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| 1. Record Nr. | UNINA9910254578603321 |
| Autore | Juan Colás José |
| Titolo | Dual-Mode Electro-photonic Silicon Biosensors // by José Juan Colás |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017 |
| ISBN | 3-319-60501-1 |
| Edizione | [1st ed. 2017.] |
| Descrizione fisica | 1 online resource (XV, 149 p. 105 illus., 89 illus. in color.) |
| Collana | Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053 |
| Disciplina | 610.28 |
| Soggetti | Biophysics Biological physics Optical materials Electronic materials Electrochemistry Physical measurements Measurement Surfaces (Physics) Interfaces (Physical sciences) Thin films Biological and Medical Physics, Biophysics Optical and Electronic Materials Measurement Science and Instrumentation Surface and Interface Science, Thin Films |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters. |
| Nota di contenuto | Introduction -- Fundamentals of Label-Free Biosensing -- Fabrication and Experimental Techniques -- The Electro-photonic Silicon Biosensor -- Study and Application of Electrografted Layers of Diazonium Ions -- Tailoring Light-matter Interaction for Quantication of Biological and Molecular Layers -- Conclusions and Outlook. |
| Sommario/riassunto | This highly interdisciplinary thesis reports ontwo innovative photonic biosensors that combine multiple simultaneous measurements to provide unique insights into the activity and structure of surface |

immobilized biological molecules. In addition, it presents a new silicon photonic biosensor that exploits two cascaded resonant sensors to provide two independent measurements of a biological layer immobilized on the surface. By combining these two measurements, it is possible to unambiguously quantify the density and thickness of the molecular layer; here, the approach's ability to study molecular conformation and conformational changes in real time is demonstrated. The electrophotonic biosensor integrates silicon photonics with electrochemistry into a single technology. This multi-modal biosensor provides a number of unique capabilities that extend the functionality of conventional silicon photonics. For example, by combining the complementary information revealed by simultaneous electrochemical and photonic measurements, it is possible to provide unique insights into on-surface electrochemical processes. Furthermore, the ability to create electrochemical reactions directly on the silicon surface provides a novel approach for engineering the chemical functionality of the photonic sensors. The electrophotonic biosensor thus represents a critical advance towards the development of very high-density photonic sensor arrays for multiplexed diagnostics.

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| 2. Record Nr. | UNINA9910825519903321 |
| Titolo | The trial on trial . Volume 1 Truth and due process // edited by Antony Duff ... [et al.] |
| Pubbl/distr/stampa | Oxford ; Portland, Oregon, : Hart Publishing, 2004 |
| ISBN | 1-4725-5965-7 1-280-80887-X 9786610808878 1-84731-162-8 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (218 p.) |
| Disciplina | 345.07 |
| Soggetti | Trials - Great Britain Criminal procedure - Great Britain Fair trial - Great Britain Trials - Philosophy Fair trial |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Based on the proceedings of a workshop which took place in 2003. |
| Nota di bibliografia | Includes bibliographical references and index |
| Nota di contenuto | 1. Introduction: Towards a Normative Theory of the Criminal Trial -- Antony Duff, Lindsay Farmer, Sandra Marshall, Victor Tadros -- 2. Changing Conceptions of the Scottish Criminal Trial: The Duty to Agree Uncontroversial Evidence -- Peter Duff -- 3. Ritual, Fairness and Truth: The Adversarial and Inquisitorial Models of Criminal Trial -- Jenny McEwan -- 4. 'More Than Just Illogical': Truth and Jury Nullification -- Matt Matravers -- 5. The Criminal Trial and the Legitimation of Punishment -- Markus Dirk Dubber -- 6. Testimony -- Duncan Pritchard -- 7. Managing Uncertainty and Finality: The Function of the Criminal Trial in Legal Inquiry -- John D Jackson -- 8. Nothing But the Truth? Some Facts, Impressions and Confessions about Truth in Criminal Procedure -- Heike Jung -- 9. The Distinctiveness of Trial Narrative -- Robert P Burns -- 10 The Objection that Cannot be Heard: Communication and Legitimacy in the Courtroom -- Emiliios Christodoulidis |
| Sommario/riassunto | The trial is central to the institutional framework of criminal justice. It |

provides the procedural link between crime and punishment, and is the forum in which both guilt and innocence and sentence are determined. Its continuing significance is evidenced by the heated responses drawn by recent government proposals to reform rules of criminal procedure and evidence so as to alter the status of the trial within the criminal justice process and to limit the role of the jury. Yet for all of the attachment to trial by jury and to principles safeguarding the right to a fair trial there has been remarkably little theoretical reflection on the meaning of fairness in the trial and criminal procedure, the relationship between rules of evidence, procedure and substantive law, or the functions and normative foundations of the trial process. There is a need, in other words, to develop a normative understanding of the criminal trial. The book is based on the proceedings of two workshops which took place in 2003, addressing the theme of Truth and Due Process in the Criminal Trial. The essays in the book are concerned with the question of whether, and in what sense, we can take the discovery of truth to be the central aim of the procedural and evidential rules and practices of criminal investigation and trial. They are divided into four parts addressing distinct but inter-related issues: models of the trial (Duff, Matravers, McEwan); the meaning of due process (Gunther, Dubber); the meaning of truth and the nature of evidence (Jung, Pritchard); and legitimacy and rhetoric in the trial (Burns, Christodoulidis)
