

Antonio J Ricco

List of Publications by Year in descending order

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161
papers

9,759
citations

47006

47
h-index

38395

95
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164
all docs

164
docs citations

164
times ranked

9270
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Resistance of polyaniline films as a function of electrochemical potential and the fabrication of polyaniline-based microelectronic devices. <i>The Journal of Physical Chemistry</i> , 1985, 89, 1441-1447. | 2.9 | 980 |
| 2 | Point of Care Diagnostics: Status and Future. <i>Analytical Chemistry</i> , 2012, 84, 487-515. | 6.5 | 962 |
| 3 | Detection of Water in the LCROSS Ejecta Plume. <i>Science</i> , 2010, 330, 463-468. | 12.6 | 707 |
| 4 | Effect of surface roughness on the response of thickness-shear mode resonators in liquids. <i>Analytical Chemistry</i> , 1993, 65, 2910-2922. | 6.5 | 323 |
| 5 | Cubesats: Cost-effective science and technology platforms for emerging and developing nations. <i>Advances in Space Research</i> , 2011, 47, 663-684. | 2.6 | 313 |
| 6 | Stand-alone self-powered integrated microfluidic blood analysis system (SIMBAS). <i>Lab on A Chip</i> , 2011, 11, 845-850. | 6.0 | 304 |
| 7 | New Organic Materials Suitable for Use in Chemical Sensor Arrays. <i>Accounts of Chemical Research</i> , 1998, 31, 219-227. | 15.6 | 271 |
| 8 | Surface acoustic wave gas sensor based on film conductivity changes. <i>Sensors and Actuators</i> , 1985, 8, 319-333. | 1.7 | 246 |
| 9 | Characterization of SH acoustic plate mode liquid sensors. <i>Sensors and Actuators</i> , 1989, 20, 253-268. | 1.7 | 242 |
| 10 | Structural Distortion of Dendrimers on Gold Surfaces: A Tapping-Mode AFM Investigation. <i>Journal of the American Chemical Society</i> , 1998, 120, 5323-5324. | 13.7 | 205 |
| 11 | Acoustic wave viscosity sensor. <i>Applied Physics Letters</i> , 1987, 50, 1474-1476. | 3.3 | 195 |
| 12 | Integrating Polymerase Chain Reaction, Valving, and Electrophoresis in a Plastic Device for Bacterial Detection. <i>Analytical Chemistry</i> , 2003, 75, 4591-4598. | 6.5 | 179 |
| 13 | A selective SAW-based organophosphonate chemical sensor employing a self-assembled, composite monolayer: a new paradigm for sensor design. <i>Analytical Chemistry</i> , 1992, 64, 3191-3193. | 6.5 | 164 |
| 14 | Synthesis and characterization of a new surface derivatizing reagent to promote the adhesion of polypyrrole films to N-type silicon photoanodes: N-(3-(trimethoxysilyl)propyl)pyrrole. <i>Journal of the American Chemical Society</i> , 1982, 104, 2031-2034. | 13.7 | 144 |
| 15 | Peer Reviewed: Plastic Advances Microfluidic Devices. <i>Analytical Chemistry</i> , 2002, 74, 78 A-86 A. | 6.5 | 135 |
| 16 | Integrated microfluidic tmRNA purification and real-time NASBA device for molecular diagnostics. <i>Lab on A Chip</i> , 2008, 8, 2071. | 6.0 | 135 |
| 17 | Three-Dimensional Wax Patterning of Paper Fluidic Devices. <i>Langmuir</i> , 2014, 30, 7030-7036. | 3.5 | 135 |
| 18 | Real-time measurements of the gas-phase adsorption of n-alkylthiol mono- and multilayers on gold. <i>Langmuir</i> , 1991, 7, 620-622. | 3.5 | 130 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Surface Acoustic Wave Chemical Sensor Arrays: New Chemically Sensitive Interfaces Combined with Novel Cluster Analysis To Detect Volatile Organic Compounds and Mixtures. <i>Accounts of Chemical Research</i> , 1998, 31, 289-296. | 15.6 | 127 |
| 20 | Chemical Microsensors. <i>Science</i> , 1991, 254, 74-80. | 12.6 | 111 |
| 21 | Molecular interactions between organized, surface-confined monolayers and vapor-phase probe molecules. 5. Acid-base interactions. <i>Langmuir</i> , 1993, 9, 1775-1780. | 3.5 | 103 |
| 22 | Molecular Interactions between Organized, Surface-Confined Monolayers and Vapor-Phase Probe Molecules. 8. Reactions between Acid-Terminated Self-Assembled Monolayers and Vapor-Phase Bases. <i>Langmuir</i> , 1996, 12, 726-735. | 3.5 | 99 |
| 23 | Thin metal film characterization and chemical sensors: monitoring electronic conductivity, mass loading and mechanical properties with surface acoustic wave devices. <i>Thin Solid Films</i> , 1991, 206, 94-101. | 1.8 | 95 |
| 24 | Acoustoelectric interaction of plate modes with solutions. <i>Journal of Applied Physics</i> , 1988, 64, 5002-5008. | 2.5 | 94 |
| 25 | Use of Linear Solvation Energy Relationships for Modeling Responses from Polymer-Coated Acoustic-Wave Vapor Sensors. <i>Analytical Chemistry</i> , 2001, 73, 3458-3466. | 6.5 | 93 |
| 26 | Optically addressable single-use microfluidic valves by laser printer lithography. <i>Lab on A Chip</i> , 2010, 10, 2680. | 6.0 | 93 |
| 27 | X-ray photoelectron and Auger electron spectroscopic study of the CdTe surface resulting from various surface pretreatments; Correlation of photoelectrochemical and capacitance-potential behavior with surface chemical composition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1984, 2, 910-915. | 2.1 | 92 |
| 28 | Characterization of n-Type Semiconducting Tungsten Disulfide Photoanodes in Aqueous and Nonaqueous Electrolyte Solutions. <i>Journal of the Electrochemical Society</i> , 1982, 129, 1461. | 2.9 | 89 |
| 29 | Electrochemical characterization of p-type semiconducting tungsten disulfide photocathodes: efficient photoreduction processes at semiconductor/liquid electrolyte interfaces. <i>Journal of the American Chemical Society</i> , 1983, 105, 2246-2256. | 13.7 | 88 |
| 30 | Interactions between Organized, Surface-Confined Monolayers and Vapor-Phase Probe Molecules. 9. Structure/Reactivity Relationship between Three Surface-Confined Isomers of Mercaptobenzoic Acid and Vapor-Phase Decylamine. <i>Langmuir</i> , 1996, 12, 1989-1996. | 3.5 | 84 |
| 31 | Miniaturized capillary isoelectric focusing in plastic microfluidic devices. <i>Electrophoresis</i> , 2002, 23, 3638-3645. | 2.4 | 83 |
| 32 | Molecular interactions between organized, surface-confined monolayers and vapor-phase probe molecules. 6. In-situ FT-IR external reflectance spectroscopy of monolayer adsorption and reaction chemistry. <i>Analytical Chemistry</i> , 1993, 65, 2102-2107. | 6.5 | 80 |
| 33 | Conferring Selectivity to Chemical Sensors via Polymer Side-Chain Selection: Thermodynamics of Vapor Sorption by a Set of Polysiloxanes on Thickness-Shear Mode Resonators. <i>Analytical Chemistry</i> , 2000, 72, 3696-3708. | 6.5 | 78 |
| 34 | Microfluidic impedance cytometer for platelet analysis. <i>Lab on A Chip</i> , 2013, 13, 722. | 6.0 | 78 |
| 35 | Earth as a Tool for Astrobiology – A European Perspective. <i>Space Science Reviews</i> , 2017, 209, 43-81. | 8.1 | 68 |
| 36 | Differentiation of Chemical Components in a Binary Solvent Vapor Mixture Using Carbon/Polymer Composite-Based Chemiresistors. <i>Analytical Chemistry</i> , 2000, 72, 1532-1542. | 6.5 | 67 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | The O/OREOS Mission: First Science Data from the Space Environment Survivability of Living Organisms (SESLO) Payload. <i>Astrobiology</i> , 2011, 11, 951-958. | 3.0 | 64 |
| 38 | SAW Sensors for the Room-Temperature Measurement of CO ₂ and Relative Humidity. <i>Analytical Chemistry</i> , 1998, 70, 2137-2145. | 6.5 | 63 |
| 39 | Effective Use of Molecular Recognition in Gas Sensing: Results from Acoustic Wave and in Situ FT-IR Measurements. <i>Analytical Chemistry</i> , 1999, 71, 3022-3035. | 6.5 | 63 |
| 40 | Determination of BET surface areas of porous thin films using surface acoustic wave devices. <i>Langmuir</i> , 1989, 5, 273-276. | 3.5 | 61 |
| 41 | Application of the Solubility Parameter Concept to the Design of Chemiresistor Arrays. <i>Journal of the Electrochemical Society</i> , 1999, 146, 3907-3913. | 2.9 | 56 |
| 42 | Real-time analysis of chemical reactions occurring at a surface-confined organic monolayer. <i>Journal of the American Chemical Society</i> , 1991, 113, 8550-8552. | 13.7 | 55 |
| 43 | Space as a Tool for Astrobiology: Review and Recommendations for Experimentations in Earth Orbit and Beyond. <i>Space Science Reviews</i> , 2017, 209, 83-181. | 8.1 | 54 |
| 44 | Interactions between self-assembled monolayers and an organophosphonate Detailed study using surface acoustic wave-based mass analysis, polarization modulation-FTIR spectroscopy and ellipsometry. <i>Faraday Discussions</i> , 1997, 107, 285-305. | 3.2 | 52 |
| 45 | Optical Scanner for Immunoassays With Up-Converting Phosphorescent Labels. <i>IEEE Transactions on Biomedical Engineering</i> , 2008, 55, 1560-1571. | 4.2 | 52 |
| 46 | Miniature radiation dosimeter for in vivo radiation measurements. <i>International Journal of Radiation Oncology Biology Physics</i> , 1988, 14, 963-967. | 0.8 | 51 |
| 47 | Synthetic spectra: a tool for correlation spectroscopy. <i>Applied Optics</i> , 1997, 36, 3342. | 2.1 | 51 |
| 48 | Ultrahigh vacuum studies of Pd metal-insulator-semiconductor diode H ₂ sensors. <i>Journal of Applied Physics</i> , 1987, 62, 1084-1092. | 2.5 | 49 |
| 49 | Age-related changes in platelet function are more profound in women than in men. <i>Scientific Reports</i> , 2015, 5, 12235. | 3.3 | 49 |
| 50 | Visual-Empirical Region-of-Influence Pattern Recognition Applied to Chemical Microsensor Array Selection and Chemical Analysis. <i>Accounts of Chemical Research</i> , 1998, 31, 297-305. | 15.6 | 45 |
| 51 | Chemically Sensitive Surface Acoustic Wave Devices Employing a Self-Assembled Composite Monolayer Film: Molecular Specificity and Effects Due to Self-Assembled Monolayer Adsorption Time and Gold Surface Morphology. <i>Langmuir</i> , 1996, 12, 2239-2246. | 3.5 | 44 |
| 52 | The O/OREOS mission "Astrobiology in low Earth orbit. <i>Acta Astronautica</i> , 2014, 93, 501-508. | 3.2 | 44 |
| 53 | Single-Step Separation of Platelets from Whole Blood Coupled with Digital Quantification by Interfacial Platelet Cytometry (iPC). <i>Langmuir</i> , 2010, 26, 14700-14706. | 3.5 | 42 |
| 54 | Microfluidic device to study arterial shear-mediated platelet-surface interactions in whole blood: reduced sample volumes and well-characterised protein surfaces. <i>Biomedical Microdevices</i> , 2010, 12, 987-1000. | 2.8 | 41 |

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| 55 | Three-Dimensional Analysis of Particle Distribution on Filter Layers inside N95 Respirators by Deep Learning. <i>Nano Letters</i> , 2021, 21, 651-657. | 9.1 | 41 |
| 56 | Microgravity validation of a novel system for RNA isolation and multiplex quantitative real time PCR analysis of gene expression on the International Space Station. <i>PLoS ONE</i> , 2017, 12, e0183480. | 2.5 | 40 |
| 57 | Evolving Point-of-Care Diagnostics Using Up-Converting Phosphor Bioanalytical Systems. <i>Analytical Chemistry</i> , 2009, 81, 3216-3221. | 6.5 | 38 |
| 58 | BioSentinel: A 6U Nanosatellite for Deep-Space Biological Science. <i>IEEE Aerospace and Electronic Systems Magazine</i> , 2020, 35, 6-18. | 1.3 | 38 |
| 59 | Hg adsorption on optically thin Au films. <i>Journal of Applied Physics</i> , 1990, 67, 4320-4326. | 2.5 | 37 |
| 60 | Blood group alters platelet binding kinetics to von Willebrand factor and consequently platelet function. <i>Blood</i> , 2019, 133, 1371-1377. | 1.4 | 36 |
| 61 | Characterization of p-type cadmium telluride electrodes in acetonitrile/electrolyte solutions. Nearly ideal behavior from reductive surface pretreatments. <i>The Journal of Physical Chemistry</i> , 1983, 87, 5140-5150. | 2.9 | 35 |
| 62 | The Mars Oxidant experiment (MOx) for Mars '96. <i>Planetary and Space Science</i> , 1998, 46, 769-777. | 1.7 | 35 |
| 63 | Microfluidic sedimentation cytometer for milk quality and bovine mastitis monitoring. <i>Biomedical Microdevices</i> , 2010, 12, 1051-1059. | 2.8 | 35 |
| 64 | Multiple-frequency SAW devices for chemical sensing and materials characterization. <i>Sensors and Actuators B: Chemical</i> , 1993, 10, 123-131. | 7.8 | 33 |
| 65 | The O/OREOS Mission: First Science Data from the Space Environment Viability of Organics (SEVO) Payload. <i>Astrobiology</i> , 2012, 12, 841-853. | 3.0 | 32 |
| 66 | Synthetic infrared spectra. <i>Optics Letters</i> , 1997, 22, 1036. | 3.3 | 30 |
| 67 | EcAMSat spaceflight measurements of the role of β -lactams in antibiotic resistance of stationary phase <i>Escherichia coli</i> in microgravity. <i>Life Sciences in Space Research</i> , 2020, 24, 18-24. | 2.3 | 29 |
| 68 | Improvement of the photoelectrochemical oxidation of halides by platinization of metal dichalcogenide photoanodes. <i>The Journal of Physical Chemistry</i> , 1983, 87, 4446-4453. | 2.9 | 27 |
| 69 | Kinetics of Hydrogen Adsorption and Absorption: Catalytic Gate MIS Gas Sensors on Silicon. <i>Journal of the Electrochemical Society</i> , 1989, 136, 2653-2661. | 2.9 | 27 |
| 70 | Liquid recirculation in microfluidic channels by the interplay of capillary and centrifugal forces. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 695-703. | 2.2 | 27 |
| 71 | Chemisorption-induced reflectivity changes in optically thin silver films. <i>Applied Physics Letters</i> , 1988, 53, 1471-1473. | 3.3 | 25 |
| 72 | Integrated system investigating shear-mediated platelet interactions with von Willebrand factor using microliters of whole blood. <i>Analytical Biochemistry</i> , 2010, 405, 174-183. | 2.4 | 25 |

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|----|---|-----|-----------|
| 73 | Study of charge transfer in back-bonding to carbonyl and nitrosyl groups. <i>Inorganic Chemistry</i> , 1980, 19, 1931-1936. | 4.0 | 24 |
| 74 | Pore structure characterization of porous films. <i>Langmuir</i> , 1989, 5, 459-466. | 3.5 | 24 |
| 75 | Identification and Quantification of Aqueous Aromatic Hydrocarbons Using SH-Surface Acoustic Wave Sensors. <i>Analytical Chemistry</i> , 2014, 86, 1794-1799. | 6.5 | 24 |
| 76 | The development of the Space Environment Viability of Organics (SEVO) experiment aboard the Organism/Organic Exposure to Orbital Stresses (O/OREOS) satellite. <i>Planetary and Space Science</i> , 2012, 60, 121-130. | 1.7 | 22 |
| 77 | An autonomous lab on a chip for space flight calibration of gravity-induced transcellular calcium polarization in single-cell fern spores. <i>Lab on A Chip</i> , 2017, 17, 1095-1103. | 6.0 | 21 |
| 78 | Electrode-confined catalyst systems for use in optical-to-chemical energy conversion. <i>Journal of Photochemistry and Photobiology</i> , 1985, 29, 71-88. | 0.6 | 20 |
| 79 | Patterned Adhesion of Electrolessly Deposited Copper on Poly(tetrafluoroethylene). <i>Journal of the Electrochemical Society</i> , 1993, 140, 1763-1768. | 2.9 | 20 |
| 80 | Application of disposable plastic microfluidic device arrays with customized chemistries to multiplexed biochemical assays. <i>Biochemical Society Transactions</i> , 2002, 30, 73-78. | 3.4 | 20 |
| 81 | Shear-Mediated Platelet Adhesion Analysis in Less Than 100 μ L of Blood: Toward a POC Platelet Diagnostic. <i>IEEE Transactions on Biomedical Engineering</i> , 2011, 58, 826-830. | 4.2 | 20 |
| 82 | Dynamic platelet function on von Willebrand factor is different in preterm neonates and full-term neonates: changes in neonatal platelet function. <i>Journal of Thrombosis and Haemostasis</i> , 2016, 14, 2027-2035. | 3.8 | 20 |
| 83 | Nanosatellites for Biology in Space: In Situ Measurement of <i>Bacillus subtilis</i> Spore Germination and Growth after 6 Months in Low Earth Orbit on the O/OREOS Mission. <i>Life</i> , 2020, 10, 1. | 2.4 | 20 |
| 84 | SAW Chemical Sensors: An Expanding Role with Global Impact. <i>Electrochemical Society Interface</i> , 1994, 3, 38-44. | 0.4 | 20 |
| 85 | Use of floating electrodes in transient isotachopheresis to increase the sensitivity of detection. <i>Lab on A Chip</i> , 2003, 3, 86. | 6.0 | 19 |
| 86 | Analysis of Binary Mixtures of Aqueous Aromatic Hydrocarbons with Low-Phase-Noise Shear-Horizontal Surface Acoustic Wave Sensors Using Multielectrode Transducer Designs. <i>Analytical Chemistry</i> , 2014, 86, 11464-11471. | 6.5 | 19 |
| 87 | Payload hardware and experimental protocol development to enable future testing of the effect of space microgravity on the resistance to gentamicin of uropathogenic <i>Escherichia coli</i> and its λ s-deficient mutant. <i>Life Sciences in Space Research</i> , 2017, 15, 1-10. | 2.3 | 19 |
| 88 | Autonomous Genetic Analysis System to Study Space Effects on Microorganisms: Results from Orbit. , 2007, , . | | 18 |
| 89 | Individual Platelet Adhesion Assay: Measuring Platelet Function and Antiplatelet Therapies in Whole Blood via Digital Quantification of Cell Adhesion. <i>Analytical Chemistry</i> , 2013, 85, 6497-6504. | 6.5 | 17 |
| 90 | SEVO ON THE GROUND: DESIGN OF A LABORATORY SOLAR SIMULATION IN SUPPORT OF THE O/OREOS MISSION. <i>Astrophysical Journal, Supplement Series</i> , 2014, 210, 15. | 7.7 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 91 | Self-Powered Microfluidic Device for Rapid Assay of Antiplatelet Drugs. <i>Langmuir</i> , 2016, 32, 2820-2828. | 3.5 | 17 |
| 92 | Detection and Quantification of Aromatic Hydrocarbon Compounds in Water Using SH-SAW Sensors and Estimation-Theory-Based Signal Processing. <i>ACS Sensors</i> , 2016, 1, 63-72. | 7.8 | 17 |
| 93 | Photolithographic metallization of fluorinated polymers. <i>Thin Solid Films</i> , 1995, 262, 73-83. | 1.8 | 16 |
| 94 | Single-monolayer in situ modulus measurements using a SAW device Photocrosslinking of a diacetylenic thiol-based monolayer. <i>Faraday Discussions</i> , 1997, 107, 247-258. | 3.2 | 16 |
| 95 | PharmaSat: drug dose response in microgravity from a free-flying integrated biofluidic/optical culture-and-analysis satellite. <i>Proceedings of SPIE</i> , 2011, , . | 0.8 | 16 |
| 96 | InÂVitro Measurement and Modeling of Platelet Adhesion on VWF-Coated Surfaces in Channel Flow. <i>Biophysical Journal</i> , 2019, 116, 1136-1151. | 0.5 | 16 |
| 97 | Characterization of intrinsic amorphous hydrogenated silicon as a thin-film photocathode material. Efficient photoreduction processes in aqueous solution. <i>Journal of the American Chemical Society</i> , 1983, 105, 4212-4219. | 13.7 | 15 |
| 98 | The Organism/Organic Exposure to Orbital Stresses (O/OREOS) Satellite: Radiation Exposure in Low-Earth Orbit and Supporting Laboratory Studies of Iron Tetraphenylporphyrin Chloride. <i>Astrobiology</i> , 2014, 14, 87-101. | 3.0 | 15 |
| 99 | Examining platelet adhesion via Stokes flow simulations and microfluidic experiments. <i>Soft Matter</i> , 2015, 11, 355-367. | 2.7 | 15 |
| 100 | Investigation of Polymerâ€“Plasticizer Blends as SH-SAW Sensor Coatings for Detection of Benzene in Water with High Sensitivity and Long-Term Stability. <i>ACS Sensors</i> , 2017, 2, 157-164. | 7.8 | 15 |
| 101 | The EcAMSat fluidic system to study antibiotic resistance in low earth orbit: Development and lessons learned from space flight. <i>Acta Astronautica</i> , 2020, 173, 449-459. | 3.2 | 15 |
| 102 | Mars atmospheric oxidant sensor (MAOS): an in-situ heterogeneous chemistry analysis. <i>Planetary and Space Science</i> , 2003, 51, 167-175. | 1.7 | 14 |
| 103 | Organics Exposure in Orbit (OREOcube): A Next-Generation Space Exposure Platform. <i>Langmuir</i> , 2014, 30, 13217-13227. | 3.5 | 14 |
| 104 | Assaying the efficacy of dual-antiplatelet therapy: use of a controlled-shear-rate microfluidic device with a well-defined collagen surface to track dynamic platelet adhesion. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 4823-4834. | 3.7 | 13 |
| 105 | BioSentinel: A Biofluidic Nanosatellite Monitoring Microbial Growth and Activity in Deep Space. <i>Astrobiology</i> , 2023, 23, 637-647. | 3.0 | 13 |
| 106 | Reflectance Infrared Spectroscopy on Operating Surface Acoustic Wave Chemical Sensors during Exposure to Gas-Phase Analytes. <i>Analytical Chemistry</i> , 1999, 71, 3615-3621. | 6.5 | 12 |
| 107 | Electrothermal modeling of a microbridge gas sensor. , 1997, 3224, 360. | | 11 |
| 108 | The ORGANIC experiment on EXPOSE-R on the ISS: Flight sample preparation and ground control spectroscopy. <i>Advances in Space Research</i> , 2011, 48, 1980-1996. | 2.6 | 11 |

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|-----|--|------|-----------|
| 109 | Reactive deposition of nano-films in deep polymeric microcavities. Lab on A Chip, 2012, 12, 4877. | 6.0 | 11 |
| 110 | Platelet behaviour on von Willebrand Factor changes in pregnancy: Consequences of haemodilution and intrinsic changes in platelet function. Scientific Reports, 2017, 7, 6354. | 3.3 | 11 |
| 111 | Effective Hydrodynamic Shaping of Sample Streams in a Microfluidic Parallel-Plate Flow-Assay Device: Matching Whole Blood Dynamic Viscosity. IEEE Transactions on Biomedical Engineering, 2012, 59, 374-382. | 4.2 | 10 |
| 112 | Design of SH-surface acoustic wave sensors for detection of ppb concentrations of BTEX in water. , 2013, , . | | 10 |
| 113 | Biological system development for GraviSat: A new platform for studying photosynthesis and microalgae in space. Life Sciences in Space Research, 2014, 3, 63-75. | 2.3 | 9 |
| 114 | Fabrication and characterisation of spin coated oxidised PMMA to provide a robust surface for on-chip assays. Journal of Materials Chemistry B, 2015, 3, 135-143. | 5.8 | 9 |
| 115 | Influence of ambient parameters on the response of polymer-coated SH-surface acoustic wave sensors to aromatic analytes in liquid-phase detection. , 2011, , . | | 8 |
| 116 | Online Chemical Sensor Signal Processing Using Estimation Theory: Quantification of Binary Mixtures of Organic Compounds in the Presence of Linear Baseline Drift and Outliers. IEEE Sensors Journal, 2016, 16, 750-761. | 4.7 | 8 |
| 117 | Chemically Sensitive Interfaces on Surface Acoustic Wave Devices. ACS Symposium Series, 1994, , 264-279. | 0.5 | 7 |
| 118 | Speciation of linear and branched hydrocarbons by a fluorinated polyimide film based surface acoustic wave sensor. Journal of the American Chemical Society, 1995, 117, 8672-8673. | 13.7 | 7 |
| 119 | Plastic microfluidic devices. , 2003, , 83-112. | | 7 |
| 120 | Low-Cost Microfluidic Single-Use Valves and On-Board Reagent Storage using Laser-Printer Technology. , 2009, , . | | 7 |
| 121 | First results of the ORGANIC experiment on EXPOSE-R on the ISS. International Journal of Astrobiology, 2015, 14, 55-66. | 1.6 | 7 |
| 122 | Computational Tracking of Shear-Mediated Platelet Interactions with von Willebrand Factor. Cardiovascular Engineering and Technology, 2016, 7, 389-405. | 1.6 | 7 |
| 123 | Carbon nanotube thermoelectric devices by direct printing: Toward wearable energy converters. Applied Physics Letters, 2021, 118, . | 3.3 | 7 |
| 124 | European Molecular Indicators of Life Investigation (EMILI) for a Future Europa Lander Mission. Frontiers in Space Technologies, 2022, 2, . | 1.4 | 7 |
| 125 | Microfluidics Microbial Activity MicroAssay: An Automated <i>In Situ</i> Microbial Metabolic Detection System. Astrobiology, 2022, 22, 158-170. | 3.0 | 7 |
| 126 | Sol-Gel Coatings on Acoustic Wave Devices: Thin Film Characterization and Chemical Sensor Development. Materials Research Society Symposia Proceedings, 1990, 180, 583. | 0.1 | 6 |

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|-----|--|-----|-----------|
| 127 | Obtaining Chemical Selectivity from a Single, Nonselective Sensing Film: Two-Stage Adaptive Estimation Scheme with Multiparameter Measurement to Quantify Mixture Components and Interferents. ACS Sensors, 2018, 3, 1656-1665. | 7.8 | 6 |
| 128 | Quantitative Detection of Complex Mixtures using a Single Chemical Sensor: Analysis of Response Transients using Multi-Stage Estimation. ACS Sensors, 2019, 4, 1682-1690. | 7.8 | 6 |
| 129 | Fiber optic micromirror studies of the interaction of thin copper films with an organophosphonate. Analytical Chemistry, 1992, 64, 1851-1854. | 6.5 | 5 |
| 130 | Characteristics of Acoustic Plate Modes on Rotated Y-Cuts of Quartz Utilized for Biosensing Applications. Analytical Chemistry, 1999, 71, 5064-5068. | 6.5 | 5 |
| 131 | Click chemistry as an immobilization method to improve oligonucleotide hybridization efficiency for nucleic acid assays. Sensors and Actuators B: Chemical, 2016, 236, 286-293. | 7.8 | 5 |
| 132 | Plastic Microfluidic Devices for DNA and Protein Analyses. , 2006, , 311-328. | | 4 |
| 133 | Dynamic platelet function is markedly different in patients with cancer compared to healthy donors. Platelets, 2019, 30, 737-742. | 2.3 | 4 |
| 134 | Electrochemistry for Life Detection on Ocean Worlds. ChemElectroChem, 2020, 7, 614-623. | 3.4 | 4 |
| 135 | CubeSats for microbiology and astrobiology research. , 2021, , 147-162. | | 4 |
| 136 | <title>Detection of volatile organics using a surface acoustic-wave array system</title>. , 1999, 3857, 146. | | 3 |
| 137 | 5.4.2 Quantification of Benzene in Groundwater Using SH-Surface Acoustic Wave Sensors. , 2012, , . | | 3 |
| 138 | Electrochemistry for Life Detection on Ocean Worlds. ECS Meeting Abstracts, 2019, MA2019-02, 2482-2482. | 0.0 | 3 |
| 139 | Multi-analyte Biochip (MAB) Based on All-solid-state Ion-selective Electrodes (ASSISE) for Physiological Research. Journal of Visualized Experiments, 2013, , . | 0.3 | 2 |
| 140 | Near-real-time analysis of binary mixtures of organic compounds in water using SH-SAW sensors and estimation theory. , 2014, , . | | 2 |
| 141 | Microfabricated Biosensing Devices: MEMS, Microfluidics, and Mass Sensors. , 2006, , 79-106. | | 2 |
| 142 | Application-Specific Adaptable Coatings for Sensors: Using a Single Polymerâ€“Plasticizer Pair to Detect Aromatic Hydrocarbons, Mixtures, and Interferents in Water with Single Sensors and Arrays. ACS Sensors, 2022, 7, 649-657. | 7.8 | 2 |
| 143 | Monolithic Centrifugal Microfluidic Platform for Bacteria Capture and Concentration, Lysis, Nucleic-Acid Amplification, and Real-Time Detection. , 2009, , . | | 1 |
| 144 | Thin film diffusion barrier formation in PDMS microcavities. , 2009, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Polymer-plasticizer coatings for shear horizontal-surface acoustic wave sensors for long-term monitoring of BTEX analytes in liquid-phase. , 2016, , . | | 1 |
| 146 | Sensor-based estimation of BTEX concentrations in water samples using recursive least squares and Kalman filter techniques. , 2016, , . | | 1 |
| 147 | Detection and Quantification of Multi-Analyte Mixtures Using a Single Sensor and Multi-Stage Data-Weighted RLSE. , 2018, , . | | 1 |
| 148 | Response to Comments on "AMSat spaceflight measurements of the role of <i>l</i> fs in antibiotic resistance of stationary phase Escherichia coli in microgravity" Life Sciences in Space Research, 2021, 29, 85-86. | 2.3 | 1 |
| 149 | <title>Synthetic infrared spectra for correlation spectroscopy</title>. , 1997, 3118, 350. | | 0 |
| 150 | Plastic Microfluidic Systems for High-Throughput Genomic Analysis and Drug Screening. Journal of the Association for Laboratory Automation, 2001, 6, 71-75. | 2.8 | 0 |
| 151 | Whole-Blood Diagnostic Sensing System Based on Populational Platelet Rolling Behavior. ECS Transactions, 2009, 19, 73-77. | 0.5 | 0 |
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