Giuseppe Cantarella

List of Publications by Year in descending order

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71 papers 1,908 citations

279798 23 h-index 265206 42 g-index

73 all docs

73 docs citations

73 times ranked

2619 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 | Biodegradable and Highly Deformable Temperature Sensors for the Internet of Things. Advanced Functional Materials, 2017, 27, 1702390. | 14.9 | 178 |
| 3 | Stretchable and Conformable Oxide Thinâ€Film Electronics. Advanced Electronic Materials, 2015, 1, 1400038. | 5.1 | 78 |
| 4 | Flexible aâ€ŀGZO Phototransistor for Instantaneous and Cumulative UVâ€Exposure Monitoring for Skin Health. Advanced Electronic Materials, 2016, 2, 1600273. | 5.1 | 59 |
| 5 | Bio-impedance and circuit parameters: An analysis for tracking fruit ripening. Postharvest Biology and Technology, 2020, 159, 110978. | 6.0 | 58 |
| 6 | Contact resistance and overlapping capacitance in flexible sub-micron long oxide thin-film transistors for above 100 MHz operation. Applied Physics Letters, 2014, 105, . | 3.3 | 57 |
| 7 | Photo-Induced Room-Temperature Gas Sensing with a-IGZO Based Thin-Film Transistors Fabricated on Flexible Plastic Foil. Sensors, 2018, 18, 358. | 3.8 | 55 |
| 8 | Buckled Thin-Film Transistors and Circuits on Soft Elastomers for Stretchable Electronics. ACS Applied Materials & Diterfaces, 2017, 9, 28750-28757. | 8.0 | 54 |
| 9 | Metalâ€Halide Perovskites for Gate Dielectrics in Fieldâ€Effect Transistors and Photodetectors Enabled by PMMA Liftâ€Off Process. Advanced Materials, 2018, 30, e1707412. | 21.0 | 51 |
| 10 | Design of Engineered Elastomeric Substrate for Stretchable Active Devices and Sensors. Advanced Functional Materials, 2018, 28, 1705132. | 14.9 | 47 |
| 11 | Low-temperature spray-deposited indium oxide for flexible thin-film transistors and integrated circuits. Applied Physics Letters, 2015, 106, . | 3.3 | 46 |
| 12 | Entirely Flexible Onâ€Site Conditioned Magnetic Sensorics. Advanced Electronic Materials, 2016, 2, 1600188. | 5.1 | 38 |
| 13 | Review of recent trends in flexible metal oxide thin-film transistors for analog applications. Flexible and Printed Electronics, 2020, 5, 033001. | 2.7 | 38 |
| 14 | Flexible and Printed Electrochemical Immunosensor Coated with Oxygen Plasma Treated SWCNTs for Histamine Detection. Biosensors, 2020, 10, 35. | 4.7 | 38 |
| 15 | Flexible In–Ga–Zn–O Thin-Film Transistors on Elastomeric Substrate Bent to 2.3% Strain. IEEE Electron Device Letters, 2015, 36, 781-783. | 3.9 | 37 |
| 16 | Flexible Quasi-Vertical In-Ga-Zn-O Thin-Film Transistor With 300-nm Channel Length. IEEE Electron Device Letters, 2015, 36, 475-477. | 3.9 | 36 |
| 17 | Development of Flexible Dispense-Printed Electrochemical Immunosensor for Aflatoxin M1 Detection in Milk. Sensors, 2019, 19, 3912. | 3.8 | 36 |
| 18 | Solution-processed p-type copper(I) thiocyanate (CuSCN) for low-voltage flexible thin-film transistors and integrated inverter circuits. Applied Physics Letters, 2017, 110, 113504. | 3.3 | 33 |

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|----|--|-----|-----------|
| 19 | Ferroelectricâ€Like Charge Trapping Thinâ€Film Transistors and Their Evaluation as Memories and Synaptic Devices. Advanced Electronic Materials, 2017, 3, 1700309. | 5.1 | 33 |
| 20 | Thin-film electronics on active substrates: review of materials, technologies and applications. Journal Physics D: Applied Physics, 2022, 55, 323002. | 2.8 | 33 |
| 21 | Charge Trapping Mechanism Leading to Sub-60-mV/decade-Swing FETs. IEEE Transactions on Electron Devices, 2017, 64, 2789-2796. | 3.0 | 29 |
| 22 | Campanile Near-Field Probes Fabricated by Nanoimprint Lithography on the Facet of an Optical Fiber. Scientific Reports, 2017, 7, 1651. | 3.3 | 28 |
| 23 | Flexible InGaZnO TFTs With \${f}\$ \$_{extsf{max}}\$ Above 300 MHz. IEEE Electron Device Letters, 2018, 39, 1310-1313. | 3.9 | 26 |
| 24 | Positive charge trapping phenomenon in n-channel thin-film transistors with amorphous alumina gate insulators. Journal of Applied Physics, 2016, 120, . | 2.5 | 23 |
| 25 | Flexible Screen Printed Aptasensor for Rapid Detection of Furaneol: A Comparison of CNTs and AgNPs Effect on Aptasensor Performance. Nanomaterials, 2020, 10, 1167. | 4.1 | 22 |
| 26 | Supervised binary classification methods for strawberry ripeness discrimination from bioimpedance data. Scientific Reports, 2021, 11, 11202. | 3.3 | 22 |
| 27 | Flexible In–Ga–Zn–O-Based Circuits With Two and Three Metal Layers: Simulation and Fabrication Study. IEEE Electron Device Letters, 2016, 37, 1582-1585. | 3.9 | 15 |
| 28 | Gain-Tunable Complementary Common-Source Amplifier Based on a Flexible Hybrid Thin-Film Transistor Technology. IEEE Electron Device Letters, 2017, 38, 1536-1539. | 3.9 | 14 |
| 29 | Oxide Thin-Film Transistors on Fibers for Smart Textiles. Technologies, 2017, 5, 31. | 5.1 | 14 |
| 30 | Focused ion beam milling for the fabrication of 160 nm channel length IGZO TFTs on flexible polymer substrates. Flexible and Printed Electronics, 2020, 5, 015007. | 2.7 | 13 |
| 31 | Improvement of contact resistance in flexible a-IGZO thin-film transistors by CF4/O2 plasma treatment. Solid-State Electronics, 2018, 150, 23-27. | 1.4 | 12 |
| 32 | Design and Validation of a Portable AD5933–Based Impedance Analyzer for Smart Agriculture. IEEE Access, 2021, 9, 63656-63675. | 4.2 | 12 |
| 33 | Flexible In–Ga–Zn–O Thin-Film Transistors With Sub-300-nm Channel Lengths Defined by Two-Photon Direct Laser Writing. IEEE Transactions on Electron Devices, 2018, 65, 3796-3802. | 3.0 | 11 |
| 34 | Laser-Induced Graphene Electrodes Modified with a Molecularly Imprinted Polymer for Detection of Tetracycline in Milk and Meat. Sensors, 2022, 22, 269. | 3.8 | 11 |
| 35 | Ge2Sb2Te5 p-Type Thin-Film Transistors on Flexible Plastic Foil. Materials, 2018, 11, 1672. | 2.9 | 10 |
| 36 | 5–31-Hz 188-\$mu\$ W Light-Sensing Oscillator With Two Active Inductors Fully Integrated on Plastic. IEEE Journal of Solid-State Circuits, 2019, 54, 2195-2206. | 5.4 | 9 |

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| 37 | Fabrication and AC Performance of Flexible Indium-Gallium-Zinc-Oxide Thin-Film Transistors. ECS Transactions, 2019, 90, 55-63. | 0.5 | 9 |
| 38 | Fabrication, Modeling, and Evaluation of a Digital Output Tilt Sensor With Conductive Microspheres. IEEE Sensors Journal, 2017, 17, 3635-3643. | 4.7 | 8 |
| 39 | Oxide Thin-Film Electronics on Carbon Fiber Reinforced Polymer Composite. IEEE Electron Device Letters, 2017, 38, 1043-1046. | 3.9 | 8 |
| 40 | Simple and accurate single transistor technique for parameters extraction from organic and inorganic thin film devices. Organic Electronics, 2018, 63, 376-383. | 2.6 | 8 |
| 41 | Integration of solution-processed (7,5) SWCNTs with sputtered and spray-coated metal oxides for flexible complementary inverters. , 2014 , , . | | 7 |
| 42 | Coupling model for an extended-range plasmonic optical transformer scanning probe. Light: Science and Applications, 2014, 3, e195-e195. | 16.6 | 7 |
| 43 | Radio frequency electronics in a-IGZO TFT technology. , 2016, , . | | 7 |
| 44 | 3–5 V, 3–3.8 MHz OOK modulator with a-IGZO TFTs for flexible wireless transmitter. , 2017, , . | | 6 |
| 45 | Flexible Green Perovskite Light Emitting Diodes. IEEE Journal of the Electron Devices Society, 2019, 7, 769-775. | 2.1 | 6 |
| 46 | Cost-effective, mask-less, and high-throughput prototyping of flexible hybrid electronic devices using dispense printing and conductive silver ink. , 2021, , . | | 6 |
| 47 | N-type to p-type transition upon phase change in Ge6Sb1Te2 compounds. Applied Physics Letters, 2018, 113 , . | 3.3 | 4 |
| 48 | Flexible Dispense-Printed Electrochemical Biosensor for Aflatoxin M1 Detection Employing NaOH and Oxygen Plasma Electrode Pre-treatment. , 2019, , . | | 4 |
| 49 | Aluminum oxide as a dielectric and passivation layer for (flexible) metal-oxide and 2D semiconductor devices., 2021,,. | | 4 |
| 50 | Flexible CMOS electronics based on p-type Ge <inf>2</inf> Sb <inf>2</inf> Te <inf>5</inf> and n-type InGaZnO <inf>4</inf> semiconductors. , 2017, , . | | 3 |
| 51 | A PEDOT:PSS/SWCNT-Coated Screen Printed Immunosensor for Histamine Detection in Food Samples. , 2020, , . | | 3 |
| 52 | Long-Term Aging of Al ₂ O ₃ Passivated and Unpassivated Flexible a-IGZO TFTs. IEEE Transactions on Electron Devices, 2020, 67, 4934-4939. | 3.0 | 3 |
| 53 | FruitMeter: An AD5933-Based Portable Impedance Analyzer for Fruit Quality Characterization., 2020,,. | | 3 |
| 54 | Recycled Carbon-based Strain Sensors: An Ecofriendly Approach using Char and Coconut Oil., 2021,,. | | 3 |

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| 55 | The Influence of Climate Conditions and On-Skin Positioning on InGaZnO Thin-Film Transistor Performance. Frontiers in Electronics, 2022, 2, . | 3.2 | 3 |
| 56 | Digital output flexible tilt sensor with conductive microspheres. , 2015, , . | | 2 |
| 57 | Design of bendable high-frequency circuits based on short-channel InGaZnO TFTs., 2019, , . | | 2 |
| 58 | Selection of Cole Model Bio-Impedance Parameters for the Estimation of the Ageing Evolution of Apples. IFMBE Proceedings, 2020, , 25-32. | 0.3 | 2 |
| 59 | Thermal Stability of Flexible IGZO/Ag Schottky Diodes on Cellulose Microfiber Paper Substrate. , 2021, , . | | 2 |
| 60 | Sensors: Entirely Flexible Onâ€Site Conditioned Magnetic Sensorics (Adv. Electron. Mater. 8/2016). Advanced Electronic Materials, 2016, 2, . | 5.1 | 1 |
| 61 | 20.3dB 0.39mW AM detector with single-transistor active inductor in bendable a-IGZO TFT. , 2016, , . | | 1 |
| 62 | 20.3dB 0.39mW AM detector with single-transistor active inductor in bendable a-IGZO TFT., 2016,,. | | 1 |
| 63 | Bendable Printed and Thin-film Electronics for Wireless Communications. , 2018, , . | | 1 |
| 64 | Single-Walled Carbon Nanotube-Coated Flexible and Soft Screen-Printed Electrochemical Biosensor for Ochratoxin a Detection. , 2020, , . | | 1 |
| 65 | Bendable metal oxide thin-film transistors and circuits for analog electronics applications. , 2021, , . | | 1 |
| 66 | Design and simulation of a 800 Mbit/s data link for magnetic resonance imaging wearables. , 2015, 2015, 1323-6. | | 0 |
| 67 | Flexible Green Perovskite Light Emitting Diodes. , 2018, , . | | 0 |
| 68 | Effects of stair case gate bias stress in IGZO/Al2O3 flexible TFTs. Microelectronics Reliability, 2018, 88-90, 882-886. | 1.7 | 0 |
| 69 | Design and Fabrication of a Pillar-Based Piezoelectric Microphone Exploiting 3D-Printing Technology. , 2021, 5, 1-4. | | 0 |
| 70 | Mechanical and Electrical Design Strategies for Flexible InGaZnO Circuits., 2021,,. | | 0 |
| 71 | Oxide Thin-Film Electronics forÂtheÂFront-End Conditioning ofÂFlexible Magnetic Field Sensors. Minerals, Metals and Materials Series, 2021, , 294-302. | 0.4 | 0 |