctions. <i>Optik</i> , 2017, 138, 207-213.	2.9	6
11	Laser induced forward transfer of graphene. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	29
12	Ferroelectricity and piezoelectricity in soft biological tissue: Porcine aortic walls revisited. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	12
13	Reliable Work Function Determination of Multicomponent Surfaces and Interfaces: The Role of Electrostatic Potentials in Ultraviolet Photoelectron Spectroscopy. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700324.	3.7	61
14	Retention of intermediate polarization states in ferroelectric materials enabling memories for multi-bit data storage. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	33
15	Extracellular electrical recording of pH-triggered bursts in C6 glioma cell populations. <i>Science Advances</i> , 2016, 2, e1600516.	10.3	22
16	Thin film thermistor with positive temperature coefficient of resistance based on phase separated blends of ferroelectric and semiconducting polymers. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	11
17	Reflection and extinction of light by self-assembled monolayers of a quinque-thiophene derivative: A coherent scattering approach. <i>Journal of Chemical Physics</i> , 2016, 144, 214302.	3.0	2
18	Solvent-Induced Galvanoluminescence of Metal-Organic Framework Electroluminescent Diodes. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11045-11048.	3.1	12

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19	An electrical method to measure low-frequency collective and synchronized cell activity using extracellular electrodes. <i>Sensing and Bio-Sensing Research</i> , 2016, 10, 1-8.	4.2	21
20	Downscaling and Charge Transport in Nanostructured Ferroelectric Memory Diodes Fabricated by Solution Micromolding. <i>Advanced Functional Materials</i> , 2016, 26, 5111-5119.	14.9	18
21	The negative piezoelectric effect of the ferroelectric polymer poly(vinylidene fluoride). <i>Nature Materials</i> , 2016, 15, 78-84.	27.5	329
22	Switching dynamics in ferroelectric P(VDF-TrFE) thin films. <i>Physical Review B</i> , 2015, 92, .	3.2	41
23	Unipolar resistive switching in metal oxide/organic semiconductor non-volatile memories as a critical phenomenon. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	10
24	Human Neuronal SHSY5Y Cells on PVDF:PTFE Copolymer Thin Films. <i>Advanced Engineering Materials</i> , 2015, 17, 1051-1056.	3.5	6
25	Microstructured organic ferroelectric thin film capacitors by solution micromolding. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2124-2132.	1.8	13
26	Sudden death of organic light-emitting diodes. <i>Organic Electronics</i> , 2015, 20, 89-96.	2.6	9
27	On the short circuit resilience of organic solar cells: prediction and validation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21501-21506.	2.8	5
28	Up-Scaling Graphene Electronics by Reproducible Metal-Graphene Contacts. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 9429-9435.	8.0	35
29	Electrical conduction of LiF interlayers in organic diodes. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	10
30	Lithium fluoride injection layers can form quasi-Ohmic contacts for both holes and electrons. <i>Applied Physics Letters</i> , 2014, 105, 123302.	3.3	17
31	Fundamental Limitations for Electroluminescence in Organic Dual-Gate Field-Effect Transistors. <i>Advanced Materials</i> , 2014, 26, 4450-4455.	21.0	14
32	Relation between the electroforming voltage in alkali halide-polymer diodes and the bandgap of the alkali halide. <i>Applied Physics Letters</i> , 2014, 105, 233502.	3.3	5
33	25th Anniversary Article: Charge Transport and Recombination in Polymer Light-Emitting Diodes. <i>Advanced Materials</i> , 2014, 26, 512-531.	21.0	194
34	Nanoscale Design of Multifunctional Organic Layers for Low-Power High-Density Memory Devices. <i>ACS Nano</i> , 2014, 8, 3498-3505.	14.6	36
35	Contactless charge carrier mobility measurement in organic field-effect transistors. <i>Organic Electronics</i> , 2014, 15, 2855-2861.	2.6	2
36	NO ₂ Detection and Real-Time Sensing with Field-Effect Transistors. <i>Chemistry of Materials</i> , 2014, 26, 773-785.	6.7	101

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37	Polarization fatigue of organic ferroelectric capacitors. <i>Scientific Reports</i> , 2014, 4, 5075.	3.3	61
38	Transverse charge transport through DNA oligomers in large-area molecular junctions. <i>Nanoscale</i> , 2013, 5, 9882.	5.6	8
39	Light Emission in the Unipolar Regime of Ambipolar Organic Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2013, 23, 4133-4139.	14.9	26
40	Controlling the microstructure of poly(vinylidene-fluoride) (PVDF) thin films for microelectronics. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7695.	5.5	158
41	Impact of derivatization on electron transmission through dithienylethene-based photoswitches in molecular junctions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 4392.	2.8	49
42	n-Type Self-Assembled Monolayer Field-Effect Transistors and Complementary Inverters. <i>Advanced Functional Materials</i> , 2013, 23, 2016-2023.	14.9	58
43	Organic ultra-thin film transistors with a liquid gate for extracellular stimulation and recording of electric activity of stem cell-derived neuronal networks. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3897.	2.8	82
44	Revisiting the β -phase of poly(vinylidene fluoride) for solution-processed ferroelectric thin films. <i>Nature Materials</i> , 2013, 12, 433-438.	27.5	361
45	Predictability of Thermal and Electrical Properties of End-Capped Oligothiophenes by a Simple Bulkiness Parameter. <i>Chemistry of Materials</i> , 2013, 25, 2128-2136.	6.7	11
46	The Curious Out-of-Plane Conductivity of PEDOT:PSS. <i>Advanced Functional Materials</i> , 2013, 23, 5787-5793.	14.9	28
47	Real-time NO ₂ detection at ppb level with ZnO field-effect transistors. <i>Sensors and Actuators B: Chemical</i> , 2013, 181, 668-673.	7.8	8
48	n-Type self-assembled monolayer field-effect transistors for flexible organic electronics. <i>Organic Electronics</i> , 2013, 14, 1297-1304.	2.6	27
49	Reversible post-breakdown conduction in aluminum oxide-polymer capacitors. <i>Applied Physics Letters</i> , 2013, 102, 153509.	3.3	4
50	The role of internal structure in the anomalous switching dynamics of metal-oxide/polymer resistive random access memories. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	11
51	Localizing trapped charge carriers in NO ₂ sensors based on organic field-effect transistors. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	19
52	Low-Frequency Diffusion Noise in Resistive-Switching Memories Based on Metal-Oxide Polymer Structure. <i>IEEE Transactions on Electron Devices</i> , 2012, 59, 2483-2487.	3.0	16
53	Intrinsic and extrinsic resistive switching in a planar diode based on silver oxide nanoparticles. <i>Thin Solid Films</i> , 2012, 522, 407-411.	1.8	14
54	Ferroelectric Phase Diagram of PVDF:PMMA. <i>Macromolecules</i> , 2012, 45, 7477-7485.	4.8	99

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55	Role of Hole Injection in Electroforming of LiF-Polymer Memory Diodes. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12443-12447.	3.1	10
56	Photophysics of Self-Assembled Monolayers of a π -Conjugated Quinquethiophene Derivative. <i>Journal of Physical Chemistry A</i> , 2012, 116, 7645-7650.	2.5	12
57	Organic field-effect transistors as a test-bed for molecular electronics: A combined study with large-area molecular junctions. <i>Organic Electronics</i> , 2012, 13, 2502-2507.	2.6	21
58	Physics of organic ferroelectric field-effect transistors. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 47-54.	2.1	41
59	Carrier-density dependence of the hole mobility in doped and undoped regioregular poly(3-hexylthiophene). <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 138-141.	1.5	12
60	Charge Trapping by Self-Assembled Monolayers as the Origin of the Threshold Voltage Shift in Organic Field-Effect Transistors. <i>Small</i> , 2012, 8, 241-245.	10.0	61
61	Improved Photovoltaic Performance of a Semicrystalline Narrow Bandgap Copolymer Based on 4 <i>H</i> -Cyclopenta[2,1- <i>b</i> :3,4- <i>b'</i>]-dithiophene Donor and Thiazolo[5,4- <i>d</i>]thiazole Acceptor Units. <i>Chemistry of Materials</i> , 2012, 24, 587-593.	6.7	73
62	Processing and Low Voltage Switching of Organic Ferroelectric Phase-Separated Bistable Diodes. <i>Advanced Functional Materials</i> , 2012, 22, 2750-2757.	14.9	52
63	The operational mechanism of ferroelectric-driven organic resistive switches. <i>Organic Electronics</i> , 2012, 13, 147-152.	2.6	37
64	Solution-Processable Septithiophene Monolayer Transistor. <i>Advanced Materials</i> , 2012, 24, 973-978.	21.0	56
65	Operational Stability of Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2012, 24, 1146-1158.	21.0	213
66	Formation of High-Quality Self-Assembled Monolayers of Conjugated Dithiols on Gold: Base Matters. <i>Journal of the American Chemical Society</i> , 2011, 133, 4930-4939.	13.7	103
67	Anomalous temperature dependence of the current in a metal-oxide-polymer resistive switching diode. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 025103.	2.8	9
68	Small band gap copolymers based on furan and diketopyrrolopyrrole for field-effect transistors and photovoltaic cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 1600-1606.	6.7	148
69	Microstructure and Phase Behavior of a Quinquethiophene-Based Self-Assembled Monolayer as a Function of Temperature. <i>Journal of Physical Chemistry C</i> , 2011, 115, 22925-22930.	3.1	21
70	Origin of the efficiency enhancement in ferroelectric functionalized organic solar cells. <i>Applied Physics Letters</i> , 2011, 98, 183301.	3.3	46
71	Controlling charge injection by self-assembled monolayers in bottom-gate and top-gate organic field-effect transistors. <i>Synthetic Metals</i> , 2011, 161, 2226-2229.	3.9	11
72	Organic ferroelectric opto-electronic memories. <i>Materials Today</i> , 2011, 14, 592-599.	14.2	92

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73	Transport Physics and Device Modeling of Zinc Oxide Thin-Film Transistors Part I: Long-Channel Devices. IEEE Transactions on Electron Devices, 2011, 58, 2610-2619.	3.0	91
74	Transport Physics and Device Modeling of Zinc Oxide Thin-Film Transistors Part II: Contact Resistance in Short Channel Devices. IEEE Transactions on Electron Devices, 2011, 58, 3025-3033.	3.0	30
75	Universal Scaling of the Charge Transport in Large Area Molecular Junctions. Small, 2011, 7, 1593-1598.	10.0	22
76	Spinodal Decomposition of Blends of Semiconducting and Ferroelectric Polymers. Advanced Functional Materials, 2011, 21, 1887-1894.	14.9	58
77	Gate-Bias Controlled Charge Trapping as a Mechanism for NO ₂ Detection with Field-Effect Transistors. Advanced Functional Materials, 2011, 21, 100-107.	14.9	57
78	The MEMOLED: Active Addressing with Passive Driving. Advanced Materials, 2011, 23, 865-868.	21.0	30
79	Dual-Gate Thin-Film Transistors, Integrated Circuits and Sensors. Advanced Materials, 2011, 23, 3231-3242.	21.0	142
80	Binary self-assembled monolayers: Apparent exponential dependence of resistance on average molecular length. Organic Electronics, 2011, 12, 857-864.	2.6	20
81	Opto-electronic characterization of electron traps upon forming polymer oxide memory diodes. Applied Physics Letters, 2011, 99, .	3.3	13
82	Crossbar memory array of organic bistable rectifying diodes for nonvolatile data storage. Applied Physics Letters, 2010, 97, .	3.3	60
83	Ordered Semiconducting Self-Assembled Monolayers on Polymeric Surfaces Utilized in Organic Integrated Circuits. Nano Letters, 2010, 10, 1998-2002.	9.1	37
84	Retention Time and Depolarization in Organic Nonvolatile Memories Based on Ferroelectric Semiconductor Phase-Separated Blends. IEEE Transactions on Electron Devices, 2010, 57, 3466-3471.	3.0	24
85	Dual-Gate Organic Field-Effect Transistors as Potentiometric Sensors in Aqueous Solution. Advanced Functional Materials, 2010, 20, 898-905.	14.9	136
86	Organic Nonvolatile Memory Devices Based on Ferroelectricity. Advanced Materials, 2010, 22, 933-945.	21.0	511
87	Efficient Solar Cells Based on an Easily Accessible Diketopyrrolopyrrole Polymer. Advanced Materials, 2010, 22, E242-6.	21.0	358
88	Revealing Buried Interfaces to Understand the Origins of Threshold Voltage Shifts in Organic Field-Effect Transistors. Advanced Materials, 2010, 22, 5105-5109.	21.0	101
89	Stability of large-area molecular junctions. Organic Electronics, 2010, 11, 146-149.	2.6	44
90	Gas sensing with self-assembled monolayer field-effect transistors. Organic Electronics, 2010, 11, 895-898.	2.6	90

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91	Structure of Phase-Separated Ferroelectric/Semiconducting Polymer Blends for Organic Non-Volatile Memories. <i>Small</i> , 2010, 6, 508-512.	10.0	50
92	Trapping of electrons in metal oxide-polymer memory diodes in the initial stage of electroforming. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	17
93	Organic field-effect transistor-based biosensors functionalized with protein receptors. <i>Journal of Applied Physics</i> , 2010, 108, 124501.	2.5	31
94	Synthesis of Monochlorosilyl Derivatives of Dialkyloligothiophenes for Self-Assembling Monolayer Field-Effect Transistors. <i>Organometallics</i> , 2010, 29, 4213-4226.	2.3	32
95	Ambipolar organic transistors and near-infrared phototransistors based on a solution-processable squarilium dye. <i>Journal of Materials Chemistry</i> , 2010, 20, 3673.	6.7	77
96	Tunable Injection Barrier in Organic Resistive Switches Based on Phase-Separated Ferroelectric-Semiconductor Blends. <i>Advanced Functional Materials</i> , 2009, 19, 3173-3178.	14.9	73
97	Monolayer coverage and channel length set the mobility in self-assembled monolayer field-effect transistors. <i>Nature Nanotechnology</i> , 2009, 4, 674-680.	31.5	121
98	Complementary circuits based on solution processed low-voltage organic field-effect transistors. <i>Synthetic Metals</i> , 2009, 159, 2368-2370.	3.9	16
99	Poly(diketopyrrolopyrrole-terthiophene) for Ambipolar Logic and Photovoltaics. <i>Journal of the American Chemical Society</i> , 2009, 131, 16616-16617.	13.7	721
100	Self-Assembled Monolayer Formation of Long Alkanedithiols in Molecular Junctions. <i>Small</i> , 2008, 4, 100-104.	10.0	69
101	Manipulating the Local Light Emission in Organic Light-Emitting Diodes by using Patterned Self-Assembled Monolayers. <i>Advanced Materials</i> , 2008, 20, 2703-2706.	21.0	26
102	Ultralow Power Microfuses for Write-Once Read-Many Organic Memory Elements. <i>Advanced Materials</i> , 2008, 20, 3750-3753.	21.0	31
103	Switching dynamics in non-volatile polymer memories. <i>Organic Electronics</i> , 2008, 9, 829-833.	2.6	13
104	Bottom-up organic integrated circuits. <i>Nature</i> , 2008, 455, 956-959.	27.8	366
105	Organic non-volatile memories from ferroelectric phase-separated blends. <i>Nature Materials</i> , 2008, 7, 547-550.	27.5	317
106	Upscaling, integration and electrical characterization of molecular junctions. <i>Nature Nanotechnology</i> , 2008, 3, 749-754.	31.5	92
107	High mobility n-channel organic field-effect transistors based on soluble C60 and C70 fullerene derivatives. <i>Synthetic Metals</i> , 2008, 158, 468-472.	3.9	151
108	Resistive Switching in Organic Memories with a Spin-Coated Metal Oxide Nanoparticle Layer. <i>Journal of Physical Chemistry C</i> , 2008, 112, 5254-5257.	3.1	38

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109	Fluorine containing C60 derivatives for high-performance electron transporting field-effect transistors and integrated circuits. <i>Applied Physics Letters</i> , 2008, 92, 143310.	3.3	26
110	Electron tunneling through alkanedithiol self-assembled monolayers in large-area molecular junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 11161-11166.	7.1	178
111	Air-stable ambipolar organic transistors. <i>Applied Physics Letters</i> , 2007, 90, 122105.	3.3	194
112	Charge Injection Across Self-Assembly Monolayers in Organic Field-Effect Transistors: Odd~Even Effects. <i>Journal of the American Chemical Society</i> , 2007, 129, 6477-6484.	13.7	134
113	Optical and Conductive Properties of Large-Area Liquid Crystalline Monodomains of Terthiophene Derivatives. <i>Journal of Physical Chemistry C</i> , 2007, 111, 18411-18416.	3.1	13
114	Reproducible resistive switching in nonvolatile organic memories. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	126
115	On the switching mechanism in Rose Bengal-based memory devices. <i>Organic Electronics</i> , 2007, 8, 559-565.	2.6	36
116	Star-Shaped Oligothiophenes for Solution-Processible Organic Electronics: A Flexible Aliphatic Spacers Approach. <i>Chemistry of Materials</i> , 2006, 18, 4101-4108.	6.7	87
117	Enhanced hole transport in poly(p-phenylene vinylene) planar metal-polymer-metal devices. <i>Journal of Applied Physics</i> , 2006, 99, 103702.	2.5	4
118	Large Area Liquid Crystal Monodomain Field-Effect Transistors. <i>Journal of the American Chemical Society</i> , 2006, 128, 2336-2345.	13.7	222
119	Control of Ambipolar Thin Film Architectures by Co-Self-Assembling Oligo(p-phenylenevinylene)s and Perylene Bisimides. <i>Journal of the American Chemical Society</i> , 2006, 128, 9535-9540.	13.7	154
120	New fluorene~bithiophene-based trimers as stable materials for OFETs. <i>Synthetic Metals</i> , 2006, 156, 582-589.	3.9	21
121	Towards molecular electronics with large-area molecular junctions. <i>Nature</i> , 2006, 441, 69-72.	27.8	583
122	Switching and filamentary conduction in non-volatile organic memories. <i>Organic Electronics</i> , 2006, 7, 305-312.	2.6	244
123	High performance n-channel organic field-effect transistors and ring oscillators based on C60 fullerene films. <i>Applied Physics Letters</i> , 2006, 89, 213504.	3.3	239
124	Origin of the stretched-exponential hole relaxation in regioregular poly(3-hexylthiophene). <i>Chemical Physics Letters</i> , 2005, 402, 370-374.	2.6	18
125	High-performance solution-processed polymer ferroelectric field-effect transistors. <i>Nature Materials</i> , 2005, 4, 243-248.	27.5	880
126	Organic thin-film electronics from vitreous solution-processed rubrene hypereutectics. <i>Nature Materials</i> , 2005, 4, 601-606.	27.5	246

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127	High Anisotropy of the Field-Effect Transistor Mobility in Magnetically Aligned Discotic Liquid-Crystalline Semiconductors. <i>Journal of the American Chemical Society</i> , 2005, 127, 16233-16237.	13.7	197
128	Novel Star-Shaped Triphenylamine-Based Molecular Glasses and Their Use in OFETs. <i>Chemistry of Materials</i> , 2005, 17, 3031-3039.	6.7	187
129	Organic complementary-like inverters employing methanofullerene-based ambipolar field-effect transistors. <i>Applied Physics Letters</i> , 2004, 85, 4205-4207.	3.3	179
130	Flexible active-matrix displays and shift registers based on solution-processed organic transistors. <i>Nature Materials</i> , 2004, 3, 106-110.	27.5	1,516
131	Spatially Correlated Charge Transport in Organic Thin Film Transistors. <i>Physical Review Letters</i> , 2004, 92, 116802.	7.8	582
132	The Disperse Charge-Carrier Kinetics in Regioregular Poly(3-hexylthiophene). <i>Journal of Physical Chemistry B</i> , 2004, 108, 17818-17824.	2.6	66
133	Gate Insulators in Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , 2004, 16, 4543-4555.	6.7	853
134	Photoconductivity enhancement of poly(3-hexylthiophene) by increasing inter- and intra-chain order. <i>Synthetic Metals</i> , 2003, 137, 863-864.	3.9	25
135	Polymer-based transistors used as pixel switches in active-matrix displays. <i>Journal of the Society for Information Display</i> , 2002, 10, 195.	2.1	18
136	Resistive Switching in Metal Oxide/Organic Semiconductor Nonvolatile Memories. , 0, , .		1