

Sven Ingebrandt

List of Publications by Year in descending order

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141
papers

4,383
citations

87888

38
h-index

128289

60
g-index

146
all docs

146
docs citations

146
times ranked

4641
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | The antioxidant Rutin counteracts the pathological impact of α -synuclein on the enteric nervous system <i>in vitro</i> . <i>Biological Chemistry</i> , 2022, 403, 103-122. | 2.5 | 5 |
| 2 | Delineating charge and capacitance transduction in system-integrated graphene-based BioFETs used as aptasensors for malaria detection. <i>Biosensors and Bioelectronics</i> , 2022, 208, 114219. | 10.1 | 17 |
| 3 | Realization of a PEDOT:PSS/Graphene Oxide On-Chip Pseudo-Reference Electrode for Integrated ISFETs. <i>Sensors</i> , 2022, 22, 2999. | 3.8 | 6 |
| 4 | Electrical SPR biosensor with thermal annealed graphene oxide: Concept of highly sensitive biomolecule detection. <i>Biosensors and Bioelectronics: X</i> , 2022, 11, 100152. | 1.7 | 1 |
| 5 | Review "Human-Body Powered Biosensing Textiles: Body-Power Generating Wearables Based on Textiles for Human Biomonitoring. <i>Journal of the Electrochemical Society</i> , 2022, 169, 067502. | 2.9 | 2 |
| 6 | Direct measurement of oxygen reduction reactions at neurostimulation electrodes. <i>Journal of Neural Engineering</i> , 2022, 19, 036045. | 3.5 | 19 |
| 7 | Microelectrode Combinations of Gold and Polypyrrole Enable Highly Stable Two-electrode Electrochemical Impedance Spectroscopy Measurements under Turbulent Flow Conditions. <i>Electroanalysis</i> , 2021, 33, 197-207. | 2.9 | 9 |
| 8 | Innovative retinal interfaces for optimized artificial vision "a new DFG funded Research Training Group. <i>Neuroforum</i> , 2021, . | 0.3 | 0 |
| 9 | PEDOT:PSS organic electrochemical transistors for electrical cell-substrate impedance sensing down to single cells. <i>Biosensors and Bioelectronics</i> , 2021, 180, 113101. | 10.1 | 23 |
| 10 | Dry Film Resist Laminated Microfluidic System for Electrical Impedance Measurements. <i>Micromachines</i> , 2021, 12, 632. | 2.9 | 11 |
| 11 | PEDOT:PSS-Based Bioelectronic Devices for Recording and Modulation of Electrophysiological and Biochemical Cell Signals. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100061. | 7.6 | 92 |
| 12 | Process Variability in Top-Down Fabrication of Silicon Nanowire-Based Biosensor Arrays. <i>Sensors</i> , 2021, 21, 5153. | 3.8 | 20 |
| 13 | Sensitive impedimetric detection of troponin I with metal-organic framework composite electrode. <i>RSC Advances</i> , 2021, 11, 2167-2174. | 3.6 | 19 |
| 14 | Contactless, Battery-free, and Stretchable Wearable for Continuous Recording of Seismocardiograms. <i>ACS Applied Electronic Materials</i> , 2021, 3, 11-20. | 4.3 | 15 |
| 15 | Comprehensive Understanding of Silicon-Nanowire Field-Effect Transistor Impedimetric Readout for Biomolecular Sensing. <i>Micromachines</i> , 2021, 12, 39. | 2.9 | 4 |
| 16 | Self-Assembling Flexible 3D-MEAs for Cortical Implants. <i>Current Directions in Biomedical Engineering</i> , 2021, 7, 359-362. | 0.4 | 1 |
| 17 | Searching for a common origin of heat-transfer effects in bio- and chemosensors: A study on thiols as a model system. <i>Sensors and Actuators B: Chemical</i> , 2020, 310, 127627. | 7.8 | 6 |
| 18 | Point-of-care-ready nanoscale ISFET arrays for sub-picomolar detection of cytokines in cell cultures. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 6777-6788. | 3.7 | 19 |

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|----|---|------|-----------|
| 19 | Development and in vitro validation of flexible intraretinal probes. <i>Scientific Reports</i> , 2020, 10, 19836. | 3.3 | 7 |
| 20 | Decomposition and modeling of signal shapes of single point cardiac monitoring. <i>Current Directions in Biomedical Engineering</i> , 2020, 6, 583-586. | 0.4 | 2 |
| 21 | Luminescent metal-organic frameworks and their composites: Potential future materials for organic light emitting displays. <i>Coordination Chemistry Reviews</i> , 2019, 401, 213077. | 18.8 | 122 |
| 22 | Tuning Channel Architecture of Interdigitated Organic Electrochemical Transistors for Recording the Action Potentials of Electrogenic Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1902085. | 14.9 | 42 |
| 23 | Reduced graphene-oxide transducers for biosensing applications beyond the Debye-screening limit. <i>Biosensors and Bioelectronics</i> , 2019, 130, 352-359. | 10.1 | 15 |
| 24 | Photothermal effects induced by surface plasmon resonance at graphene/gold nanointerfaces: A multiscale modeling study. <i>Biosensors and Bioelectronics</i> , 2019, 126, 470-477. | 10.1 | 14 |
| 25 | Reduced graphene oxide biosensor platform for the detection of NT-proBNP biomarker in its clinical range. <i>Biosensors and Bioelectronics</i> , 2019, 126, 136-142. | 10.1 | 43 |
| 26 | Scalable fabrication and application of nanoscale IDE-arrays as multi-electrode platform for label-free biosensing. <i>Sensors and Actuators B: Chemical</i> , 2018, 265, 115-125. | 7.8 | 14 |
| 27 | Front-End-of-Line Integration of Graphene Oxide for Graphene-Based Electrical Platforms. <i>Advanced Materials Technologies</i> , 2018, 3, 1700318. | 5.8 | 16 |
| 28 | Silicon Nanowire Field-Effect Biosensors. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2018, , 27-57. | 0.5 | 9 |
| 29 | Transistor-Based Impedimetric Monitoring of Single Cells. <i>Bioanalytical Reviews</i> , 2018, , 77-110. | 0.2 | 1 |
| 30 | Impedimetric Sensing of DNA with Silicon Nanowire Transistors as Alternative Transducer Principle. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700740. | 1.8 | 14 |
| 31 | Graphite oxide electrical sensors are able to distinguish single nucleotide polymorphisms in physiological buffers. <i>FlatChem</i> , 2018, 7, 1-9. | 5.6 | 5 |
| 32 | Intriguing electronic insensitivity and high carrier mobility in monolayer hexagonal YN. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4943-4951. | 5.5 | 28 |
| 33 | ScFv-modified graphene-coated IDE-arrays for "label-free"™ screening of cardiovascular disease biomarkers in physiological saline. <i>Biosensors and Bioelectronics</i> , 2018, 102, 574-581. | 10.1 | 20 |
| 34 | Comparative cell biological study of in vitro antitumor and antimetastatic activity on melanoma cells of GnRH-III-containing conjugates modified with short-chain fatty acids. <i>Beilstein Journal of Organic Chemistry</i> , 2018, 14, 2495-2509. | 2.2 | 9 |
| 35 | Wafer-scale fabrication of microelectrode arrays on optically transparent polymer foils for the integration of flexible nanoscale devices. <i>Flexible and Printed Electronics</i> , 2018, 3, 044001. | 2.7 | 4 |
| 36 | A Novel Modular Device for Biological Impedance Measurements: The Differential Impedimetric Sensor Cell (DISC). <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1701029. | 1.8 | 3 |

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|----|---|------|-----------|
| 37 | Wafer-Scale Nanoimprint Lithography Process Towards Complementary Silicon Nanowire Field-Effect Transistors for Biosensor Applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800234. | 1.8 | 10 |
| 38 | Top-Down Fabricated Silicon Nanowire Arrays for Field-Effect Detection of Prostate-Specific Antigen. <i>ACS Omega</i> , 2018, 3, 8471-8482. | 3.5 | 31 |
| 39 | Silane Deposition via Gas-Phase Evaporation and High-Resolution Surface Characterization of the Ultrathin Siloxane Coatings. <i>Langmuir</i> , 2018, 34, 10217-10229. | 3.5 | 42 |
| 40 | Considering the spin-orbit coupling effect on the photocatalytic performance of AlN/MX ₂ nanocomposites. <i>Journal of Materials Chemistry C</i> , 2017, 5, 9412-9420. | 5.5 | 36 |
| 41 | Adsorption of Gas Molecules on Graphene-Like ZnO Nanosheets: The Roles of Gas Concentration, Layer Number, and Heterolayer. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700647. | 3.7 | 33 |
| 42 | PEDOT:PSS organic electrochemical transistor arrays for extracellular electrophysiological sensing of cardiac cells. <i>Biosensors and Bioelectronics</i> , 2017, 93, 132-138. | 10.1 | 56 |
| 43 | DNA detection with top-down fabricated silicon nanowire transistor arrays in linear operation regime. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1510-1519. | 1.8 | 13 |
| 44 | Influence of different chemical surface patterns on the dynamic wetting behaviour on flat and silanized silicon wafers during inclining-plate measurements: An experimental investigation with the high-precision drop shape analysis approach. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 508, 274-285. | 4.7 | 10 |
| 45 | Selective comparison of gelling agents as neural cell culture matrices for long-term microelectrode array electrophysiology. <i>OCL - Oilseeds and Fats, Crops and Lipids</i> , 2016, 23, D117. | 1.4 | 6 |
| 46 | Biologically sensitive field-effect transistors: from ISFETs to NanoFETs. <i>Essays in Biochemistry</i> , 2016, 60, 81-90. | 4.7 | 96 |
| 47 | On the Use of Scalable NanoISFET Arrays of Silicon with Highly Reproducible Sensor Performance for Biosensor Applications. <i>ACS Omega</i> , 2016, 1, 84-92. | 3.5 | 30 |
| 48 | Nano-fabricated memristive biosensors for biomedical applications with liquid and dried samples. , 2016, 2016, 295-298. | | 1 |
| 49 | Label-Free Ultrasensitive Memristive Aptasensor. <i>Nano Letters</i> , 2016, 16, 4472-4476. | 9.1 | 87 |
| 50 | Incubator-independent cell-culture perfusion platform for continuous long-term microelectrode array electrophysiology and time-lapse imaging. <i>Royal Society Open Science</i> , 2015, 2, 150031. | 2.4 | 29 |
| 51 | Handheld readout system for field-effect transistor biosensor arrays for label-free detection of biomolecules. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1313-1319. | 1.8 | 12 |
| 52 | Graphite oxide multilayers for device fabrication: Enzyme-based electrical sensing of glucose. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1335-1341. | 1.8 | 7 |
| 53 | Impedimetric immunosensor for the detection of histamine based on reduced graphene oxide. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1327-1334. | 1.8 | 21 |
| 54 | High-precision drop shape analysis (HPDSA) of quasistatic contact angles on silanized silicon wafers with different surface topographies during inclining-plate measurements: Influence of the surface roughness on the contact line dynamics. <i>Applied Surface Science</i> , 2015, 342, 11-25. | 6.1 | 31 |

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|----|---|------|-----------|
| 55 | Electronic monitoring of single cell-substrate adhesion events with quasi-planar field-effect transistors. <i>Sensors and Actuators B: Chemical</i> , 2015, 210, 776-783. | 7.8 | 4 |
| 56 | The influence of medium conductivity on ECIS measurements with field-effect transistor arrays. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1260-1265. | 1.8 | 2 |
| 57 | Sensing beyond the limit. <i>Nature Nanotechnology</i> , 2015, 10, 734-735. | 31.5 | 22 |
| 58 | Electrical cell-substrate impedance sensing with field-effect transistors is able to unravel cellular adhesion and detachment processes on a single cell level. <i>Lab on A Chip</i> , 2015, 15, 668-679. | 6.0 | 41 |
| 59 | Statistical contact angle analyses: "slow moving" drops on inclining flat mono-aminopropylsiloxane surfaces. <i>Journal of Adhesion Science and Technology</i> , 2015, 29, 1796-1806. | 2.6 | 13 |
| 60 | Neurodegeneration through oxidative stress: Monitoring hydrogen peroxide induced apoptosis in primary cells from the subventricular zone of BALB/c mice using field-effect transistors. <i>Biosensors and Bioelectronics</i> , 2015, 67, 490-496. | 10.1 | 24 |
| 61 | Human T cells monitored by impedance spectrometry using field-effect transistor arrays: A novel tool for single-cell adhesion and migration studies. <i>Biosensors and Bioelectronics</i> , 2015, 67, 170-176. | 10.1 | 22 |
| 62 | Investigation of ISFET device parameters to optimize for impedimetric sensing of cellular adhesion (<i>Phys. Status Solidi A</i> 6 (2014)). <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, . | 1.8 | 0 |
| 63 | Reduced graphene oxide-based sensing platform for electric cell-substrate impedance sensing. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1404-1409. | 1.8 | 8 |
| 64 | Investigation of ISFET device parameters to optimize for impedimetric sensing of cellular adhesion. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1395-1403. | 1.8 | 12 |
| 65 | Statistical approach for contact angle determination on inclining surfaces: "slow-moving" analyses of non-axisymmetric drops on a flat silanized silicon wafer. <i>International Journal of Adhesion and Adhesives</i> , 2014, 55, 123-131. | 2.9 | 19 |
| 66 | Thermal detection of histamine with a graphene oxide based molecularly imprinted polymer platform prepared by reversible addition-fragmentation chain transfer polymerization. <i>Sensors and Actuators B: Chemical</i> , 2014, 203, 527-535. | 7.8 | 59 |
| 67 | Impedimetric Detection of Histamine in Bowel Fluids Using Synthetic Receptors with pH-Optimized Binding Characteristics. <i>Analytical Chemistry</i> , 2013, 85, 1475-1483. | 6.5 | 54 |
| 68 | <sc>PSPICE</sc> model for silicon nanowire field-effect transistor biosensors in impedimetric measurement mode. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 870-876. | 1.8 | 12 |
| 69 | Routine fabrication of reduced graphene oxide microarray devices via all solution processing (<i>Phys.</i>) Tj ETQq1 1 0.784314 rgBT /Overl | 1.8 | 0 |
| 70 | Routine fabrication of reduced graphene oxide microarray devices via all solution processing. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 968-974. | 1.8 | 10 |
| 71 | Impedance spectroscopy with field-effect transistor arrays for the analysis of anti-cancer drug action on individual cells. <i>Biosensors and Bioelectronics</i> , 2013, 40, 50-56. | 10.1 | 40 |
| 72 | Monitoring nanoparticle induced cell death in H441 cells using field-effect transistors. <i>Biosensors and Bioelectronics</i> , 2013, 40, 89-95. | 10.1 | 19 |

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|----|--|------|-----------|
| 73 | Functional peptides for capacitative detection of Ca ²⁺ ions. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 1030-1037. | 1.8 | 1 |
| 74 | Reduced graphene oxide micropatterns as an interface for adherent cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 975-982. | 1.8 | 9 |
| 75 | Label-free electrical detection of DNA by means of field-effect nanoplate capacitors: Experiments and modeling. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 925-934. | 1.8 | 64 |
| 76 | The Use of SU-8 Topographically Guided Microelectrode Array in Measuring Extracellular Field Potential Propagation. <i>Annals of Biomedical Engineering</i> , 2012, 40, 619-627. | 2.5 | 5 |
| 77 | The significance of chloride in the inhibitory action of disodium cromoglycate on immunologically-stimulated rat peritoneal mast cells. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2011, 1810, 867-874. | 2.4 | 4 |
| 78 | An array of field-effect nanoplate SOI capacitors for (bio-)chemical sensing. <i>Biosensors and Bioelectronics</i> , 2011, 26, 3023-3028. | 10.1 | 26 |
| 79 | Rapid assessment of the stability of DNA duplexes by impedimetric real-time monitoring of chemically induced denaturation. <i>Lab on A Chip</i> , 2011, 11, 1656. | 6.0 | 35 |
| 80 | Top-Down Processed SOI Nanowire Devices for Biomedical Applications. <i>ECS Transactions</i> , 2011, 35, 3-15. | 0.5 | 17 |
| 81 | A Study of the Relationship Between Pharmacologic Preconditioning and Adenosine Triphosphate-Sensitive Potassium (KATP) Channels on Cultured Cardiomyocytes Using the Microelectrode Array. <i>Journal of Cardiovascular Pharmacology</i> , 2010, 56, 60-68. | 1.9 | 6 |
| 82 | Light induced stimulation and delay of cardiac activity. <i>Lab on A Chip</i> , 2010, 10, 2588. | 6.0 | 32 |
| 83 | Extracellular recording of glycine receptor chloride channel activity as a prototype for biohybrid sensors. <i>Biosensors and Bioelectronics</i> , 2010, 26, 155-161. | 10.1 | 12 |
| 84 | Fabrication and application of silicon nanowire transistor arrays for biomolecular detection. <i>Sensors and Actuators B: Chemical</i> , 2010, 144, 354-360. | 7.8 | 86 |
| 85 | Customized impedance spectroscopy device as possible sensor platform for biosensor applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 919-923. | 1.8 | 20 |
| 86 | Fabrication and application of a microfluidic-embedded silicon nanowire biosensor chip. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 850-857. | 1.8 | 37 |
| 87 | A study of the relationship between pharmacologic preconditioning and adenosine triphosphate-sensitive potassium (KATP) channels on cultured cardiomyocytes using the microelectrode array. <i>Journal of Cardiovascular Pharmacology</i> , 2010, 56, 60-8. | 1.9 | 0 |
| 88 | Action potentials of HL-1 cells recorded with silicon nanowire transistors. <i>Applied Physics Letters</i> , 2009, 95, . | 3.3 | 63 |
| 89 | The use of microelectrode array (MEA) to study the protective effects of potassium channel openers on metabolically compromised HL-1 cardiomyocytes. <i>Physiological Measurement</i> , 2009, 30, 155-167. | 2.1 | 26 |
| 90 | To establish a pharmacological experimental platform for the study of cardiac hypoxia using the microelectrode array. <i>Journal of Pharmacological and Toxicological Methods</i> , 2009, 59, 146-152. | 0.7 | 16 |

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|-----|---|------|-----------|
| 91 | Diamond Transistor Array for Extracellular Recording From Electrogenic Cells. <i>Advanced Functional Materials</i> , 2009, 19, 2915-2923. | 14.9 | 86 |
| 92 | Nanoplate field-effect capacitive (bio-)chemical sensor array based on SOI structure. <i>Procedia Chemistry</i> , 2009, 1, 670-673. | 0.7 | 3 |
| 93 | Top-down processed silicon nanowire transistor arrays for biosensing. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 426-434. | 1.8 | 58 |
| 94 | Impedimetric detection of covalently attached biomolecules on field-effect transistors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 417-425. | 1.8 | 18 |
| 95 | Time-dependent observation of individual cellular binding events to field-effect transistors. <i>Biosensors and Bioelectronics</i> , 2009, 24, 1201-1208. | 10.1 | 48 |
| 96 | Field-effect devices for detecting cellular signals. <i>Seminars in Cell and Developmental Biology</i> , 2009, 20, 41-48. | 5.0 | 94 |
| 97 | Modulatory action of potassium channel openers on field potential and histamine release from rat peritoneal mast cells. <i>Canadian Journal of Physiology and Pharmacology</i> , 2009, 87, 624-632. | 1.4 | 3 |
| 98 | CMOS sensor array for bi-directional communication with electrically active cells. , 2009, , . | | 1 |
| 99 | Iridium oxide microelectrode arrays for in-vitro stimulation of individual rat neurons from dissociated cultures. <i>Frontiers in Neuroengineering</i> , 2009, 2, 16. | 4.8 | 39 |
| 100 | Label-Free, Fully Electronic Detection of DNA with a Field-Effect Transistor Array. <i>Nanostructure Science and Technology</i> , 2009, , 103-129. | 0.1 | 0 |
| 101 | Membrane allocation profiling: A method to characterize three-dimensional cell shape and attachment based on surface reconstruction. <i>Biomaterials</i> , 2008, 29, 3927-3935. | 11.4 | 18 |
| 102 | Novel post-process for the passivation of a CMOS biosensor. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008, 2, 4-6. | 2.4 | 27 |
| 103 | Transmission electron microscopy study of the cell-sensor interface. <i>Journal of the Royal Society Interface</i> , 2008, 5, 213-222. | 3.4 | 72 |
| 104 | The Use of Microelectrode Array (MEA) to Study Rat Peritoneal Mast Cell Activation. <i>Journal of Pharmacological Sciences</i> , 2008, 107, 201-212. | 2.5 | 11 |
| 105 | High-k Dielectric Layers for Bioelectronic Applications. <i>IEICE Transactions on Electronics</i> , 2008, E91-C, 1894-1898. | 0.6 | 0 |
| 106 | Markierungsfreie DNA-Detektion mit Silizium-Feldeffekt-Sensoren - Mess-effekte oder Artefakte? (Label-free DNA Detection with Silicon Field-Effect Sensors - Real Effects or Artefacts?). <i>TM Technisches Messen</i> , 2007, 74, 466-474. | 0.7 | 1 |
| 107 | Probing the Adhesion and Viability of Individual Cells with Field-Effect Transistors. , 2007, , . | | 2 |
| 108 | Design and Function Principle of a Large Scale Sensor Array for the Bi-Directional Coupling to Electrogenic Cells. , 2007, , . | | 0 |

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| 109 | Label-free detection of single nucleotide polymorphisms utilizing the differential transfer function of field-effect transistors. <i>Biosensors and Bioelectronics</i> , 2007, 22, 2834-2840. | 10.1 | 111 |
| 110 | Influence of the first amplifier stage in MEA systems on extracellular signal shapes. <i>Biosensors and Bioelectronics</i> , 2007, 22, 1092-1096. | 10.1 | 15 |
| 111 | Field-effect sensors with charged macromolecules: Characterisation by capacitance-voltage, constant-capacitance, impedance spectroscopy and atomic-force microscopy methods. <i>Biosensors and Bioelectronics</i> , 2007, 22, 2100-2107. | 10.1 | 68 |
| 112 | Solution of the Poisson-Nernst-Planck equations in the cell-substrate interface. <i>European Physical Journal E</i> , 2007, 24, 1-8. | 1.6 | 31 |
| 113 | Drug profiling using planar microelectrode arrays. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 2673-2680. | 3.7 | 33 |
| 114 | Label-free detection of charged macromolecules by using a field-effect-based sensor platform: Experiments and possible mechanisms of signal generation. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 87, 517-524. | 2.3 | 56 |
| 115 | Advanced CMOS process for floating gate field-effect transistors in bioelectronic applications. <i>Sensors and Actuators B: Chemical</i> , 2007, 128, 208-217. | 7.8 | 19 |
| 116 | Detection of DNA hybridization by a field-effect transistor with covalently attached catcher molecules. <i>Surface and Interface Analysis</i> , 2006, 38, 176-181. | 1.8 | 42 |
| 117 | Label-free detection of DNA using field-effect transistors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 3399-3411. | 1.8 | 45 |
| 118 | Field-effect sensors for monitoring the layer-by-layer adsorption of charged macromolecules. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 163-170. | 7.8 | 57 |
| 119 | Surface activation of thin silicon oxides by wet cleaning and silanization. <i>Thin Solid Films</i> , 2006, 510, 175-180. | 1.8 | 124 |
| 120 | N-Channel field-effect transistors with floating gates for extracellular recordings. <i>Biosensors and Bioelectronics</i> , 2006, 21, 1037-1044. | 10.1 | 48 |
| 121 | Cell-Transistor Hybrid Systems. , 2006, , 99-113. | | 1 |
| 122 | Towards Label-free Detection of Charged Macromolecules Using Field-effect-based Structures: Scaling Down from Capacitive EIS Sensor over ISFET to Nano-scale Devices. <i>Materials Research Society Symposia Proceedings</i> , 2006, 915, 1. | 0.1 | 0 |
| 123 | A Semiconductor-based Field-effect Platform for (Bio-)Chemical and Physical sensors: From Capacitive EIS Sensors and LAPS over ISFETs to Nano-scale Devices. <i>Materials Research Society Symposia Proceedings</i> , 2006, 952, 2. | 0.1 | 1 |
| 124 | Single cell recordings with pairs of complementary transistors. <i>Applied Physics Letters</i> , 2006, 89, 013901. | 3.3 | 17 |
| 125 | Neuron-transistor coupling: interpretation of individual extracellular recorded signals. <i>European Biophysics Journal</i> , 2005, 34, 144-154. | 2.2 | 52 |
| 126 | Possibilities and limitations of label-free detection of DNA hybridization with field-effect-based devices. <i>Sensors and Actuators B: Chemical</i> , 2005, 111-112, 470-480. | 7.8 | 238 |

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|-----|---|------|-----------|
| 127 | Interfacing Biology with Electronic Devices. Solid State Phenomena, 2005, 108-109, 789-796. | 0.3 | 2 |
| 128 | Recording of cell action potentials with AlGaIn ⁺ GaN field-effect transistors. Applied Physics Letters, 2005, 86, 033901. | 3.3 | 112 |
| 129 | Cell-Transistor Coupling: Investigation of Potassium Currents Recorded with p- and n-Channel FETs. Biophysical Journal, 2005, 89, 3628-3638. | 0.5 | 63 |
| 130 | Membrane on a Chip: A Functional Tethered Lipid Bilayer Membrane on Silicon Oxide Surfaces. Biophysical Journal, 2005, 89, 1780-1788. | 0.5 | 170 |
| 131 | Electronic Detection of Nucleic Acid Molecules with a Field-Effect Transistor. Materials Research Society Symposia Proceedings, 2004, 828, 276. | 0.1 | 4 |
| 132 | Labelfree fully electronic nucleic acid detection system based on a field-effect transistor device. Biosensors and Bioelectronics, 2004, 19, 1723-1731. | 10.1 | 245 |
| 133 | 64-Channel extended gate electrode arrays for extracellular signal recording. Electrochimica Acta, 2003, 48, 3355-3362. | 5.2 | 48 |
| 134 | Backside contacted field effect transistor array for extracellular signal recording. Biosensors and Bioelectronics, 2003, 18, 429-435. | 10.1 | 39 |
| 135 | Cardiomyocyte-transistor-hybrids for sensor application. Biosensors and Bioelectronics, 2001, 16, 565-570. | 10.1 | 100 |
| 136 | Aligned microcontact printing of biomolecules on microelectronic device surfaces. IEEE Transactions on Biomedical Engineering, 2001, 48, 838-842. | 4.2 | 48 |
| 137 | Validation of the use of field effect transistors for extracellular signal recording in pharmacological bioassays. Journal of Pharmacological and Toxicological Methods, 2001, 45, 207-214. | 0.7 | 52 |
| 138 | Extended gate electrode arrays for extracellular signal recordings. Sensors and Actuators B: Chemical, 2000, 70, 101-107. | 7.8 | 37 |
| 139 | Multi-electrode arrays (meas) with guided network for cell-to-cell communication transduction. , 0, , . | | 0 |
| 140 | Investigation of Extracellular Signal Shapes Recorded by Planar Metal Microelectrodes and Field-Effect Transistors. , 0, , . | | 1 |
| 141 | Bioelectronic Detection Schemes for Biomedical and Environmental Sensing. Advances in Science and Technology, 0, , . | 0.2 | 1 |