# Ilaria Palchetti

List of Publications by Year
in descending order



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|---|---|---|---|
| 129 papers | 5,476 citations | 76031 42 h-index | 97045 71 g-index |
| 143 all docs | 143 docs citations | 143 times ranked | 6480 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Editorial: Electrochemical aptasensors are gaining momentum. Electrochimica Acta, 2022, 401, 139520. | 2.6 | 1 |
| 2 | Nitroimidazole-Based Ruthenium(II) Complexes: Playing with Structural Parameters to Design Photostable and Light-Responsive Antibacterial Agents. Inorganic Chemistry, 2022, 61, 6689-6694. | 1.9 | 20 |
| 3 | Au Nanoparticles Decorated Graphene-Based Hybrid Nanocomposite for As(III) Electroanalytical Detection. Chemosensors, 2022, 10, 67. | 1.8 | 7 |
| 4 | Electrochemical sensors based on sewage sludgeâ€“derived biochar for the analysis of anthocyanins in berry fruits. Analytical and Bioanalytical Chemistry, 2022, 414, 6295-6307. | 1.9 | 7 |
| 5 | Bicyclic peptide-based assay for uPA cancer biomarker. Biosensors and Bioelectronics, 2022, 213, 114477. | 5.3 | 6 |
| 6 | Chip-Based and Wearable Tools for Isothermal Amplification and Electrochemical Analysis of Nucleic Acids. Chemosensors, 2022, 10, 278. | 1.8 | 6 |
| 7 | Gold nanoparticles modified graphene platforms for highly sensitive electrochemical detection of vitamin C in infant food and formulae. Food Chemistry, 2021, 344, 128692. | 4.2 | 40 |
| 8 | Electrochemical and PEC platforms for miRNA and other epigenetic markers of cancer diseases: Recent updates. Electrochemistry Communications, 2021, 124, 106929. | 2.3 | 23 |
| 9 | Soft Tissue Sarcoma: An Insight on Biomarkers at Molecular, Metabolic and Cellular Level. Cancers, 2021, 13, 3044. | 1.7 | 20 |
| 10 | The Role of Peptides in the Design of Electrochemical Biosensors for Clinical Diagnostics. Biosensors, 2021, 11, 246. | 2.3 | 48 |
| 11 | Stimulation of Ca<sup>2+</sup>â€ATPase Transport Activity by a Smallâ€Molecule Drug. ChemMedChem, 2021, 16, 3293-3299. | 1.6 | 15 |
| 12 | Advances in Antimicrobial Resistance Monitoring Using Sensors and Biosensors: A Review. Chemosensors, 2021, 9, 232. | 1.8 | 23 |
| 13 | A simple and selective electrochemical magneto-assay for sea lice eDNA detection developed with a Quality by Design approach. Science of the Total Environment, 2021, 791, 148111. | 3.9 | 7 |
| 14 | A simple spectroscopic method to determine dimethoate in water samples by complex formation. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2020, 55, 310-318. | 0.7 | 3 |
| 15 | Determination of Glyphosate in Water from a Rural Locality in MÃ©xico and Its Implications for the Population Based on Water Consumption and Use Habits. International Journal of Environmental Research and Public Health, 2020, 17, 7102. | 1.2 | 24 |
| 16 | Sustainable Printed Electrochemical Platforms for Greener Analytics. Frontiers in Chemistry, 2020, 8, 644. | 1.8 | 29 |
| 17 | Optical whispering gallery mode resonators for label-free detection of water contaminants. TrAC - Trends in Analytical Chemistry, 2020, 126, 115856. | 5.8 | 18 |
| 18 | Functional polymers in photoelectrochemical biosensing. Bioelectrochemistry, 2020, 136, 107590. | 2.4 | 38 |

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|---|---|---|---|
| 19 | The Translational Potential of Electrochemical DNA-Based Liquid Biopsy. Frontiers in Chemistry, 2020, 8, 143. | 1.8 | 21 |
| 20 | Label-Free Bioelectrochemical Methods for Evaluation of Anticancer Drug Effects at a Molecular Level. Sensors, 2020, 20, 1812. | 2.1 | 15 |
| 21 | Solvent Dispersible Nanocomposite Based on RGO Surface Decorated with Au Nanoparticles for Electrochemical Genosensors. NATO Science for Peace and Security Series B: Physics and Biophysics, 2020, , 225-234. | 0.2 | 0 |
| 22 | Au nanoparticle in situ decorated RGO nanocomposites for highly sensitive electrochemical genosensors. Journal of Materials Chemistry B, 2019, 7, 768-777. | 2.9 | 25 |
| 23 | Spectrophotometric Detection of Glyphosate in Water by Complex Formation between Bis 5-Phenyldipyrrinate of Nickel (II) and Glyphosate. Water (Switzerland), 2019, 11, 719. | 1.2 | 16 |
| 24 | Nanotoxicity assessment: A challenging application for cutting edge electroanalytical tools. Analytica Chimica Acta, 2019, 1072, 61-74. | 2.6 | 20 |
| 25 | Trends and Perspectives in Immunosensors for Determination of Currently-Used Pesticides: The Case of Glyphosate, Organophosphates, and Neonicotinoids. Biosensors, 2019, 9, 20. | 2.3 | 73 |
| 26 | Optical and Electrochemical Study of Acridine-Based Polyaza Ligands for Anion Sensing. European Journal of Inorganic Chemistry, 2018, 2018, 2675-2679. | 1.0 | 13 |
| 27 | Ascorbic acid-sensitized Au nanorods-functionalized nanostructured TiO2 transparent electrodes for photoelectrochemical genosensing. Electrochimica Acta, 2018, 276, 389-398. | 2.6 | 29 |
| 28 | Glyphosate Determination by Coupling an Immuno-Magnetic Assay with Electrochemical Sensors. Sensors, 2018, 18, 2965. | 2.1 | 43 |
| 29 | Innovative Biocatalysts as Tools to Detect and Inactivate Nerve Agents. Scientific Reports, 2018, 8, 13773. | 1.6 | 13 |
| 30 | Photoelectrochemical genosensors for the determination of nucleic acid cancer biomarkers. Current Opinion in Electrochemistry, 2018, 12, 51-59. | 2.5 | 27 |
| 31 | Electrochemical Hybridization-Based Biosensor in Environmental Monitoring. , 2018, , 353-374. | | 1 |
| 32 | Evaluation of a QuEChERS-like extraction approach for the determination of PBDEs in mussels by immuno-assay-based screening methods. Talanta, 2017, 170, 540-545. | 2.9 | 6 |
| 33 | Enhanced photoactivity and conductivity in transparent TiO<sub>2</sub>nanocrystals/graphene hybrid anodes. Journal of Materials Chemistry A, 2017, 5, 9307-9315. | 5.2 | 18 |
| 34 | Nanostructured Photoelectrochemical Biosensing Platform for Cancer Biomarker Detection. Procedia Technology, 2017, 27, 144-145. | 1.1 | 3 |
| 35 | Biosensors and Related Bioanalytical Tools. Comprehensive Analytical Chemistry, 2017, 77, 1-33. | 0.7 | 23 |
| 36 | Imidazo[1,2-a]pyrazin-8-amine core for the design of new adenosine receptor antagonists: Structural exploration to target the A3 and A2A subtypes. European Journal of Medicinal Chemistry, 2017, 125, 611-628. | 2.6 | 17 |

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| 37 | Direct determination of small RNAs using a biotinylated polythiophene impedimetric genosensor. Biosensors and Bioelectronics, 2017, 87, 1012-1019. | 5.3 | 51 |
| 38 | TiO<sub>2</sub>nanocrystals decorated CVD graphene for electroanalytical sensing. , 2017, , . | | 0 |
| 39 | Electrochemical, Electrochemiluminescence, and Photoelectrochemical Aptamer-Based Nanostructured Sensors for Biomarker Analysis. Biosensors, 2016, 6, 39. | 2.3 | 59 |
| 40 | TiO 2 Nanocrystals Decorated CVD Graphene Based Hybrid for UV-Light Active Photoanodes. Procedia Engineering, 2016, 168, 396-402. | 1.2 | 4 |
| 41 | Improving impedimetric nucleic acid detection by using enzyme-decorated liposomes and nanostructured screen-printed electrodes. Analytical and Bioanalytical Chemistry, 2016, 408, 7271-7281. | 1.9 | 31 |
| 42 | Development of an Electrochemical Immunoassay for the Detection of Polybrominated Diphenyl Ethers (PBDEs). Electroanalysis, 2016, 28, 1817-1823. | 1.5 | 14 |
| 43 | Health and carcinogenic risk evaluation for cohorts exposed to PAHs in petrochemical workplaces in Rawalpindi city (Pakistan). International Journal of Environmental Health Research, 2016, 26, 37-57. | 1.3 | 25 |
| 44 | Strategies for the development of an electrochemical bioassay for TNF-alpha detection by using a non-immunoglobulin bioreceptor. Talanta, 2016, 151, 141-147. | 2.9 | 51 |
| 45 | To the memory of Marco Mascini: His contribution in the field of biosensors. TrAC - Trends in Analytical Chemistry, 2016, 79, 2-8. | 5.8 | 2 |
| 46 | Emerging Biosensor for Pesticide Detection. Advanced Sciences and Technologies for Security Applications, 2016, , 431-442. | 0.4 | 2 |
| 47 | New Trends in the Design of Enzyme-based Biosensors for Medical Applications. Mini-Reviews in Medicinal Chemistry, 2016, 16, 1125-1133. | 1.1 | 18 |
| 48 | DNA-Surfactant Thin-Film Processing and Characterization. , 2016, , 192-243. | | 0 |
| 49 | A Genosensor for Point Mutation Detection of P53 Gene PCR Product Using Magnetic Particles. Electroanalysis, 2015, 27, 1378-1386. | 1.5 | 35 |
| 50 | Different enzyme-based strategies for the development of disposable electrochemical biosensors: Application to environmental pollutant monitoring. , 2015, , . | | 0 |
| 51 | A <I>Special Section</I> on Analytical Aspects of Nanoscience and Nanotechnology. Journal of Nanoscience and Nanotechnology, 2015, 15, 3305-3306. | 0.9 | 0 |
| 52 | Different strategies for the detection of bioagents using electrochemical and photoelectrochemical genosensors. , 2015, , . | | 0 |
| 53 | Alkaline-Phosphatase-Based Nanostructure Assemblies for Electrochemical Detection of microRNAs. Journal of Nanoscience and Nanotechnology, 2015, 15, 3378-3384. | 0.9 | 16 |
| 54 | Label-Free Impedimetric Determination of miRNA Using Biotinylated Conducting Polymer Modified Carbon Electrodes. Lecture Notes in Electrical Engineering, 2015, , 59-64. | 0.3 | 1 |

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| 55 | Electrochemical Biosensors for miRNA Detection. RNA Technologies, 2015, , 1-19. | 0.2 | 0 |
| 56 | Photoelectrochemical Biosensors for Nucleic Acid Detection. Journal of Nanoscience and Nanotechnology, 2015, 15, 3320-3332. | 0.9 | 24 |
| 57 | Detection of biomarkers for inflammatory diseases by an electrochemical immunoassay: The case of neopterin. Talanta, 2015, 134, 48-53. | 2.9 | 18 |
| 58 | Self-powered microneedle-based biosensors for pain-free high-accuracy measurement of glycaemia in interstitial fluid. Biosensors and Bioelectronics, 2015, 66, 162-168. | 5.3 | 114 |
| 59 | Affinity biosensors for tumor-marker analysis. Bioanalysis, 2014, 6, 3417-3435. | 0.6 | 27 |
| 60 | New Affinity Biosensors as Diagnostic Tools for Tumour Marker Analysis. Lecture Notes in Electrical Engineering, 2014, , 19-23. | 0.3 | 1 |
| 61 | Cell surface display of organophosphorus hydrolase for sensitive spectrophotometric detection of p-nitrophenol substituted organophosphates. Enzyme and Microbial Technology, 2014, 55, 107-112. | 1.6 | 62 |
| 62 | Biosensors, Electrochemical. , 2014, , 136-140. | | 1 |
| 63 | Electrochemical detection of miRNA-222 by use of a magnetic bead-based bioassay. Analytical and Bioanalytical Chemistry, 2013, 405, 1025-1034. | 1.9 | 113 |
| 64 | A review on the electrochemical biosensors for determination of microRNAs. Talanta, 2013, 115, 74-83. | 2.9 | 113 |
| 65 | Microbial surface display of glucose dehydrogenase for amperometric glucose biosensor. Biosensors and Bioelectronics, 2013, 45, 19-24. | 5.3 | 71 |
| 66 | Direct energy conversion from xylose using xylose dehydrogenase surface displayed bacteria based enzymatic biofuel cell. Biosensors and Bioelectronics, 2013, 44, 160-163. | 5.3 | 41 |
| 67 | Electrochemical bioassay for the detection of TNF-Î± using magnetic beads and disposable screen-printed array of electrodes. Bioanalysis, 2013, 5, 11-19. | 0.6 | 48 |
| 68 | Ion Selective Electrodes: Enzyme Electrodes. , 2013, , . | | 0 |
| 69 | Microcantilever-based Biosensor Array for Tumor Angiogenic Marker Detection. , 2012, , 59-77. | | 1 |
| 70 | Introduction of an Electrochemical Genosensor for Detection of P53 Gene Via Sandwich Hybridization Method. Lecture Notes in Electrical Engineering, 2012, , 37-41. | 0.3 | 9 |
| 71 | A Mercuryâ€Free Sensor to Control Trace Metal Ionization Used to Treat Pathogens in Water Distribution Systems. Electroanalysis, 2012, 24, 882-888. | 1.5 | 2 |
| 72 | Electrochemical nanomaterial-based nucleic acid aptasensors. Analytical and Bioanalytical Chemistry, 2012, 402, 3103-3114. | 1.9 | 99 |

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| 73 | PBDEs in Italian sewage sludge and environmental risk of using sewage sludge for land application. Environmental Pollution, 2012, 161, 229-234. | 3.7 | 68 |
| 74 | Dipyridineâ€Containing Macrocyclic Polyamine â€“ Nafionâ€Modified Screenâ€Printed Carbon Electrode for Voltammetric Detection of Lead. Electroanalysis, 2012, 24, 591-599. | 1.5 | 8 |
| 75 | Nucleic Acid and Peptide Aptamers: Fundamentals and Bioanalytical Aspects. Angewandte Chemie - International Edition, 2012, 51, 1316-1332. | 7.2 | 315 |
| 76 | Chapter 1. Biosensor Techniques for Environmental Monitoring. , 2011, , 1-16. | | 4 |
| 77 | Chapter 3. Genosensing Environmental Pollution. , 2011, , 34-60. | | 1 |
| 78 | Chapter 9. Conclusions and Criticisms. , 2011, , 165-167. | | 0 |
| 79 | A new gravityâ€driven microfluidicâ€based electrochemical assay coupled to magnetic beads for nucleic acid detection. Electrophoresis, 2010, 31, 3727-3736. | 1.3 | 36 |
| 80 | Electrochemical nucleic acid-based biosensors: Concepts, terms, and methodology (IUPAC Technical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf | 0.9 | 200 |
| 81 | Biosensor Technology: A Brief History. Lecture Notes in Electrical Engineering, 2010, , 15-23. | 0.3 | 14 |
| 82 | Development of an Aptamer-Based Electrochemical Sandwich Assay for the Detection of a Clinical Biomarker. Lecture Notes in Electrical Engineering, 2010, , 207-210. | 0.3 | 2 |
| 83 | Detection of C Reactive Protein (CRP) in Serum by an Electrochemical Aptamerâ€Based Sandwich Assay. Electroanalysis, 2009, 21, 1309-1315. | 1.5 | 98 |
| 84 | Enzyme-amplified electrochemical hybridization assay based on PNA, LNA and DNA probe-modified micro-magnetic beads. Bioelectrochemistry, 2009, 76, 214-220. | 2.4 | 52 |
| 85 | Novel enzyme biosensor for hydrogen peroxide via supramolecular associations. Biosensors and Bioelectronics, 2009, 24, 2028-2033. | 5.3 | 32 |
| 86 | Aligned carbon nanotube thin films for DNA electrochemical sensing. Electrochimica Acta, 2009, 54, 5035-5041. | 2.6 | 52 |
| 87 | Microfluidic-based electrochemical genosensor coupled to magnetic beads for hybridization detection. Talanta, 2009, 77, 971-978. | 2.9 | 50 |
| 88 | Electrochemical Biosensor Technology: Application to Pesticide Detection. Methods in Molecular Biology, 2009, 504, 115-126. | 0.4 | 27 |
| 89 | Disposable Electrochemical Biosensors for Environmental Analysis. , 2009, , 115-140. | | 0 |
| 90 | Different approaches for the detection of thrombin by an electrochemical aptamer-based assay coupled to magnetic beads. Biosensors and Bioelectronics, 2008, 23, 1602-1609. | 5.3 | 94 |

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| 91 | Electroanalytical biosensors and their potential for food pathogen and toxin detection. Analytical and Bioanalytical Chemistry, 2008, 391, 455-471. | 1.9 | 201 |
| 92 | Disposable electrodes modified with multi-wall carbon nanotubes for biosensor applications. Irbm, 2008, 29, 202-207. | 3.7 | 26 |
| 93 | Disposable electrochemical DNA-array for PCR amplified detection of hazelnut allergens in foodstuffs. Analytica Chimica Acta, 2008, 614, 93-102. | 2.6 | 78 |
| 94 | Electrochemical behavior of colchicine using graphite-based screen-printed electrodes. Talanta, 2008, 76, 288-294. | 2.9 | 29 |
| 95 | Amperometric Biosensor for Pathogenic Bacteria Detection. , 2008, , 299-312. | | 9 |
| 96 | Nucleic acid biosensors for environmental pollution monitoring. Analyst, The, 2008, 133, 846. | 1.7 | 203 |
| 97 | As(III) Voltammetric Detection by Means of Disposable Screenâ€Printed Gold Electrochemical Sensors. Analytical Letters, 2007, 40, 3002-3013. | 1.0 | 24 |
| 98 | Electrochemical Imaging of Localized Sandwich DNA Hybridization Using Scanning Electrochemical Microscopy. Analytical Chemistry, 2007, 79, 7206-7213. | 3.2 | 50 |
| 99 | Evaluation of pesticide-induced acetylcholinesterase inhibition by means of disposable carbon-modified electrochemical biosensors. Enzyme and Microbial Technology, 2007, 40, 485-489. | 1.6 | 66 |
| 100 | Polychlorinated biphenyls (PCBs) detection in milk samples by an electrochemical magneto-immunosensor (EMI) coupled to solid-phase extraction (SPE) and disposable low-density arrays. Analytica Chimica Acta, 2007, 594, 9-16. | 2.6 | 60 |
| 101 | Disposable electrochemical genosensor for the simultaneous analysis of different bacterial food contaminants. Biosensors and Bioelectronics, 2007, 22, 1544-1549. | 5.3 | 121 |
| 102 | A disposable electrochemical sensor for vanillin detection. Analytica Chimica Acta, 2006, 555, 134-138. | 2.6 | 75 |
| 103 | Gold-based screen-printed sensor for detection of trace lead. Sensors and Actuators B: Chemical, 2006, 114, 460-465. | 4.0 | 168 |
| 104 | Development of disposable low density screen-printed electrode arrays for simultaneous electrochemical measurements of the hybridisation reaction. Journal of Electroanalytical Chemistry, 2006, 593, 211-218. | 1.9 | 60 |
| 105 | Miniaturised stripping-based carbon modified sensor for in field analysis of heavy metals. Analytica Chimica Acta, 2005, 530, 61-67. | 2.6 | 111 |
| 106 | On the electrochemical flow measurements using carbon-based screen-printed electrodiffusion probes. Journal of Applied Electrochemistry, 2005, 35, 599-607. | 1.5 | 7 |
| 107 | Biosensor for Defence Against Terrorism. , 2005, , 245-259. | | 0 |
| 108 | Disposable genosensor, a new tool for the detection of NOS-terminator, a genetic element present in GMOs. Food Control, 2004, 15, 621-626. | 2.8 | 47 |

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| 109 | DETECTION OF HEAVY METALS USING DISPOSABLE MODIFIED ELECTROCHEMICAL SENSORS. , 2004, , . | | 0 |
| 110 | Disposable electrochemical sensor for rapid determination of heavy metals in herbal drugs. Journal of Pharmaceutical and Biomedical Analysis, 2003, 32, 251-256. | 1.4 | 33 |
| 111 | Polymer-Mercury Coated Screen-Printed Sensors for Electrochemical Stripping Analysis of Heavy Metals. International Journal of Environmental Analytical Chemistry, 2003, 83, 701-711. | 1.8 | 16 |
| 112 | Rapid Electrochemical Sensors And Biosensors For Environmental Analysis. , 2003, , . | | 0 |
| 113 | Electrochemical DNA biosensor as a screening tool for the detection of toxicants in water and wastewater samples. Talanta, 2002, 56, 949-957. | 2.9 | 117 |
| 114 | Electrochemical DNA biosensor for analysis of wastewater samples. Bioelectrochemistry, 2002, 58, 113-118. | 2.4 | 101 |
| 115 | Coupling of an indicator-free electrochemical DNA biosensor with polymerase chain reaction for the detection of DNA sequences related to the apolipoprotein E. Analytica Chimica Acta, 2002, 469, 93-99. | 2.6 | 74 |
| 116 | INDICATOR-FREE ELECTROCHEMICAL DNA BIOSENSOR FOR THE DETECTION OF HYBRIDISATION REACTION. , 2002, , . | | 0 |
| 117 | NEW PROCEDURES TO OBTAIN ELECTROCHEMICAL SENSORS FOR HEAVY METAL DETECTION. Analytical Letters, 2001, 34, 813-824. | 1.0 | 30 |
| 118 | DNA electrochemical biosensors. Fresenius' Journal of Analytical Chemistry, 2001, 369, 15-22. | 1.5 | 188 |
| 119 | Amperometric separation-free immunosensor for real-time environmental monitoring. Analytica Chimica Acta, 2001, 427, 173-180. | 2.6 | 47 |
| 120 | Electrochemical application of DNA biosensors. , 2001, , . | | 0 |
| 121 | POLYPHENOLS DETERMINATION IN OLIVE OIL SAMPLES BASED ON A THICK FILM VOLTAMMETRIC SENSOR AND A TYROSINASE BIOSENSOR. , 2000, , . | | 0 |
| 122 | Electrochemical sensor and biosensor for polyphenols detection in olive oils. Food Chemistry, 2000, 71, 553-562. | 4.2 | 232 |
| 123 | Disposable Screen-Printed Electrodes (Spe) Mercury-Free for Lead Detection. Analytical Letters, 2000, 33, 1231-1246. | 1.0 | 44 |
| 124 | Determination of Anticholinesterase Activity for Pesticides Monitoring Using a Thiocholine Sensor. International Journal of Environmental Analytical Chemistry, 2000, 78, 263-278. | 1.8 | 36 |
| 125 | Disposable strip potentiometric electrodes with solvent-polymeric ion-selective membranes fabricated using screen-printing technology. Analytica Chimica Acta, 1999, 385, 451-459. | 2.6 | 52 |
| 126 | Determination of anticholinesterase pesticides in real samples using a disposable biosensor. Analytica Chimica Acta, 1997, 337, 315-321. | 2.6 | 190 |

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| 127 | Ruthenized screen-printed choline oxidase-based biosensors for measurement of anticholinesterase activity. Mikrochimica Acta, 1995, 121, 155-166. | 2.5 | 41 |
| 128 | Disposable ruthenized screen-printed biosensors for pesticides monitoring. Sensors and Actuators B: Chemical, 1995, 24, 85-89. | 4.0 | 99 |
| 129 | Electrochemical Adsorption Technique for Immobilization of Single-Stranded Oligonucleotides onto Carbon Screen-Printed Electrodes. , 0, , 27-43. | | 10 |