Marloes M Peeters

List of Publications by Year in descending order

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72 papers

2,112 citations

201385 27 h-index 243296 44 g-index

74 all docs

74 docs citations

74 times ranked 2129 citing authors

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Recent Advances in Electrosynthesized Molecularly Imprinted Polymer Sensing Platforms for Bioanalyte Detection. Sensors, 2019, 19, 1204. | 2.1 | 154 |
| 2 | How controlled and versatile is N-carboxy anhydride (NCA) polymerization at 0 \hat{A}° C? Effect of temperature on homo-, block- and graft (co)polymerization. Polymer Chemistry, 2010, 1, 514-524. | 1.9 | 141 |
| 3 | MIPs for commercial application in low-cost sensors and assays – An overview of the current status quo. Sensors and Actuators B: Chemical, 2020, 325, 128973. | 4.0 | 130 |
| 4 | Molecularly imprinted polymer based electrochemical biosensors: Overcoming the challenges of detecting vital biomarkers and speeding up diagnosis. Talanta Open, 2020, 2, 100018. | 1.7 | 92 |
| 5 | Selective Enzymatic Degradation of Self-Assembled Particles from Amphiphilic Block Copolymers Obtained by the Combination of $\langle i \rangle N \langle i \rangle$ -Carboxyanhydride and Nitroxide-Mediated Polymerization. Biomacromolecules, 2011, 12, 3761-3769. | 2.6 | 69 |
| 6 | Label-Free Detection of <i>Escherichia coli</i> Based on Thermal Transport through Surface Imprinted Polymers. ACS Sensors, 2016, 1, 1140-1147. | 4.0 | 64 |
| 7 | Temperature-Dependent Solubilization of the Hydrophobic Antiepileptic Drug Lamotrigine in Different Pluronic Micellesâ€"A Spectroscopic, Heat Transfer Method, Small-Angle Neutron Scattering, Dynamic Light Scattering, and in Vitro Release Study. ACS Omega, 2019, 4, 11251-11262. | 1.6 | 62 |
| 8 | Thermal detection of histamine with a graphene oxide based molecularly imprinted polymer platform prepared by reversible addition–fragmentation chain transfer polymerization. Sensors and Actuators B: Chemical, 2014, 203, 527-535. | 4.0 | 59 |
| 9 | The Heat-Transfer Method: A Versatile Low-Cost, Label-Free, Fast, and User-Friendly Readout Platform for Biosensor Applications. ACS Applied Materials & Samp; Interfaces, 2014, 6, 13309-13318. | 4.0 | 59 |
| 10 | MIP-based biomimetic sensor for the electronic detection of serotonin in human blood plasma. Sensors and Actuators B: Chemical, 2012, 171-172, 602-610. | 4.0 | 58 |
| 11 | Impedimetric Detection of Histamine in Bowel Fluids Using Synthetic Receptors with pH-Optimized Binding Characteristics. Analytical Chemistry, 2013, 85, 1475-1483. | 3.2 | 54 |
| 12 | Development of a novel flexible polymer-based biosensor platform for the thermal detection of noradrenaline in aqueous solutions. Chemical Engineering Journal, 2017, 315, 459-468. | 6.6 | 53 |
| 13 | A novel thermal detection method based on molecularly imprinted nanoparticles as recognition elements. Nanoscale, 2018, 10, 2081-2089. | 2.8 | 53 |
| 14 | Thermal Detection of Cardiac Biomarkers Heart-Fatty Acid Binding Protein and ST2 Using a Molecularly Imprinted Nanoparticle-Based Multiplex Sensor Platform. ACS Sensors, 2019, 4, 2838-2845. | 4.0 | 50 |
| 15 | Heat-transfer-based detection of l-nicotine, histamine, and serotonin using molecularly imprinted polymers as biomimetic receptors. Analytical and Bioanalytical Chemistry, 2013, 405, 6453-6460. | 1.9 | 45 |
| 16 | Molecularly Imprinted Polymer Nanoparticles Enable Rapid, Reliable, and Robust Point-of-Care Thermal Detection of SARS-CoV-2. ACS Sensors, 2022, 7, 1122-1131. | 4.0 | 45 |
| 17 | Screen Printed Electrode Based Detection Systems for the Antibiotic Amoxicillin in Aqueous Samples Utilising Molecularly Imprinted Polymers as Synthetic Receptors. Chemosensors, 2020, 8, 5. | 1.8 | 42 |
| 18 | Phase transitions in lipid vesicles detected by a complementary set of methods: heatâ€transfer measurements, adiabatic scanning calorimetry, and dissipationâ€mode quartz crystal microbalance. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1377-1388. | 0.8 | 41 |

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| 19 | HealthCloud: A system for monitoring health status of heart patients using machine learning and cloud computing. Internet of Things (Netherlands), 2022, 17, 100485. | 4.9 | 40 |
| 20 | Advances in the therapeutic delivery and applications of functionalized Pluronics: A critical review. Advances in Colloid and Interface Science, 2022, 299, 102563. | 7.0 | 38 |
| 21 | Molecularly imprinted polymers as synthetic receptors for the QCM-D-based detection of l-nicotine in diluted saliva and urine samples. Analytical and Bioanalytical Chemistry, 2013, 405, 6479-6487. | 1.9 | 33 |
| 22 | Biomimetic Bacterial Identification Platform Based on Thermal Wave Transport Analysis (TWTA) through Surface-Imprinted Polymers. ACS Infectious Diseases, 2017, 3, 388-397. | 1.8 | 33 |
| 23 | Evaluating the temperature dependence of heat-transfer based detection: A case study with caffeine and Molecularly Imprinted Polymers as synthetic receptors. Chemical Engineering Journal, 2019, 359, 505-517. | 6.6 | 33 |
| 24 | Label-free Protein Detection Based on the Heat-Transfer Methodâ€"A Case Study with the Peanut Allergen Ara h 1 and Aptamer-Based Synthetic Receptors. ACS Applied Materials & Diterfaces, 2015, 7, 10316-10323. | 4.0 | 32 |
| 25 | Introducing Thermal Wave Transport Analysis (TWTA): A Thermal Technique for Dopamine Detection by Screen-Printed Electrodes Functionalized with Molecularly Imprinted Polymer (MIP) Particles. Molecules, 2016, 21, 552. | 1.7 | 32 |
| 26 | Label-Free Detection of Small Organic Molecules by Molecularly Imprinted Polymer Functionalized Thermocouples: Toward In Vivo Applications. ACS Sensors, 2017, 2, 583-589. | 4.0 | 31 |
| 27 | Toward the Rapid Diagnosis of Sepsis: Detecting Interleukin-6 in Blood Plasma Using Functionalized Screen-Printed Electrodes with a Thermal Detection Methodology. Analytical Chemistry, 2021, 93, 5931-5938. | 3.2 | 31 |
| 28 | Mobile Application for Impedance-Based Biomimetic Sensor Readout. IEEE Sensors Journal, 2013, 13, 2659-2665. | 2.4 | 27 |
| 29 | Phase Transitions of Binary Lipid Mixtures: A Combined Study by Adiabatic Scanning Calorimetry and Quartz Crystal Microbalance with Dissipation Monitoring. Advances in Condensed Matter Physics, 2015, 2015, 1-14. | 0.4 | 27 |
| 30 | Solubilization of hydrophobic drugs clozapine and oxcarbazepine in the lower and higher molecular weight pluronic mixed micelles-a physicochemical, In vitro release and In vitro anti-oxidant study. Journal of Molecular Liquids, 2020, 317, 113816. | 2.3 | 27 |
| 31 | Optimizing the Thermal Read-Out Technique for MIP-Based Biomimetic Sensors: Towards Nanomolar Detection Limits. Sensors, 2013, 13, 9148-9159. | 2.1 | 26 |
| 32 | Electrospun Nylon Fibers with Integrated Polypyrrole Molecularly Imprinted Polymers for the Detection of Glucose. Analytical Chemistry, 2021, 93, 13235-13241. | 3.2 | 25 |
| 33 | Melittin disruption of raft and non-raft-forming biomimetic membranes: A study by quartz crystal microbalance with dissipation monitoring. Colloids and Surfaces B: Biointerfaces, 2014, 123, 938-944. | 2.5 | 24 |
| 34 | Immobilization of Molecularly Imprinted Polymer Nanoparticles onto Surfaces Using Different Strategies: Evaluating the Influence of the Functionalized Interface on the Performance of a Thermal Assay for the Detection of the Cardiac Biomarker Troponin I. ACS Applied Materials & Samp; Interfaces, 2021, 13, 27868-27879. | 4.0 | 24 |
| 35 | Array Formatting of the Heat-Transfer Method (HTM) for the Detection of Small Organic Molecules by Molecularly Imprinted Polymers. Sensors, 2014, 14, 11016-11030. | 2.1 | 23 |
| 36 | Miniaturised eightâ€channel impedance spectroscopy unit as sensor platform for biosensor applications. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1357-1363. | 0.8 | 22 |

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|----|---|-----|-----------|
| 37 | Cross-linked degradable poly(\hat{l}^2 -thioester) networks via amine-catalyzed thiol-ene click polymerization. Polymer, 2014, 55, 3525-3532. | 1.8 | 22 |
| 38 | Substrate displacement colorimetry for the detection of diarylethylamines. Sensors and Actuators B: Chemical, 2019, 282, 137-144. | 4.0 | 19 |
| 39 | Fluorescein functionalized random amino acid copolymers in the biomimetic synthesis of CaCO3. Soft Matter, 2011, 7, 9685. | 1.2 | 18 |
| 40 | Engineering molecularly imprinted polymers (MIPs) for the selective extraction and quantification of the novel psychoactive substance (NPS) methoxphenidine and its regioisomers. Analyst, The, 2018, 143, 2002-2007. | 1.7 | 17 |
| 41 | Molecular imprinted polymer films on <scp>RFID</scp> tags: a first step towards disposable packaging sensors. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 938-944. | 0.8 | 16 |
| 42 | Single-Shot Detection of Neurotransmitters in Whole-Blood Samples by Means of the Heat-Transfer Method in Combination with Synthetic Receptors. Sensors, 2017, 17, 2701. | 2.1 | 16 |
| 43 | A Novel Biomimetic Tool for Assessing Vitamin K Status Based on Molecularly Imprinted Polymers. Nutrients, 2018, 10, 751. | 1.7 | 15 |
| 44 | Approaches to the Rational Design of Molecularly Imprinted Polymers Developed for the Selective Extraction or Detection of Antibiotics in Environmental and Food Samples. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100021. | 0.8 | 15 |
| 45 | Real-time analysis of microbial growth by means of the Heat-Transfer Method (HTM) using Saccharomyces cerevisiae as model organism. Physics in Medicine, 2018, 6, 1-8. | 0.6 | 14 |
| 46 | Improving the sensitivity of the heatâ€transfer method (HTM) for cancer cell detection with optimized sensor chips. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1320-1326. | 0.8 | 13 |
| 47 | Towards a catheter-based impedimetric sensor for the assessment of intestinal histamine levels in IBS patients. Biosensors and Bioelectronics, 2020, 158, 112152. | 5.3 | 13 |
| 48 | Heat-Transfer Method: A Thermal Analysis Technique for the Real-Time Monitoring of <i>Staphylococcus aureus</i> Growth in Buffered Solutions and Digestate Samples. ACS Applied Bio Materials, 2019, 2, 3790-3798. | 2.3 | 11 |
| 49 | Principal Component Analysis to Determine the Surface Properties That Influence the Self-Cleaning Action of Hydrophobic Plant Leaves. Langmuir, 2021, 37, 8177-8189. | 1.6 | 11 |
| 50 | Solid residue and by-product yields from acid-catalysed conversion of poplar wood to levulinic acid. Chemical Papers, 2020, 74, 1647-1661. | 1.0 | 10 |
| 51 | Synthesis of Optimized Molecularly Imprinted Polymers for the Isolation and Detection of Antidepressants via HPLC. Biomimetics, 2019, 4, 18. | 1.5 | 9 |
| 52 | Thermistors coated with molecularly imprinted nanoparticles for the electrical detection of peptides and proteins. Analyst, The, 2020, 145, 5419-5424. | 1.7 | 9 |
| 53 | Dual detection of nafcillin using a molecularly imprinted polymer-based platform coupled to thermal and fluorescence read-out. Materials Advances, 2021, 2, 5105-5115. | 2.6 | 9 |
| 54 | Heat transfer resistance as a tool to quantify hybridization efficiency of DNA on a nanocrystalline diamond surface. Diamond and Related Materials, 2014, 48, 32-36. | 1.8 | 8 |

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| 55 | Drawing inspiration from nature to develop anti-fouling coatings: the development of biomimetic polymer surfaces and their effect on bacterial fouling. Pure and Applied Chemistry, 2021, 93, 1097-1108. | 0.9 | 8 |
| 56 | Nano-molecularly imprinted polymers for serum creatinine sensing using the heat transfer method. Talanta Open, 2022, 5, 100087. | 1.7 | 8 |
| 57 | Electropolymerized Receptor Coatings for the Quantitative Detection of Histamine with a Catheter-Based, Diagnostic Sensor. ACS Sensors, 2021, 6, 100-110. | 4.0 | 7 |
| 58 | Electropolymerised molecularly imprinted polymers for the heat-transfer based detection of microorganisms: A proof-of-concept study using yeast. Thermal Science and Engineering Progress, 2021, 24, 100956. | 1.3 | 7 |
| 59 | Evaluating the potential of thermal readâ€out techniques combined with molecularly imprinted polymers for the sensing of lowâ€weight organic molecules. Journal of Molecular Recognition, 2017, 30, e2563. | 1.1 | 6 |
| 60 | Rapid Colorimetric Screening of Elevated Phosphate in Urine: A Charge-Transfer Interaction. ACS Omega, 2020, 5, 21054-21066. | 1.6 | 6 |
| 61 | Reviewing the use of chitosan and polydopamine for electrochemical sensing. Current Opinion in Electrochemistry, 2022, 32, 100885. | 2.5 | 6 |
| 62 | Unusual solubilization capacity of hydrophobic drug olanzapine in polysorbate micelles for improved sustained drug release. Journal of Molecular Liquids, 2022, 359, 119256. | 2.3 | 6 |
| 63 | Development of a Flexible MIP-Based Biosensor Platform for the Thermal Detection of Neurotransmitters. MRS Advances, 2018, 3, 1569-1574. | 0.5 | 5 |
| 64 | Molecularly Imprinted Polymers. , 2016, , 253-271. | | 2 |
| 65 | Influence of design and material characteristics on 3D printed flow-cells for heat transfer-based analytical devices. Mikrochimica Acta, 2022, 189, 73. | 2.5 | 2 |
| 66 | Heat Transfer as a New Sensing Technique for the Label-Free Detection of Biomolecules. Springer Series on Chemical Sensors and Biosensors, 2017, , 383-407. | 0.5 | 1 |
| 67 | Integration of Catalytic Biofuel Production and Anaerobic Digestion for Biogas Production. Springer Proceedings in Energy, 2021, , 125-131. | 0.2 | 0 |
| 68 | Celebrating a centenary of macromolecules. Pure and Applied Chemistry, 2021, . | 0.9 | 0 |
| 69 | Designing Fluorescent Polymer Sensors for the Detection of Antibiotics in Wastewater. ECS Meeting Abstracts, 2020, MA2020-01, 2245-2245. | 0.0 | 0 |
| 70 | (Invited) Chemical Sensors Based on Thermal Resistance Analysis at Solid-Liquid Interfaces – Applications and Challenges. ECS Meeting Abstracts, 2020, MA2020-01, 2441-2441. | 0.0 | 0 |
| 71 | A Novel Thermal Analysis Method for the Detection of a Range of Biomedical Targets. ECS Meeting Abstracts, 2020, MA2020-01, 1882-1882. | 0.0 | 0 |
| 72 | Leveraging diversity and inclusion in the polymer sciences: the key to meeting the rapidly changing needs of our world. Pure and Applied Chemistry, 2021, . | 0.9 | 0 |