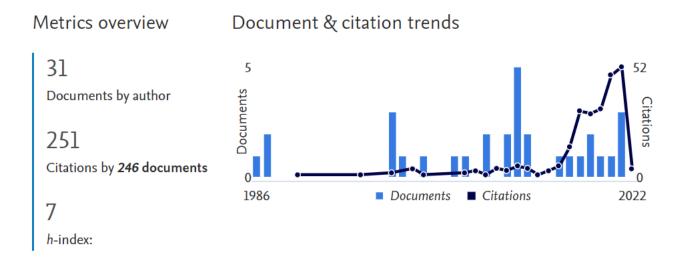
### Citas a trabajos y publicaciones del Dr. Graciano Dieck Assad (fuentes: SCOPUS y Google-Académico, enero 1, 2022)

#### Contenido.

- Resumen de Citas obtenidas de la Base de Datos SCOPUS-Académico ١.
- II. Tabla Resumen de las Citas importantes de acuerdo a Google-Académico
- Desglose de citas importantes por publicación o libro. III.
  - Resumen de SCOPUS Académico para citas de Graciano Dieck Assad ١.

### Dieck-Assad, Graciano

- i) Tecnologico de Monterrey, Monterrey, Mexico
- 🕟 Connect to ORCID 🛮 👭 Is this you? Connect to Mendeley account
- Edit profile



31 Documents

Cited by 246 Documents 0 Preprints

51 Co-Authors

Article • Open access  Excel methods to design and validate in microelectronics (Complementary metal-oxide-semiconductor, cmos) for biomedical instrumentation application  Dieck-Assad, G., Rodríguez-Delgado, J.M., Peña, O.I.G.  Sensors, 2021, 21(22), 7486  Show abstract V Related documents	0 Citations
Article • Open access  Comparing competency assessment in electronics engineering education with and without industry training partner by challenge-based learning oriented to sustainable development goals  Dieck-Assad, G., Ávila-Ortega, A., Peña, O.I.G.  Sustainability (Switzerland), 2021, 13(19), 10721  Show abstract V Related documents	l Citations
Article • Open access  Evaluation of emergency first response's competency in undergraduate college students: Enhancing sustainable medical education in the community for work occupational safety  Dieck-Assad, G., González Peña, O.I., Rodríguez-Delgado, J.M.  International Journal of Environmental Research and Public Health, 2021, 18(15), 7814  Show abstract V Related documents	2 Citations
Article  Study of the effectiveness of interactive videos in applied electronics courses  Dieck-Assad, G., Hinojosa-Olivares, J.M., Colomer-Farrarnos, J.  International Journal on Interactive Design and Manufacturing, 2020, 14(3), pp. 983–  1001  Show abstract V Related documents	2 Citations
Article • Open access  Dynamic simulation of a crude oil distillation plant using Aspen-Hysys®  Sotelo, D., Favela-Contreras, A., Lozoya, C.,Dieck-Assad, G., Sotelo, C.  International Journal of Simulation Modelling, 2019, 18(2), pp. 229–241  Show abstract ∨ Related documents	6 Citations
Article • Open access Electrochemical instrumentation of an embedded potentiostat system (Eps) for a programmable-system-on-a-chip Muñoz-Martínez, A.I., Peña, O.I.G., Colomer-Farrarons, J.,Ávila-Ortega, A., Dieck-Assad, G.  Sensors (Switzerland), 2018, 18(12), 4490  Show abstract  Related documents	3 Citations

### A Novel Discrete-time Nonlinear Model Predictive Control Based on State Space 8 Model Citations Sotelo, C., Favela-Contreras, A., Beltrán-Carbajal, F., ...Rodríguez-Cañedo, P., Sotelo, D. International Journal of Control, Automation and Systems, 2018, 16(6), pp. 2688-2696 Show abstract ∨ Related documents Article Modeling and simulation of furnace pulse firing improvements using fuzzy control 7 Cadena-Ramírez, A., Favela-Contreras, A., Dieck-Assad, G. Citations Simulation, 2017, 93(6), pp. 477-487 Show abstract ∨ Related documents Article The use of polybutene for controlling the flow of liquids in centrifugal microfluidic 6 systems Citations Soroori, S., Rodriguez-Delgado, J.M., Kido, H., ... Madou, M., Kulinsky, L. Microfluidics and Nanofluidics, 2016, 20(1), pp. 1–13, 26 Show abstract ∨ Related documents Review • Open access Laccase-based biosensors for detection of phenolic compounds 151 Rodríguez-Delgado, M.M., Alemán-Nava, G.S., Rodríguez-Delgado, J.M., ...Barceló, D., Parra, R. Citations TrAC - Trends in Analytical Chemistry, 2015, 74, pp. 21-45 Show abstract ∨ Related documents

### II. Tabla Resumen de Citas según Google Académico

Publicación	Año	Número de Citas
Artículo 1	2015	207
<u>Laccase-based biosensors for detection of phenolic compounds</u>		
MM Rodríguez-Delgado, GS Alemán-Nava, JM Rodríguez-Delgado,		
TrAC Trends in Analytical Chemistry 74, 21-45		
Artículo 2	1987	31
Optimal set-point scheduling in a boiler-turbine system		
G Dieck-Assad, GY Masada, RH Flake		
IEEE Transactions on Energy Conversion, 388-395		
Artículo 3	2012	26
State of the art and new perspectives in non-invasive glucose		
<u>sensors</u>		
A Losoya-Leal, S Camacho-León, G Dieck-Assad, SO Martínez-Chapa		
Revista Mexicana De Ingeniería Biomédica 33 (1), 41-52		
Artículo 4	1990	13
Development of a state space boiler model for process		
<u>optimization</u>		
G Dieck-Assad		
Simulation 55 (4), 201-213		

Autinula E	2006	13
Artículo 5	2006	15
Modeling and simulation of a fuzzy supervisory controller for an		
<u>industrial boiler</u>		
E Arriaga-de-Valle, G Dieck-Assad		
Simulation 82 (12), 841-850	2222	
Artículo 6	2000	14
A fuzzy logic based AGC algorithm for a radio communication		
<u>system</u>		
J Ramirez-Barajas, G Dieck-Assad, R Soto		
Ninth IEEE International Conference on Fuzzy Systems. FUZZ-IEEE 2000	2212	
Artículo 7	2010	14
Modelación del nivel de ácido láctico para atletas de alto		
<u>rendimiento</u>		
MA Leminszka, G Dieck-Assad, SO Martínez, JE Garza		
Revista mexicana de ingeniería biomédica 31 (1), 41-56		
Artículo 8	2019	8
Dynamic Simulation of a Crude Oil Destillation Plant Using ASPEN-		
<u>HYSYS</u>		
D Sotelo, A Favela-Contreras, F Beltrán-Carbajal, G Dieck-Assad,		
International Journal of Control, Automation and Systems 18 (2), 229-241		
Libro 1	2000	7
Instrumentación, acondicionamiento electrónico y adquisición de		
datos: preedición		
G Dieck Assad		
Instituto Tecnológico y de Estudios Superiores de Monterrey		
Artículo 9	2017	7
Modeling and simulation of furnace pulse firing improvements		
using fuzzy control		
A Cadena-Ramírez, A Favela-Contreras, G Dieck-Assad		
Simulation 93 (6), 477-487		
Artículo 10	2010	7
A 0.5 V 94dB SNR CT-ΣΔ modulator for implantable and portable		
biomedical devices		
F Bautista, SO Martínez-Chapa, O Rossetto, G Dieck-Assad		
2010 17th IEEE International Conference on Electronics, Circuits and Systems		
Artículo 11	2018	8
A novel discrete-time nonlinear model predictive control based on		
state space model		
C Sotelo, A Favela-Contreras, F Beltrán-Carbajal, G Dieck-Assad,		
International Journal of Control, Automation and Systems 16 (6), 2688-2696		
Artículo 12	2016	6
The use of polybutene for controlling the flow of liquids in		
centrifugal microfluidic systems		
S Soroori, JM Rodriguez-Delgado, H Kido, G Dieck-Assad, M Madou,		
Microfluidics and Nanofluidics 20 (1), 26		
Artículo 13	2011	3
A multi-channel sinusoidal generator for electrokinetic stimulation		
of microfluidic platforms		
J Gomez-Quinones, VH Perez-Gonzalez, H Moncada-Hernandez, G Dieck-Assad		
2011 IEEE Electronics, Robotics and Automotive Mechanics Conference, 20-25		
Artículo 14	1994	3
Fuzzy environmental control of surgical rooms in hospitals		
· · · · · · · · · · · · · · · · · · ·	l	L

AD Malpica-Romero, G Dieck-Assad		
NAFIPS/IFIS/NASA'94. Proceedings of the First International Joint Conference		
Artículo 15	2020	5
Study of the Efectiveness of Interactive Videos in Applied		
Electronics Courses		
G Dieck-Assad, J. M. Hinojosa-Olivares, J. Colomer-Ferrarons International Journal on Interactive Design and Manufacturing (IJIDeM), Vol. 14 (3), Springer, 983-1001		
Artículo 16	2021	3
Evaluation of Emergency First Response's Competency in		
<u>Undergraduate College Students: Enhancing Sustainable Medical</u>		
Education in the Community for Work Occupational Safety		
Dieck-Assad, Graciano, Omar I. González Peña, and José M. Rodríguez-		
Delgado. International Journal of Environmental Research and Public		
Health 18, no. 15: 7814.		
TOTAL		375 [*]

<sup>[\*]</sup> Nota: en la siguiente sección se desglosan las citas por publicación que haya tenido 3 o más.

### III. Desglose de Citas por artículo y/o libro

### **Artículo 1: 106 Citas**

[2015] Rodríguez-Delgado M.M., Alemán-Nava G.S., Rodríguez-Delgado J.M, Dieck-Assad G., Martínez-Chapa S. O, Barceló D., Parra R., "Review on Laccase Based Biosensors for Detection of Phenolic Compounds", Published in Trends in Analytical Chemistry 74 pages 21-45, Elsevier, Technical Paper: TRAC-D-15-00035R1, 2015.

### Laccase: a multi-purpose biocatalyst at the forefront of biotechnology

DM Mate, M Alcalde - Microbial biotechnology, 2017 - Wiley Online Library

Laccases are multicopper containing enzymes capable of performing one electron oxidation of a broad range of substrates. Using molecular oxygen as the final electron acceptor, they release only water as a by-product, and as such, laccases are eco-friendly, versatile ...

☆ 99 Citado por 125 Artículos relacionados Las 9 versiones Web of Science: 81 
≫

#### Ionic liquids as tool to improve enzymatic organic synthesis

T Itoh - Chemical reviews, 2017 - ACS Publications

Ionic liquids (ILs) have now been acknowledged as reaction media for biotransformations. The first three examples were reported in this field in 2000, and since then, numerous applications have been reported for biocatalytic reactions using ILs. Two topics using ILs for ...

☆ 99 Citado por 99 Artículos relacionados Las 6 versiones Web of Science: 77

# [HTML] Emergent contaminants: endocrine disruptors and their laccase-assisted degradation—a review

C Barrios-Estrada, M de Jesús Rostro-Alanis... - Science of the total ..., 2018 - Elsevier Herein, an effort has been made to highlight the trends of the state-of-the-art of laccase-assisted degradation of emerging contaminants at large and endocrine disruptors in particular. Since first described in the 19th century, laccase has received particular interest ...

☆ 99 Citado por 76 Artículos relacionados Las 7 versiones Web of Science: 59

#### [HTML] Analytical tools monitoring endocrine disrupting chemicals

V Scognamiglio, <u>A Antonacci</u>, L Patrolecco... - TrAC Trends in ..., 2016 - Elsevier Endocrine disrupting chemicals (EDCs) are harmful, xenobiotic compounds requiring a multitiered analytical approach for a reliable management. Although worth efforts worldwide, comprehensive EDCs monitoring and risk-assessment still require improvements. This ...

☆ 99 Citado por 38 Artículos relacionados Las 7 versiones Web of Science: 28

# Nanomaterial-based sensing and biosensing of phenolic compounds and related antioxidant capacity in food

F Della Pelle, D Compagnone - Sensors, 2018 - mdpi.com

Polyphenolic compounds (PCs) have received exceptional attention at the end of the past millennium and as much at the beginning of the new one. Undoubtedly, these compounds in foodstuffs provide added value for their well-known health benefits, for their technological ...

☆ 99 Citado por 39 Artículos relacionados Las 7 versiones Web of Science: 28 >>>

# [HTML] Fe2O3 yolk-shell particle-based laccase biosensor for efficient detection of 2, 6-dimethoxyphenol

SKS Patel, MZ Anwar, A Kumar, SV Otari... - Biochemical ..., 2018 - Elsevier

The structural morphology and composition of a support play a key role in the performance of nanoparticle-based enzymatic biosensors. In the present study, the influence of different functional groups, including glutaraldehyde, 3-aminopropyltriethoxysilane, carbodiimide ...

☆ 99 Citado por 30 Artículos relacionados Las 4 versiones Web of Science: 25

### [HTML] Electroanalytical tools for antioxidant evaluation of red fruits dry extracts

IYL de Macêdo, LF Garcia, <u>JRO Neto</u>... - Food chemistry, 2017 - Elsevier Red fruits are rich sources of antioxidant compounds with recognized health benefits. Since they are perishable, dried extracts emerge as more durable products and their quality control must include antioxidant capacity assays. In this study, the redox behavior of ...

☆ 99 Citado por 20 Artículos relacionados Las 6 versiones Web of Science: 12

### Laccase-functionalized graphene oxide assemblies as efficient nanobiocatalysts for oxidation reactions

# [HTML] High yield production in seven days of Coriolopsis gallica 1184 laccase at 50 L scale; enzyme purification and molecular characterization

# Statistical Optimization of Culture Conditions and Characterization for Ligninolytic Enzymes Produced from *Rhizopus* Sp. Using Prickly Palm Cactus Husk

# [PDF] Polyphenol oxidase (PPO) based biosensors for detection of phenolic compounds: a review

I Gul, MS Ahmad, SMS Naqvi, A Hussain, R Wali... - J. Appl. Biol ..., 2017 - jabonline.in The present review summarizes the literature on applications and development of polyphenol oxidase-based biosensors for detection of phenolic compounds present in industrial waste waters. Phenolic compounds including phenol and its derivatives: bisphenol ...

☆ 99 Citado por 17 Artículos relacionados Las 3 versiones >>>

### [HTML] Immobilization of laccase of Pycnoporus sanguineus CS43

LA Gonzalez-Coronel, M Cobas, <u>MJ Rostro-Alanis</u>... - New biotechnology, 2017 - Elsevier Laccase from Pycnoporus sanguineus CS43 was successfully immobilized onto Immobead-150 and Eupergit-C by covalent binding and by entrapment in LentiKats. The highest immobilization was onto Immobead-150 (97.1±1.2%) compared to the other supports ...

☆ 99 Citado por 13 Artículos relacionados Las 5 versiones Web of Science: 10

# [HTML] Potential use of electronic noses, electronic tongues and biosensors as multisensor systems for spoilage examination in foods

M Ghasemi-Varnamkhasti, C Apetrei, J Lozano... - Trends in food science & ..., 2018 - Elsevier Abstract Development and use of reliable and precise detecting systems in the food supply chain must be taken into account to ensure the maximum level of food safety and quality for consumers. Spoilage is a challenging concern in food safety considerations as it is a threat ...

☆ 99 Citado por 24 Artículos relacionados Las 5 versiones Web of Science: 11

### Fungal ligninolytic enzymes and their applications

MR Mäkelä, EL Bredeweg, JK Magnuson... - The Fungal ..., 2017 - Wiley Online Library Lignin is an aromatic polymer with a heterogeneous structure. Varied, nonhydrolyzable linkages between subunits present a significant constraint to efficient exploitation of plant lignin. The different types of biomass and pretreatment used in biomass conversion ...

☆ 99 Citado por 9 Artículos relacionados Las 3 versiones Web of Science: 4

# [HTML] Electroanalysis and laccase-based biosensor on the determination of phenolic content and antioxidant power of honey samples

JR de Oliveira Neto, SG Rezende, GS Lobón... - Food chemistry, 2017 - Elsevier Honey is a functional food widely consumed. Thus, the evaluation of honey samples to determine its phenolic content and antioxidant capacity (AOC) is relevant to determine its quality. Usually AOC is performed by spectrophotometric methods, which lacks ...

☼ 99 Citado por 11 Artículos relacionados Las 6 versiones Web of Science: 7

### Advances in enzyme-based biosensors for pesticide detection

B Bucur, FD Munteanu, <u>JL Marty</u>, <u>A Vasilescu</u> - Biosensors, 2018 - mdpi.com
The intensive use of toxic and remanent pesticides in agriculture has prompted research into novel performant, yet cost-effective and fast analytical tools to control the pesticide residue levels in the environment and food. In this context, biosensors based on enzyme inhibition ...

\$\frac{1}{12}\$ 99 Citado por 15 Artículos relacionados Las 8 versiones Web of Science: 6 \$\text{\$\infty}\$\$

### Biochemical sensing with macrocyclic receptors

R Pinalli, <u>A Pedrini</u>, <u>E Dalcanale</u> - Chemical Society Reviews, 2018 - pubs.rsc.org Preventive healthcare asks for the development of cheap, precise and non-invasive sensor devices for the early detection of diseases and continuous population screening. The actual techniques used for diagnosis, eg MRI and PET, or for biochemical marker sensing, eg ...

☆ 99 Citado por 18 Artículos relacionados Las 5 versiones Web of Science: 16

# Laccases: A blue enzyme for greener alternative technologies in the detection and treatment of emerging pollutants

M Rodríguez-Delgado, N Ornelas-Soto - Green Technologies and ..., 2017 - Springer The continuous contamination of worldwide water bodies, by the presence of emerging pollutants, has raised great importance over the last decades. This group of pollutants comprises a large variety of chemicals, comprehending household and personal care ...

☆ ワワ Citado por 9 Artículos relacionados Las 3 versiones

# One-pot synthesis of microporous nanoscale metal organic frameworks conjugated with laccase as a promising biocatalyst

A Samui, SK Sahu - New Journal of Chemistry, 2018 - pubs.rsc.org

Enzymes immobilized into or onto a smart material have attracted much attention due to their numerous applications as biocatalysts. Recently, microporous metal organic frameworks (MOFs) have been used as active supports for enzyme immobilization owing to their high ...

☆ 99 Citado por 10 Artículos relacionados Las 2 versiones Web of Science: 8

# [HTML] Real-time monitoring of glucose and phenols intestinal absorption through an integrated Caco-2TC7cells/biosensors telemetric device: Hypoglycemic effect of ...

<u>A Barberis</u>, <u>A Garbetta</u>, <u>A Cardinali</u>, <u>G Bazzu</u>... - Biosensors and ..., 2017 - Elsevier An integrated device for real-time monitoring of glucose and phenols absorption, that consists of a sensors/biosensors system (SB) and a Caco-2TC7 human intestinal cell culture, is described in this study. The SB is composed of a glucose oxidase-based ...

☆ 99 Citado por 9 Artículos relacionados Las 6 versiones Web of Science: 6

#### Nanoparticles carrying biological molecules: Recent advances and applications

S Saallah, IW Lenggoro - KONA Powder and Particle Journal, 2018 - jstage.jst.go.jp 抄録 In the past few decades, enormous advances have been achieved in the field of particle technology and the trend has been shifted from macro to micro and recently to the nanoscale. Integration of nanotechnology and biotechnology has paved the way to the ...

\$\preceq \textsquare \textsqu

### [HTML] A naphthoquinone/SAM-mediated biosensor for olive oil polyphenol content

A Hammami, J Kuliček, N Raouafi - Food chemistry, 2016 - Elsevier

We report on the design of an amperometric tyrosinase-based biosensor using a self-assembled monolayer of  $\omega$ -mercaptopropyl naphthoquinone on gold electrode as an electron mediator. Under optimal conditions (ie pH= 7.4 and E=- 0.35 V vs. KCI), the ...

☆ 99 Citado por 6 Artículos relacionados Las 7 versiones Web of Science: 2

### Statistical optimization for enhanced production of extracellular laccase from Aspergillus sp. HB\_RZ4 isolated from bark scrapping

HM Bhamare, HP Jadhav, <u>RZ Sayyed</u> - Environmental Sustainability, 2018 - Springer Laccase enzyme has gained tremendous demand in various industries, waste water treatment, bioremediation and nano-biotechnology. This compels the availability of enzyme in greater yields that can be achieved by employing potential laccase producing cultures ...

☆ 99 Citado por 7 Artículos relacionados

# Efficient electrochemical biosensors for ethynylestradiol based on the laccase enzyme supported on single walled carbon nanotubes decorated with nanocrystalline ...

TC Canevari, FH Cincotto, M Nakamura... - Analytical ..., 2016 - pubs.rsc.org

A new hybrid nanomaterial based on single-walled carbon nanotubes incorporating
nanocrystalline carbon quantum dots (SWCNT/C-dots) was developed and characterized by
means of high resolution transmission electron microscopy, atomic force microscopy ...

\$\tau\$ 99 Citado por 6 Artículos relacionados Las 2 versiones Web of Science: 6

[PDF] Development of Laccase-TiO2@ Carbon Paste Biosensor for Voltammetric Determination of Paracetamol

<u>DV Thomaz</u>, M Teles de Oliveira, GS Lobón... - Int J Electrochem ..., 2018 - electrochemsci.org In this work a nanostructured TiO2/carbon graphite matrix was employed in the development of a laccase (Lcc) carbon paste biosensor. The biosensor, hereby named Lcc-TiO2@ CPE had its response evaluated for paracetamol. Results evidenced that the biosensor was ...

\$\frac{1}{12}\$ \square \text{DD}\$ Citado por 4 Artículos relacionados Web of Science: 3 \$\text{\$\infty}\$\$

# Optical detection of different phenolic compounds by means of a novel biosensor based on sol-gel immobilized laccase

M Lepore, M Portaccio - Biotechnology and applied ..., 2017 - Wiley Online Library
A novel sol-gel-based biosensor exploiting the optical absorption properties of sol-gel
immobilized laccase has been constructed to increase enzyme specificity toward different
phenolic substrates. Laccase from Trametes versicolor has been immobilized in optically ...

\$\frac{1}{12}\$ 99 Citado por 5 Artículos relacionados Las 4 versiones Web of Science: 4

# [HTML] Electrochemical and optical characterization of thin polydopamine films on carbon surfaces for enzymatic sensors

LC Almeida, JP Correia, AS Viana - Electrochimica Acta, 2018 - Elsevier

The electrochemistry, optical properties, wettability and morphology of polydopamine (PDA) thin films were extensively studied on carbon electrodes, in order to evaluate their potential to be used as electrochemical biosensor interfaces. To fulfil this purpose, several PDA films ...

☆ 99 Citado por 6 Artículos relacionados Las 2 versiones Web of Science: 5

# [нтмь] Ecofriendly syntheses of phenothiazones and related structures facilitated by laccase–a comparative study

MD Cannatelli, AJ Ragauskas - Tetrahedron Letters, 2016 - Elsevier

The biocatalytic synthesis of phenothiazones and related compounds has been achieved in an aqueous system under mild conditions facilitated by laccase oxidation. It was found that by coupling 2-aminothiophenol directly with 1, 4-quinones, the product yields could be ...

☆ ワワ Citado por 4 Artículos relacionados Las 6 versiones Web of Science: 4

# [HTML] Fabrication of biosensor based on core—shell and large void structured magnetic mesoporous microspheres immobilized with laccase for dopamine detection

Z Li, Y Zheng, <u>T Gao</u>, Z Liu, J Zhang, G Zhou - Journal of materials science, 2018 - Springer Abstract The Fe 3 O 4@ SiO 2@ vmSiO 2 microspheres with ordered mesochannels and large inter-lamellar void were successfully prepared through stepwise solution-phase interface deposition. Fe 3 O 4 nanoparticles were coated with SiO 2 via the Stöber method ...

\$\frac{1}{12}\$ 99 Citado por 4 Artículos relacionados Las 8 versiones Web of Science: 3 ≫

# [HTML] Laccase biosensor: Green technique for quantification of phenols in wastewater (a review)

SR Yashas, BP Shivakumara... - Oriental Journal of ..., 2018 - orientjchem.org
It is imperative that the impurities in our air and water are polluting the environment. Growing concern on phenolic, micro and macro pollutants has created the need for a technological platform for researchers to come up with advanced bio-analytics like biosensors for ...

☆ 99 Citado por 4 Artículos relacionados Las 4 versiones Web of Science: 3 
≫

### Cold Plasma as an Innovative Construction Method of Voltammetric Biosensor Based on Laccase

S Malinowski, C Wardak, J Jaroszyńska-Wolińska... - Sensors, 2018 - mdpi.com
Abstract Development of new, faster methods of biosensor construction is a huge challenge for current science and industry. In this work, biosensor construction was carried out using a new soft plasma polymerization (SPP) method in which a bio-recognition layer of laccase ...

☆ 99 Citado por 3 Artículos relacionados Las 9 versiones Web of Science: 2 >>>

# [HTML] Modulating antioxidant activity and the controlled release capability of laccase mediated catechin grafting of chitosan

S Kim, KI Requejo, J Nakamatsu, KN Gonzales... - Process ..., 2017 - Elsevier Laccase from ascomycete Myceliophthora thermophila was used for the oxidation and grafting of catechin (CA) and chitosan (CS). The enzymatic grafting of CA into CS resulted in the improvement of natural properties of chitosan films. The successful grafting of CA to CS ...

☆ 99 Citado por 6 Artículos relacionados Las 5 versiones Web of Science: 3

# [HTML] An optical catechol biosensor based on a desert truffle tyrosinase extract immobilized into a sol–gel silica layered matrix

S Leboukh, <u>H Gouzi</u>, T Coradin, H Yahia - Journal of Sol-Gel Science and ..., 2018 - Springer An optical biosensor for the determination of catechol, a widely used yet toxic and carcinogenic molecule, is proposed using a crude extract of desert truffle (Terfezia leonis Tul.) as an enzymatic source of tyrosinase. The biosensor is constructed by the ...

☆ 99 Citado por 6 Artículos relacionados Las 8 versiones Web of Science: 3 
≫

# Electrosynthesized Molecularly Imprinted Polymer for Laccase Using the Inactivated Enzyme as the Target

<u>A Yarman</u> - Bulletin of the Korean Chemical Society, 2018 - Wiley Online Library
The first molecularly imprinted polymer (MIP) for the recognition of the copper-enzyme
laccase was successfully prepared by electropolymerizing scopoletin in the presence of
alkaline-inactivated enzyme. Laccase-MIP and the control polymer without laccase ...

☆ 99 Citado por 4 Artículos relacionados Web of Science: 3

# Construction and Evaluation of a Self-Calibrating Multiresponse and Multifunctional Graphene Biosensor

S Beyranvand, MF Gholami, AD Tehrani, <u>JP Rabe</u>... - Langmuir, 2019 - ACS Publications Recently, many studies have been focused on the development of graphene-based biosensors. However, they rely on one type of signal and need to be calibrated by other techniques. In this study, a nonenzymatic graphene-based biosensor has been designed ...

☆ 99 Citado por 3 Las 6 versiones Web of Science: 1

#### A new Laccase based biosensor for tartrazine

S Mazlan, Y Lee, S Hanifah - Sensors, 2017 - mdpi.com

Laccase enzyme, a commonly used enzyme for the construction of biosensors for phenolic compounds was used for the first time to develop a new biosensor for the determination of the azo-dye tartrazine. The electrochemical biosensor was based on the immobilization of ...

☆ 99 Citado por 5 Artículos relacionados Las 9 versiones Web of Science: 3 
≫

### Structure and function of Aspergillus niger laccase McoG

M Ferraroni, AH Westphal, M Borsari... - Biocatalysis, 2017 - degruyter.com
The ascomycete Aspergillus niger produces several multicopper oxidases, but their biocatalytic properties remain largely unknown. Elucidation of the crystal structure of A. niger laccase McoG at 1.7 Å resolution revealed that the C-terminal tail of this glycoprotein blocks ...

☆ 99 Citado por 3 Artículos relacionados Las 10 versiones

# [HTML] Ultrasensitive biosensor based on polyvinylpyrrolidone/chitosan/reduced graphene oxide electrospun nanofibers for 17α–Ethinylestradiol electrochemical ...

A Pavinatto, LA Mercante, MHM Facure, RB Pena... - Applied Surface ..., 2018 - Elsevier Abstract 17α-ethinylestradiol (EE2) is a female synthetic hormone with a high estrogenic action that can potentially disrupt the organisms' endocrine system, leading to severe health problems. Such fact increases the need for technologies capable of detecting this compound ...

☆ 99 Citado por 5 Artículos relacionados Las 4 versiones Web of Science: 5

### Mode of Action, Properties, Production, and Application of Laccase: A Review

N Patel, S Shahane, R Majumdar... - Recent patents on ..., 2019 - ingentaconnect.com Background and Source: Laccase belongs to the blue multi-copper oxidases, which are widely distributed in fungi and higher plants. It is present in Ascomycetes, Deuteromycetes, and Basidiomycetes and found abundantly in white-rot fungi. Applications: Laccase ...

☆ 99 Citado por 7 Artículos relacionados Las 3 versiones

# [HTML] Application of eukaryotic and prokaryotic laccases in biosensor and biofuel cells: recent advances and electrochemical aspects

Y Zhang, Z Lv, J Zhou, F Xin, J Ma, H Wu... - Applied microbiology ..., 2018 - Springer Laccases exhibit a wide range of applications, especially in the electrochemical field, where they are regarded as a potential biotic component. Laccase-based biosensors have immense practical applications in the food, environmental, and medical fields. The ...

☆ 99 Citado por 4 Artículos relacionados Las 6 versiones Web of Science: 3 
≫

# [HTML] High performance electrochemical biosensor for bisphenol a using screen printed electrodes modified with multiwalled carbon nanotubes functionalized with ...

K Kunene, M Sabela, <u>S Kanchi</u>, <u>K Bisetty</u> - Waste and Biomass ..., 2018 - Springer This study reports on a novel electrochemical biosensor for the detection of Bisphenol A (BPA) using a carbon-screen printed electrode modified with multiwalled carbon nanotubes that are functionalized with silver doped zinc oxide nanoparticles (Ag-ZnONPs) on which ...

☆ 99 Citado por 1 Artículos relacionados Las 2 versiones

### Design of Ultrasensitive Protein Biosensor Strips for Selective Detection of Aromatic Contaminants in Environmental Wastewater

<u>S Ray,</u> T Senapati, <u>S Sahu</u>... - Analytical ..., 2018 - ACS Publications

Phenol and its derivatives constitute a class of highly toxic xenobiotics that pollute both river and groundwater. Here, we use a highly stable enzyme-based in vitro biosensing scaffold to develop a chip-based environmental diagnostic for in situ accurate, direct detection of ...

☆ 99 Citado por 2 Artículos relacionados Las 6 versiones Web of Science: 2

# [HTML] Experimental development of a biosensor system to measure the concentration of phenol diluted in water using alternative sources of oxidoreductase ...

G Tuta-Navajas, K Gutierrez-Avila, <u>S Roa-Prada</u>... - Analytica chimica ..., 2018 - Elsevier The presence of phenol in industrial wastewater is an issue of great relevance for petrochemical and energy companies, among others. The high toxicity level of this substance requires polluting industries to continuously monitor the concentration of phenol ...

☼ 99 Citado por 2 Artículos relacionados Las 3 versiones Web of Science: 1

# [PDF] Biocatalysts obtained by enzyme immobilization on functionalized mesoporous silica supports

M Filip, M Mureseanu, G Paun... - REVUE ROUMAINE DE ..., 2016 - revroum.lew.ro Three mesoporous silica (MCM-41, MCM-48 and SBA-15), with different surface properties, pore size and porous structure, were synthesized and used as supports for laccase immobilization. The supports were functionalized with 3-aminopropyl-triethoxysilane ...

\$\frac{1}{12}\$ 99 Citado por 1 Artículos relacionados Web of Science: 1 \$\infty\$

# [HTML] Electrochemical deposition of bio-inspired laccase-polydopamine films for phenolic sensors

LC Almeida, RD Correia, G Squillaci, A Morana... - Electrochimica ..., 2019 - Elsevier Hereby, a precisely controlled one-step electrode modification is presented where the enzyme laccase is immobilized during the potentiostatic deposition of a thin polydopamine film (ePDA) on carbon surfaces. The morphology, wettability, optical and electrochemical ...

☆ 99 Citado por 1 Las 2 versiones Web of Science: 1

# [PDF] The optimization of propagation medium for the increase of laccase production by the white-rot fungus Pleurotus ostreatus

M Hazuchová, <u>D Chmelová</u>... - Nova Biotechnologica et ..., 2017 - degruyter.com The lignocellulolytic enzymes are routinely produced by submerged fermentation using lignocellulosic material, but for more effective production, it would be suitable to precede the production phase on the lignocellulose by propagation phase in the nutrition medium ...

☆ 99 Citado por 1 Artículos relacionados Las 6 versiones

### The Impact of Six Critical Impurities on Recombinant Protein Recovery and Purification from Plant Hosts

C Dixon, LR Wilken, <u>SL Woodard</u>... - Molecular ..., 2018 - Wiley Online Library ATPS aqueous two-phase system, BPTI bovine pancreatic trypsin inhibitor, BvLz bovine lysozyme, EBA expanded bed adsorption, CBH-I cellobiohydrolase I, DARPA Defense Advanced Research Projects Agency, DBC dynamic binding capacity, DSP downstream ...

☆ 99 Citado por 1 Artículos relacionados Las 4 versiones

### Metallic Nanoparticles Obtained via "Green" Synthesis as a Platform for Biosensor Construction

GZ Gayda, OM Demkiv, NY Stasyuk, <u>RY Serkiz</u>... - Applied Sciences, 2019 - mdpi.com Novel nanomaterials, including metallic nanoparticles obtained via green synthesis (gNPs), have a great potential for application in biotechnology, industry and medicine. The special role of gNPs is related to antibacterial agents, fluorescent markers and carriers for drug ...

\$\frac{1}{12}\$ \Therefore \text{9D}\$ Citado por 3 Artículos relacionados Las 6 versiones Web of Science: 2 \$\text{\$\infty}\$

# [HTML] The convergence of forefront technologies in the design of laccase-based biosensors-an update

MC Castrovilli, P Bolognesi, J Chiarinelli... - TrAC Trends in ..., 2019 - Elsevier We present a synopsis of 90 references on the last trends in electrochemical laccase-based biosensors and highlight how forefront technologies have prompted the development of smarter biosensors boosting their applications in agro-environmental and biomedical fields ...

☆ 99 Citado por 1 Las 5 versiones

### Enzyme-Based Electrochemical Biosensors for Microfluidic Platforms to Detect Pharmaceutical Residues in Wastewater

AL Campaña, SL Florez, MJ Noguera, OP Fuentes... - Biosensors, 2019 - mdpi.com
Emerging water pollutants such as pharmaceutical contaminants are suspected to induce adverse effects to human health. These molecules became worrisome due to their increasingly high concentrations in surface waters. Despite this alarming situation, available ...

☆ ワワ Citado por 7 Artículos relacionados Las 8 versiones ≫ Versatile Electrochemical Platform for the Determination of Phenol-like Compounds Based on Laccases from Different Origins

I Borón, S Wirth, <u>F Battaglini</u> - Electroanalysis, 2017 - Wiley Online Library Simple and fast methods for the monitoring of phenol-like compounds are relevant in diverse fields ranging from waste management to neurosciences. Laccases are coppercontaining enzymes, which, depending on their origin, are able to oxidize different phenol ...

☆ 99 Citado por 2 Artículos relacionados Las 3 versiones Web of Science: 2

# [HTML] Conditions and Regulation of Mixed Culture to Promote Shiraia bambusicola and Phoma sp. BZJ6 for Laccase Production

W Du, C Sun, J Wang, W Xie, B Wang, X Liu, Y Zhang... - Scientific reports, 2017 - nature.com Mixing cultures induces the biosynthesis of laccase in mixed cells, produces signal molecules, and regulates the production of mixed-cell metabolites. The fungal strain, which promotes laccase production, has been isolated and screened from the host bamboos of ...

☆ 99 Citado por 3 Artículos relacionados Las 6 versiones Web of Science: 2 
≫

[HTML] Laccase immobilized onto graphene oxide nanosheets and electrodeposited gold-cetyltrimethylammonium bromide complex to fabricate a novel catechol ...

M Nazari, S Kashanian, N Maleki... - Bulletin of Materials ..., 2019 - Springer In this study, a new biosensor is developed with reliable and easy-to-use biodevice properties for catechol determination in real samples. A method is proposed for the fabrication of biosensors to sense catechol based on the adsorption method of laccase ...

☆ 99 Citado por 4 Artículos relacionados Las 4 versiones Web of Science: 1 ≫

### Phase Behavior of Pyrene and Vinyl Polymers with Aromatic Side Groups

GN Kangovi, S Lee - Macromolecules, 2017 - ACS Publications

The phase behavior and thermodynamic properties of mixtures of pyrene and model vinyl polymers with and without aromatic side groups are investigated using differential scanning calorimetry (DSC) measurements. The melting temperature and associated heat of melting ...

☆ 99 Citado por 2 Artículos relacionados Las 6 versiones Web of Science: 1

# [PDF] Разработка электрохимических иммуносенсоров для определения бактерий Escherichia coli и Staphylococcus Aureus с использованием наночастиц ...

TC Свалова - 2016 - elar.urfu.ru

В настоящее время в связи с повсеместным загрязнением объектов окружающей среды, ослаблением производственного контроля качества питьевой воды и продуктов питания, а также снижением иммунитета у населения, имеет место стремительное ...

☆ 99 Citado por 1 Artículos relacionados Las 5 versiones 
≫

#### Напівпровідникові квантові точки як матеріали для лазерів на їх основі

СД Бардашевська, IM Будзуляк, БІ Рачій, АМ Бойчук - 2018 - lib.pnu.edu.ua Квантові точки (КТ), на сьогодні належать до центральних об'єктів досліджень багатьох наукових груп. Вивчення властивостей структур малих розмірів важливе як для подальшого розвитку електроніки, так і для удосконалення вже існуючих ...

☆ 99 Citado por 1 Artículos relacionados Las 3 versiones ⇒

### [PDF] Licor de maíz como medio de cultivo para la producción de lacasa por Phlebia brevispora

GA Prigioni, MD Rodríguez, PD Zapata... - Revista de Ciencia y ..., 2018 - researchgate.net El objetivo de este trabajo fue ensayar diferentes medios de cultivo para la producción de lacasa por el hongo Phlebia brevispora con el fin de lograr una elevada producción utilizando sustratos de bajo costo. Con el medio compuesto por extracto de malta, extracto ...

☆ 99 Artículos relacionados Las 3 versiones >>>

# [HTML] Bioinformatics and enzymatics investigation of *Trametes* laccase for optical biosensing application

Y Wang, ZH Chen - Journal of materials science, 2019 - Springer

Laccase has recently drawn a considerable attention as a promising tool for optical biosensing application, mainly due to its attractive intrinsic optical properties. The discovery of a laccase with great enzyme stability is the principal step for enzyme-based optical ...

☆ 99 Citado por 1 Artículos relacionados Las 5 versiones

# Pleurotus ostreatus: A Biofactory for Lignin-Degrading Enzymes of Diverse Industrial Applications

<u>H El Enshasy</u>, <u>F Agouillal</u>, Z Mat, <u>RA Malek</u>... - Recent Advancement in ..., 2019 - Springer Mushrooms have been used since centuries as food and medicine in many ancient cultures. This is based on their high content of carbohydrates, proteins, minerals, and many bioactive ingredients. Of different types of mushrooms, Pleurotus ostreatus is widely used and ...

☆ 99 Las 4 versiones

### Enzyme-Based Biosensors in Food Industry via Surface Modifications

N Gazel, <u>HB Yildiz</u> - Surface Treatments for Biological, Chemical ..., 2017 - books.google.com Enzyme technology has received great attention with improvements in biological remediation techniques. Enzyme-based biosensors can qualify as a measuring system as they permit the detection of biological events by detecting biochemical changes in biological ...

☆ 99 Citado por 1 Artículos relacionados Las 3 versiones

# [HTML] Novel fabrication of a laccase biosensor to detect phenolic compounds using a carboxylated multiwalled carbon nanotube on the electropolymerized support

SAR Albayati, S. Kashanian, M. Nazari... - Bulletin of Materials ..., 2019 - Springer Biosensors research is one of the fastest growing fields in which tens of thousands of papers have been published over the years; even more, numerous biosensors have been developed for the detection of phenolic compounds, such as catechol which reacts with an ...

### [PDF] LACCASES IN NANO-BIOTECHNOLOGY: RECENT TRENDS AND ADVANCED APPLICATIONS

DM Rudakiya, A Gupte - researchgate.net

Laccases or ρ-diphenol: dioxygen oxidoreductases belong to the multicopper oxidase family, which catalyze the oxidation of phenolic compounds and aromatic amines with a concomitant reduction of the oxygen molecule to water. Due to broad substrate specificity ...

☆ 99 >>

### [HTML] Development of a biosensing platform based on a laccase-hydrophobin chimera

I Sorrentino, <u>P Giardina</u>, <u>A Piscitelli</u> - Applied microbiology and ..., 2019 - Springer A simple and stable immobilization of a laccase from Pleurotus ostreatus was obtained through genetic fusion with a self-assembling and adhesive class I hydrophobin. The chimera protein was expressed in Pichia pastoris and secreted into the culture medium. The ...

☆ 99 Citado por 1 Artículos relacionados Las 5 versiones

# [HTML] A high-throughput screening method for improved R-2-(4-hydroxyphenoxy)propionic acid biosynthesis

HY Zhou, YZ Li, R Jiang, HF Hu, YS Wang... - Bioprocess and ..., 2019 - Springer Abstract R-2-(4-hydroxyphenoxy) propionic acid (R-HPPA) is a key intermediate of the enantiomerically pure phenoxypropionic acid herbicides. R-HPPA could be biosynthesized through selective introduction of a hydroxyl group (–OH) into the substrate R-2 ...

☆ 99 Artículos relacionados Las 3 versiones

# Enzymatic oxidation of lignin: challenges and barriers toward practical applications

<u>JC Chan, M Paice, X Zhang - ChemCatChem, 2019 - Wiley Online Library Lignocellulosic biomass represents perhaps the most abundant renewable resource with a potential to replace fossil-based feedstock for sustainable energy, chemical and materials production. Among the three major lignocellulosic biomass components (ie cellulose ...</u>

☆ 99 Las 2 versiones

# [HTML] Novel method for detecting and quantifying phenol with transient response of glycolytic oscillations of synchronised yeast cells

<u>G Pasternak, MM Hanczyc</u> - Sensing and Bio-Sensing Research, 2019 - Elsevier Yeast displays cyclic changes of autofluorescence of NADH in living, metabolising cells, known as glycolytic oscillations. In this study, we have demonstrated the proof of concept for exploiting this mechanism for a novel oscillation-based biosensor. The metabolism of ...

☆ 99 Artículos relacionados Las 2 versiones

# Application of nanotechnology based-biosensors in analysis of wine compounds and control of wine quality and safety: A critical review

B Hosnedlova, J Sochor, M Baron... - Critical Reviews in ..., 2019 - Taylor & Francis Nanotechnology is one of the most promising future technologies for the food industry. Some of its applications have already been introduced in analytical techniques and food packaging technologies. This review summarizes existing knowledge about the ...

☆ 99 Las 2 versiones

#### A comprehensive perspective of food nanomaterials

<u>IJ Joye</u>, <u>MG Corradini</u>, <u>LM Duizer</u>... - Advances in food ..., 2019 - books.google.com Nanotechnology is a rapidly developing toolbox that provides solutions to numerous challenges in the food industry and meet public demands for healthier and safer food products. The diversity of nanostructures and their vast, tunable functionality drives their ...

☆ 99 Artículos relacionados Las 4 versiones

### Laccase-Mediated Catalyzed Fluorescent Reporter Deposition for Live-Cell Imaging

BT Cisneros, NK Devaraj - ChemBioChem, 2019 - Wiley Online Library
Catalyzed reporter deposition (CARD) is a widely established method for labeling biological samples analyzed using microscopy. Horseradish peroxidase, commonly used in CARD to amplify reporter signals, requires the addition of hydrogen peroxide, which may perturb ...

☆ 99 Las 6 versiones

# [PDF] Enzymatic Sensor Based on Dye Sensitized TiO2 Electrode for Detection of Catechol in Water

A Klumpp, A Adrovic, <u>J Boudaden</u> - Multidisciplinary Digital Publishing ..., 2018 - mdpi.com The aim of our work is to show a proof of principle of a new sensor concept. The sensing material consists of TiO2 nanoparticles combined with selective enzymes and dyes, which are able to detect phenolic molecules in water. A light induced excitation is employed to ...

☆ 99 Artículos relacionados >>>

### Fungal Laccase: A Versatile Enzyme for Biotechnological Applications

<u>S Rodríguez-Couto</u> - ... Advancement in White Biotechnology Through Fungi, 2019 - Springer Fungal laccases are multicopper oxidase enzymes whose versatility has attracted increased interest in the last decades. Despite to be known since the nineteenth century, the interest in laccase enzymes boosted after the discovery that their catalytic action could be extended to ...

☆ 99 Citado por 2 Artículos relacionados Las 3 versiones

# [HTML] Laccase assay based on electrochemistry and fluorescence detection via anthracene sequestered poly (amic acid) films

E Esen, I Yazgan, DO Demirkol, S Timur - Reactive and Functional ..., 2018 - Elsevier Phenols are among the most problematic organic compounds, which manipulates metabolism of living organisms and pose threat to environment. Detection of total phenol at the lowest allowable concentration is critical, so development of sensitive and easy to use ...

☆ 99 Artículos relacionados Las 3 versiones

# Extracellular Fungal Peroxidases and Laccases for Waste Treatment: Recent Improvement

S Natesan - ... in White Biotechnology Through Fungi: Volume 3 ..., 2019 - books.google.com Fungi are widespread eukaryotic microorganism exploit subsidiary living conditions through their unusual extracellular enzymes capable of utilizing variable sources as substrates. Mostly, these extracellular enzymes degrade complex organic substances including ...

☆ 99

# [HTML] Promoting laccase sensing activity for catechol detection using LBL assemblies of chitosan/ionic liquid/phthalocyanine as immobilization surfaces

C Salvo-Comino, C Garcia-Hernandez... - ..., 2020 - Elsevier

The performance of electrochemical laccase-based biosensors can be improved by immobilizing the enzyme on composite Layer-by-Layer (LbL) supports in which materials with complementary functions are combined. LbL films are formed by layers combining an ...

☆ 99 Las 3 versiones

# [HTML] Recent advances in electrochemical biosensors for antioxidant analysis in foodstuff

Y Ye, <u>J Ji</u>, <u>Z Sun</u>, P Shen, X Sun - TrAC Trends in Analytical Chemistry, 2019 - Elsevier Antioxidants play an important role in human health and provide a defense against many diseases. Electrochemical biosensors are considered promising tools for antioxidant research due to their high sensitivity, fast response time, and ease of miniaturization and ...

☆ 99 Las 2 versiones

### Amperometric Biosensors Based on Recombinant Bacterial Laccase CotA for Hydroquinone Determination

Y Zhang, Z Lv, J Zhou, Y Fang, H Wu, F Xin... - ..., 2019 - Wiley Online Library In this study, stable CotA laccase from Bacillus subtilis 168 was adsorbed on electrode modified with a thiol graphene-gold nanoparticle (thGP-AuNPs) nanocomposite film. The novel bacterial laccase biosensor was employed for quantitative detection of hydroquinone ...

☆ 99

### Electroanalytical determination of catechol by a biosensor based on laccase from Aspergillus oryzae immobilized on gold screen-printed electrodes

SJ Caballero, MA Guerrero, LY Vargas... - Journal of Physics ..., 2018 - iopscience.iop.org In the present work, the detection of catechol (CC) was studied by using a biosensor of gold screen-printed electrode functionalized with laccase and cysteine as a linker. Cyclic voltammetry (CVs) studies were performed in order to determine the stability range of the ...

☆ 99 Citado por 1 Artículos relacionados Las 3 versiones

# [PDF] 179-REMOÇÃO DE COMPOSTOS RECALCITRANTES EM REATOR POR LACASE IMOBILIZADA EM NANOCELULOSE BACTERIANA

HCO dos Reis, KC de Castro, <u>GM Maciel</u>, CR Xavier... - tratamentodeagua.com.br Este trabalho tem o objetivo de imobilizar lacase de Myceliophthora thermophila para o póstratamento de efluente de papel e celulose tratado anteriormente por processo biológico com enfoque na remoção de compostos recalcitrantes. Para a imobilização, o suporte ...

☆ 99 >>

### [PDF] ELECTROSPRAY IONISATION TECHNIQUE IN BIOSENSOR DESIGN: LACCASE AS CASE STUDY

MC Castrovilli, J Chiarinelli, <u>P Bolognesi</u>, E Tempesta... - barianalitica2019.it Immobilization of enzymes on the surface of transduction systems represents a compulsory and critical phase in the development of biosensors. Indeed, by influencing orientation, loading, and mobility of enzymes by means of tailored immobilisation procedures, it is ...

☆ 99 ≫

# [PDF] Enzyme-Based Biosensors in Food Industry via Surface Modifications (Chapter 7)

N Gazel, HB Yıldız - 2017 - acikerisim.karatay.edu.tr

Enzyme technology has received great attention with improvements in biological remediation techniques. Enzyme-based biosensors can qualify as a measuring system as they permit the detection of biological events by detecting biochemical changes in biological ...

☆ 99 >>>

# [HTML] Beyond natural laccases: extension of their potential applications by protein engineering

I Stanzione, <u>C Pezzella</u>, <u>P Giardina</u>, <u>G Sannia</u>... - Applied Microbiology ..., 2019 - Springer Laccases bring exciting promises into the green industries, and the development of enzymes with improved properties is further raising their exploitation potential. Molecular engineering methods to build highly efficient catalysts both through rational and random ...

# [HTML] A novel non-enzymatic zinc oxide thin film based electrochemical recyclable strip with device interface for quantitative detection of catechol in water

<u>A Maikap</u>, <u>K Mukherjee</u>, <u>B Mondal</u>, <u>N Mandal</u>... - Biosensors and ..., 2019 - Elsevier Catechol, one of the major effluents released by various chemical and metal processing industries, causes severe pollution of groundwater. Monitoring of catechol in water using cost-effective, handheld sensor is demanding for the safety of the environment. In this work ...

☆ 99 Citado por 2 Artículos relacionados Las 6 versiones Web of Science: 1

# Fabrication of electrochemical biosensors for the determination of phenolic compounds by experimental and computational methods

KW Kunene - 2018 - openscholar.dut.ac.za

The polyphenolic compounds of interest, bisphenol A (BPA) and its analogue bisphenol S (BPS) used in the plastic industry to manufacture baby bottles and beverage containers, were used in this study. They are generally used in the manufacture of polycarbonates ...

☆ 99 Artículos relacionados Las 2 versiones ⇒

# [HTML] Evaluation of Different Storage Processes of Passion Fruit (Passiflora edulis Sims.) using a New Dual Biosensor Platform based on a Conducting Polymer

G Calitri, P Bollella, L Ciogli, C Tortolini, F Mazzei... - Microchemical ..., 2019 - Elsevier In this work, we present a new electrochemical biosensor array for the evaluation of pH changes and total polyphenols content based on a conductive polymer used to immobilize anthraquinone-2-carboxylic acid (ANTQ), on the first electrode, and Trametes versicolor ...

☆ 99 Las 2 versiones

# Développement de biocapteurs pour la détermination de substances biologiquement actives

I Kucherenko - 2016 - tel.archives-ouvertes.fr

Les biocapteurs sont des moyens d'analyse en plein essor à la fois rapides, sélectifs et peu coûteux applicables à des domaines extrêmement variés (environnement, santé, agroalimentaire,...). Dans ce type d'outil, un élément sensible de nature biologique ...

☆ 99 Artículos relacionados Las 5 versiones ॐ [нтмь] A laccase based biosensor on AuNPs-MoS2 modified glassy carbon electrode for catechol detection

Y Zhang, X Li, D Li, Q Wei - Colloids and Surfaces B: Biointerfaces, 2020 - Elsevier As a kind of two-dimensional layered nanomaterial, MoS 2 nanosheets have been widely used in the field of biosensors. In this work, a novel laccase based biosensor for catechol detection was fabricated based on a nanocomposite of MoS 2 nanosheets and gold ...

☆ 99 Las 2 versiones

# Desenvolvimento de biossensor contendo lacase, haloisita e surfactante para determinação de dopamina

NO Decarli - 2015 - repositorio.ufsc.br

A lacase é uma enzima da classe das oxirredutases e atua na catalise dos processos de oxidação de compostos fenólicos. Quando utilizada em biossensores utiliza-se a técnica de imobilização enzimática para proporcionar uma adequada estabilidade e maior tempo de ...

☆ 99 Artículos relacionados Las 2 versiones >>>

# Extracellular Fungal Peroxidases and Laccases for Waste Treatment: Recent Improvement

S Shanmugapriya, G Manivannan... - Recent Advancement in ..., 2019 - Springer Ecological monitoring and degradation of phenolics and lignin-based substances from the sludge released by the food, leather, and pharmaceutical industries have become more important in recent years. The use of physical and chemical methods produced excess ...

☆ 99 Las 3 versiones

### Biossensor de glicose baseado na imobilização da glicose oxidase em nanofibras de óxido de zinco

VHB Oliveira - 2019 - riut.utfpr.edu.br

Diabetes is a chronic disease that causes one death every 10 seconds throughout the world. In view of this scenario, zinc oxide (ZnO) nanofibers were synthesized by electrospinning technique followed by thermal treatment for use as glucose biosensors for demonstrating ...

☆ 99 Las 3 versiones >>>

[HTML] Microporous carbon fibers as electroconductive immobilization matrixes: Effect of their structure on operational parameters of laccase-based amperometric ...

<u>T Kavetskyy</u>, O Smutok, O Demkiv, I Matko... - Materials Science and ..., 2019 - Elsevier In this study, we describe the fabrication of sensitive biosensor for the detection of phenolic substrates using laccase immobilized onto two types of microporous carbon fibers (CFs). The main characteristics of microporous CFs used for preparation of biosensors are given ...

☆ 99 Las 2 versiones

#### Síntese verde de corantes azo utilizando lacases

SRT Baptista - 2018 - repositorio.ipl.pt

Este trabalho teve como objetivo avaliar a capacidade da lacase de origem bacteriana de Bacillus subtilis designada CotA-lacase em promover a formação de corantes azo por oxidação de diferentes aminas aromáticas, selecionadas com base na sua estrutura ...

☆ 99 Artículos relacionados ⇒>>

### Herbicide-detoxifying enzymes and uses thereof

B Thompson - US Patent 10,428,347, 2019 - Google Patents
SJSYJHLLBBSLIH-SDNWHVSQSA-N (E)-3-(2-methoxyphenyl)-2-phenylprop-2-enoic acid
Chemical compound data: image/svg+xml; base64, PD94bWwgdmVyc2lvbj0nMS4wJyBlbmNvZ...
/+++++ CjxwYXRoIGNsYXNzPSdib25kLTEzJyBkP... Cjx0ZXh0IHg9JzUyLjUxNDYnIHk9JzEyOS ...

☆ 99 Las 2 versiones >>>

# Applications of Microbial Laccases: Patent Review of the Past Decade (2009–2019)

<u>AZerva</u>, S Simić, <u>E Topakas</u>, <u>J Nikodinovic-Runic</u> - Catalysts, 2019 - mdpi.com

There is a high number of well characterized, commercially available laccases with different redox potentials and low substrate specificity, which in turn makes them attractive for a vast array of biotechnological applications. Laccases operate as batteries, storing electrons from ...

☆ 99 Las 2 versiones ⇒⇒

### Progress in Electrochemical (Bio) Sensors for Monitoring Wine Production

<u>A Vasilescu</u>, <u>P Fanjul-Bolado</u>, AM Titoiu, R Porumb... - Chemosensors, 2019 - mdpi.com Electrochemical sensors and biosensors have been proposed as fast and cost effective analytical tools, meeting the robustness and performance requirements for industrial process monitoring. In wine production, electrochemical biosensors have proven useful for ...

☆ 99 ≫

### [PDF] Amperometry☆

AAmine, H Mohammadi - 2018 - researchgate.net

The present edition of this chapter discusses amperometry as an analytical technique, and critically examines a range of applications using different amperometric transducers and updates the previous edition published by Adeloju. 3 Amperometry is an electroanalytical ...

☆ 99 >>>

#### Laccases as versatile enzymes: from industrial uses to novel applications

AD Moreno, D Ibarra, ME Eugenio... - Journal of Chemical ..., 2019 - Wiley Online Library The application of enzymes offers an enormous potential in the improvement of existing industrial procedures and in the establishment of new processes for obtaining high-added value products. Enzymes provide cleaner and more efficient industrial processes and ...

☆ 99

# Extraction et prétraitement de fibres naturelles de lin par une approche enzymatique combinée au CO2 supercritique

HM Nlandu - 2019 - corpus.ulaval.ca

La présente étude a eu pour objectif principalde mettre en place un procédé de prétraitement de la fibre naturelle de lin, de fabrication de nanofibres lignocellulosiques et leur modification de surface subséquente, environnementalement irréprochable sur toute la ...

☆ 99 Artículos relacionados >>>

# [РРБ] Электрохимические сенсорные системы на основе органических и неорганических наноразмерных модификаторов для бесферментного определения ...

АН Козицина - 2018 - elar.urfu.ru

Эффективность первичной медико-санитарной помощи, включающей профилактику, лечение различных заболеваний, таких как диабет, сердечнососудистые, инфекционные и онкологические заболевания, в значительной степени зависит от ...

☆ 99 Artículos relacionados Las 4 versiones ⇒>>

# [PDF] Genomische, enzymatische und biotechnologische Charakterisierung einer Pilzsammlung aus Vietnam

SC Brandt - 2018 - ediss.sub.uni-hamburg.de

4 ist die Suche nach effektiveren und wirkungsstärkeren Fungiziden ein großes Forschungsfeld und von großem bioökonomischen Interesse. Neben den phytopathogenen Pilzen ist die Suche nach neuen Wirkstoffen gegen humanpathogene Pilze ein großer ...

☆ 99 Artículos relacionados Las 2 versiones ⇒

#### **Artículo 2: 29 Citas**

[1987] Dieck-Assad G., Masada, G. Y., Flake, R.H. "Optimal Set-Point Scheduling In A Boiler-Turbine System," publicado en: IEEE Transactions On Energy Conversion Vol. EC-2, Numero 3, páginas 388 a 395, Septiembre de 1987.

# Multiobjective optimal power plant operation through coordinate control with pressure set point scheduling

R Garduno-Ramirez, <u>KY Lee</u> - IEEE Transactions on energy ..., 2001 - ieeexplore.ieee.org Coordinated control schemes, at fossil fuel power plants, drive units as a whole through a variable pressure operating policy. Ordinarily, the pressure control loop set-point is obtained from the unit load demand through a fixed nonlinear mapping that does not allow for process ...

ជា ១១ Citado por 115 Artículos relacionados Las 8 versiones Web of Science: 48 An autonomous control system for boiler-turbine units

A Ben-Abdennour, <u>KY Lee</u> - IEEE transactions on energy ..., 1996 - ieeexplore.ieee.org
Achieving a more autonomous power plant operation is an important part of power plant
control. To be autonomous, a control system needs to provide adequate control actions in
the presence of significant uncertainties and/or disturbances, such as actuator or component ...

☆ 99 Citado por 74 Artículos relacionados Las 3 versiones Web of Science: 28

### Neuro-fuzzy control of a steam boiler-turbine unit

FA Alturki, AB Abdennour - Proceedings of the 1999 IEEE ..., 1999 - ieeexplore.ieee.org Conceptually, fuzzy logic possesses the quality of simplicity. However, its early applications relied on trial and error in selecting either the fuzzy membership functions or the fuzzy rules. This made it depend rather too heavily on expert knowledge which may not always be ...

☆ 99 Citado por 56 Artículos relacionados

# Modeling and optimization of a combined cooling, heating and power plant system

V Chandan, AT Do, B Jin, F Jabbari... - 2012 American ..., 2012 - ieeexplore.ieee.org
In this paper, we develop a modeling and optimization procedure for minimizing the
operating costs of a combined cooling, heating, and power (CCHP) plant at the University of
California, Irvine, which uses co-generation and Thermal Energy Storage (TES) capabilities ...

☆ 99 Citado por 47 Artículos relacionados Las 8 versiones

#### An overview of modelling and simulation of thermal power plant

C Liu, <u>H Wang</u>, J Ding, C Zhen - The 2011 International ..., 2011 - ieeexplore.ieee.org
Thermal power plants constitute the largest proportion of installed capability in global power
generation system, which consumes large quantities of coal. Therefore achieving optimal
operation of thermal power units, improving its efficiency and reducing the coal consumption ...

☆ ワワ Citado por 23 Artículos relacionados Las 4 versiones

# [HTML] Design and simplification of adaptive neuro-fuzzy inference controllers for power plants

FA Alturki, A Abdennour - International Journal of Electrical Power & Energy ..., 1999 - Elsevier This article presents the design of an Adaptive Neuro-Fuzzy Inference Controller (ANFIC) for a 160 MW power plant. The space of operating conditions of the plant is partitioned into five regions. For each of the regions, an optimal controller is designed to meet a set of design ...

☆ 99 Citado por 20 Artículos relacionados Las 3 versiones Web of Science: 11

### Overall control of fossil-fuel power plants

R Garduno-Ramirez, <u>KY Lee</u> - 2001 IEEE Power Engineering ..., 2001 - ieeexplore.ieee.org Under the trend toward market deregulation, effective plant-wide automation systems for operation and control of power units are of paramount importance for the survival and profitable operation of any electric utility. This paper identifies the overall unit control scheme ...

☆ 99 Citado por 18 Artículos relacionados

### Overall intelligent hybrid control system for a fossil-fuel power unit

R Garduno-Ramirez - 2000 - etda.libraries.psu.edu

The current global problem scenario faced by power plants is characterized by a changing multiplicity of everyday-tighter operation requirements (eg, life extension, pollution regulation, cyclic operation, heat rate improvement, etc.). In this situation, an overall ...

☆ 99 Citado por 17 Artículos relacionados Las 9 versiones ⇒

# On the practice of artificial intelligence based predictive control scheme: a case study

AH Mazinan, M Sheikhan - Applied intelligence, 2012 - Springer

This paper describes a novel artificial intelligence based predictive control scheme for the purpose of dealing with so many complicated systems. In the control scheme proposed here, the system has to be first represented through a multi-Takagi-Sugeno-Kang (TSK) fuzzy ...

☆ 99 Citado por 14 Artículos relacionados Las 6 versiones Web of Science: 14 >>>

### A multiobjective-optimal neuro-fuzzy extension to power plant co-ordinated control

R Garduno-Ramirez, <u>KY Lee</u> - Transactions of the Institute of ..., 2002 - journals.sagepub.com This paper presents an overall control scheme for wide-range multiobjective-optimal operation of a fossil-fuel power unit. The scheme provides the means to accommodate operating scenarios characterized by multiple operating requirements, and to attain optimal ...

☆ 99 Citado por 14 Artículos relacionados Las 6 versiones Web of Science: 1

#### 热力过程控制系统多目标优化及其在机炉协调控制中的应用研究

郭颖, 吕剑虹, 张铁军 - 热力发电, 2008 - cqvip.com

目前采用的优化控制方法主要是基于优化单一的控制品质, 对于整个控制系统而言, 仅针对单一控制指标的优化是不全面的. 为此, 提出了一种控制系统的多目标优化设计方法: 从控制系统整体优化角度出发确定控制系统的多个优化目标, 并采用粒群优化理论对控制系统的 ...

☆ 99 Citado por 9 Artículos relacionados Las 2 versiones

### Modelling and predictive control of a drum-type boiler

B Molloy - 1997 - doras.dcu.ie

Boilers generate steam continuously and on a large scale. Controlling the boiler process is extremely difficult-it is a highly nonlinear process, its dynamics vary with load and it is strongly multivariable. It is also inherently unstable due to the integrator effect of the drum. In ...

☆ 99 Citado por 9 Artículos relacionados ⇒>>

### [CITAS] Physical Model-based Co-ordinated Control of Thermal Power Plants

<u>G Prasad</u> - Thermal Power Plant Simulation and Control, 2003 - pure.ulster.ac.uk
Prasad, G 2003, Physical Model-based Co-ordinated Control of Thermal Power Plants. in D Flynn
(ed.), Thermal Power Plant Simulation and Control. pp. 365-394 ... Physical Model-based
Co-ordinated Control of Thermal Power Plants. / Prasad, G ... Thermal Power Plant Simulation ...

☆ 99 Citado por 5 Artículos relacionados ⇒

### Modeling, identification, and control of coal-fired thermal power plants

S Chandrasekharan, RC Panda... - Reviews in Chemical ..., 2014 - degruyter.com
The major portion of total captive power comes from thermal power from coal, oil, natural
gas, etc., of which coal-fired units contribute 41% of global electricity. The overall efficiency
of such power plants is 33% due to variations in power plant design, use of wide fuel ranges ...

☆ 99 Citado por 5 Artículos relacionados Las 4 versiones Web of Science: 4

### Risk assessment of micro energy grid protection layers

H Gabbar, Y Koraz - Energies, 2017 - mdpi.com

Micro energy grids (MEGs) are used extensively to meet the combined electricity, heating, and cooling energy demands for all types of customers. This paper develops a hazard matrix for a MEG and utilizes two advanced risk modeling approaches (fault tree and layer of ...

☆ 99 Citado por 5 Artículos relacionados Las 11 versiones Web of Science: 2 
≫

# An intelligent multi-multivariable Dynamic Matrix Control scheme for a 160 MW drum-type Boiler-Turbine system

AH Mazinan - Journal of Electrical Engineering and Technology, 2012 - koreascience.or.kr A 160 MW drum-type boiler-turbine system is developed in the present research through a multi-multivariable dynamic matrix control (DMC) scheme and a multi-multivariable model approach. A novel intelligence-based decision mechanism (IBDM) is realized to support ...

☆ 99 Citado por 3 Artículos relacionados Las 6 versiones Web of Science: 2 >>>

# Economic optimal control with environmental constraints for combined cycle power plants

<u>D Saez</u>, A Cipriano - IECON'98. Proceedings of the 24th ..., 1998 - ieeexplore.ieee.org A simulator of combined cycle power plants based on phenomenological equations, developed in Matlab-SIMULINK, is presented. Then, a new nonlinear control strategy based on minimising the operational costs with environmental and operational constraints of the ...

☆ 99 Citado por 4 Artículos relacionados

### A multi-objective optimizing control method for boiler-turbine coordinated control

Y Guo, J Lu, <u>T Zhang</u>, K Wu - 2007 International Conference on ..., 2007 - ieeexplore.ieee.org The traditional optimizing control method is mainly based on the single control objective optimization, which is not enough for the overall coordinated control system of power plant. So this paper proposes a multi-objective optimizing control method, including two ...

☆ 99 Citado por 4 Artículos relacionados Las 2 versiones

### Modeling and simulation of furnace pulse firing improvements using fuzzy control

A Cadena-Ramírez, A Favela-Contreras... - ..., 2017 - journals.sagepub.com
Pulse firing offers significant process and productivity benefits, such as improved
temperature uniformity and high heat transfer rates to the product load through maximum
system turndown and utilizes the system's burners at their most efficient firing rates ...

☆ 99 Citado por 6 Artículos relacionados Las 6 versiones

#### Plant optimization and performance monitoring

MA JOHNSON, MR KATEBI - Recent Trends In Optimization Theory ..., 1995 - World Scientific World-wide competitive trends require large-scale industrial processes to be fully optimised across all levels of the process hierarchy. This paper reports a methodological framework for the problems to be solved. Industrial examples are used to motivate the use of generic ...

☆ ワワ Citado por 1 Artículos relacionados Las 3 versiones

### Power unit wide-range load tracking through set-point optimization and feedforward/feedback control

R Garduno-Ramirez, <u>KY Lee</u> - 1999 IEEE Power Engineering ..., 1999 - ieeexplore.ieee.org Current overall unit control strategies for fossil fuel power units consist of decentralized multiloop configurations based on conventional fixed-gain PID control algorithms. These strategies are challenged during wide-range load-following operation by the nonlinear plant ...

☆ 99 Citado por 1 Artículos relacionados

#### A fuzzy set-point state feedback controller for a temperature process

A Favela-Contreras... - ... International Conference of ..., 1999 - ieeexplore.ieee.org
This paper describes a prototype fuzzy function generator system that improves the
performance of a state feedback controller for a temperature process. The system modifies
the reference value (set-point) which modifies the response of the system when external ...

☆ 99 Artículos relacionados

#### Power Generation Plant Control

AW Ordys, AW Pike, MA Johnson, RM Katebi... - ... and Simulation of ..., 1994 - Springer The recent advances in information technology, increased market competition, the tightening of environmental regulations, the demand for low cost operation and energy efficiency have all influenced the need for new control design philosophies for complex industrial systems ...

☆ 99 Artículos relacionados

#### A complete solution to intelligence based multivariable predictive control scheme

AH Mazinan, MF Kazemi... - 2011 IEEE GCC ..., 2011 - ieeexplore.ieee.org

A 160 MW drum-type boiler-turbine system has been selected in this paper for the purpose of dealing with through a new intelligence based multivariable predictive control (IBMPC) scheme. In the control strategy presented here, a multi-IBMPC scheme, which is developed ...

☆ 99 Artículos relacionados Las 2 versiones

### [PDF] Drum type fossil fueled power plant control based on fuzzy inverse MIMO model

A Ghaffaria, MN Bahramib, H Parsab - Proceedings of the 7th WSEAS ..., 2006 - Citeseer In this paper, a new fuzzy controller is proposed based on inverse model of boiler-turbine system. Gain scheduling scheme is used to keep feedback rule as close as possible to optimal condition while generating plant Input/Output data. Interaction between state ...

☆ 99 Artículos relacionados Las 6 versiones ⇒⇒

#### Economic optimal control for a combined cycle power plant boiler

<u>D Sáez</u>, A Cipriano - 1999 European Control Conference (ECC) - ieeexplore.ieee.org
A boiler simulator of a combined cycle power plant based on phenomenological equations,
developed in Matlab-SIMULINK, is presented. Then, a new economical optimal control
strategy based on minimising the operational costs of a boiler is designed and implemented ...

☆ 99 Artículos relacionados Las 2 versiones

#### [PDF] Transactions of the Institute of

R Garduno-Ramirez, <u>KY Lee</u> - Transactions of the ..., 2002 - pdfs.semanticscholar.org
This paper presents an overall control scheme for wide-range multiobjective-optimal
operation of a fossil-fuel power unit. The scheme provides the means to accommodate
operating scenarios characterized by multiple operating requirements, and to attain optimal ...

☆ 99 Artículos relacionados Las 6 versiones ⇒

#### Modelling, simulation and control of large power plants

R Katebi - IFAC Proceedings Volumes, 2007 - Elsevier

The traditional approach to modelling complex power plants often leads to cumbersome, expensive and inefficient models. This paper is concerned with the development of a systematic, hierarchical and modular modelling procedure and advanced control system ...

☆ 99 Citado por 1 Artículos relacionados

#### **Articulo 3: 19 Citas**

[2012] Losoya-Leal A.D., Camacho-León S., Dieck-Assad G., Avila-Ortega A., Martínez-Chapa S.O., "State of the art and New Perspectives in non-invasive glucose sensors", Revista Mexicana de Ingeniería Biomédica RMIB, ISSN: 0188-9532, Volúmen XXXIII, Número 1, pp 41-52, Junio 2012

#### Trends in nanomaterial-based non-invasive diabetes sensing technologies

P Makaram, D Owens, J Aceros - Diagnostics, 2014 - mdpi.com

Blood glucose monitoring is considered the gold standard for diabetes diagnostics and self-monitoring. However, the underlying process is invasive and highly uncomfortable for patients. Furthermore, the process must be completed several times a day to successfully ...

#### Towards non-invasive extraction and determination of blood glucose levels

C Todd, P Salvetti, K Naylor, M Albatat - Bioengineering, 2017 - mdpi.com

Diabetes is a condition where the body is incapable of proper utilization of glucose and one that, if not properly managed, can lead to critical illness. Glucose monitoring and decision support is vital in avoiding potential adverse health effects. Current methods mainly involve ...

☆ 99 Citado por 12 Artículos relacionados Las 9 versiones ⇒

### Simulating multisensor noninvasive blood glucose monitoring systems

AAsaduzzaman, S Samadarsinee... - SoutheastCon ..., 2016 - ieeexplore.ieee.org

Diabetes and related complications are responsible for early death-one person in every 7 seconds. Long term and short term complications due to diabetes can be reduced through proper diet, physical exercise, and medication. In order to assess the pattern of glucose ...

☆ 99 Citado por 5 Artículos relacionados Las 2 versiones

### Noninvasive evaluation of glucose concentration in the human blood based on electrocardiograms

AA Pulavskyi, <u>SS Krivenko</u>... - 2015 IEEE 35th ..., 2015 - ieeexplore.ieee.org
A method for detection of twofold or greater change in the concentration of glucose in the blood of patients suffering from type 2 diabetes by means of the analysis of their electrocardiograms is proposed. The method is based on a tenth order linear prediction ...

☆ 99 Citado por 5 Artículos relacionados Las 2 versiones

### Simulation Study of ZnO based ultrasonic micro-electronics mechanical systems model for blood glucose level measurement

<u>HP Tripathy</u>, <u>P Pattanaik</u>, <u>SK Pradhan</u>... - Advanced Science ..., 2016 - ingentaconnect.com Proper management of blood glucose levels is essential to prevent complications in diabetes. This paper aims to discuss the miniaturized size of ultrasonic transmitter. The method of using lead free piezo-electric material like zinc oxide (ZnO) is designed and ...

☆ 99 Citado por 4 Artículos relacionados

# A simulation approach to study the effect of ultrasonic MEMS based receiver for blood glucose sensing applications

<u>HP Tripathy</u>, <u>P Pattanaik</u>, <u>SK Kamilla</u>... - IEEE sensors ..., 2017 - ieeexplore.ieee.org The accurate measurement of glucose level in the blood is an important task to prevent the progression of chronic disease like diabetes mellitus. This article proposes a simulation based approach to evaluate the ZnO-based ultrasonic piezoelectric microelectronics ...

☆ 99 Citado por 4 Artículos relacionados

# Investigation of opportunities of the optical non-invasive diagnostics method for the blood sugar control

EA Lastovskaia, EV Gorbunova... - Photonic ..., 2015 - spiedigitallibrary.org

The relevance of noninvasive method for determining the blood sugar is caused by necessity of regular monitoring of glucose levels in diabetic patients blood. Traditional invasive method is painful, because it requires a finger pricking. Despite the active studies in ...

☆ 99 Citado por 2 Artículos relacionados Las 2 versiones

### [PDF] Alternate glucometer bio-sensor model based on ultrasonic MEMS transceivers

P Pattnaik, SK Kamilla, DP Das - measurements, 2013 - comsol.co.in

To prevent further complications in diabetes, proper management of blood glucose levels is essential. By using ultrasonic transceivers (both transmit and receive) the glucose level of human blood can be determined. Ultrasonic sensors works on the principle of generating ...

\$\frac{1}{12}\$ \square \text{TD}\$ Citado por 2 Artículos relacionados Las 39 versiones \$\text{\$\infty}\$\$

### [LIBRO] Hierarchical micro/nano structures for painless glucose sensor and selfcleaning surface application

Y Yoon - 2013 - search.proquest.com

With the advent of the nanoscience and nanotechnology, phenomenal expansion of the research horizon has been achieved in many disciplines. This newly emerged nanoscience and nanotechnology study is often combined with mature microelectromechanical systems ...

☆ 99 Citado por 2 Artículos relacionados ⇒>>

#### Multisensor noninvasive blood glucose monitoring system

S Samadarsinee - 2015 - soar.wichita.edu

Diabetes and related complications are responsible for early death-one person in every 7 seconds. Long term and short term complications due to diabetes can be reduced through proper diet, physical exercise, and medication. In order to assess the pattern of glucose ...

☆ 99 Citado por 2 Artículos relacionados ⇒

### Impedance Spectroscopy as a Method for the Measurement of Calibrated Glucose Solutions with Concentration Occurring in Human Blood

I Osiecka, T Pałko, W Łukasik, <u>D Pijanowska</u>... - Recent Global Research ..., 2017 - Springer This report presents the variation of impedance values in glucose-sodium chloride (0.9%) and glucose-bovine plasma solutions at different concentrations, ranging from 50 to 400 mg/dl, with use of sensor model based on a tetrapolar current method. It is worth noticing ...

☆ 99 Citado por 1 Artículos relacionados Las 3 versiones

# State-of-the-art and User Requirements of Blood Glucose Measurement: Devices, Software and Services.

N Wallenius - 2014 - aaltodoc.aalto.fi

Diabetes is an increasingly common illness that often requires regular measurement of Blood Glucose (BG). This Thesis discusses the state-of-the-art and user requirements of BG measurement, focusing on: BG meters, diabetes management software, and diabetes ...

# [HTML] Study of a noninvasive blood glucose detection model using the near-infrared light based on SA-NARX

J Cheng, Z Ji, M Li, J Dai - Biomedical Signal Processing and Control, 2020 - Elsevier Accumulated attempts have been made to develop models for near-infrared noninvasive measurement of human blood glucose concentration. Most of them focus on the relationship between near-infrared absorbance and blood glucose concentration, but do not consider the ...

☆ 99 Las 2 versiones

[сітаs] A Novel Non-Invasive Technique for Blood Glucose Monitoring using Electrical Bioimpedance Analysis (Feasibility Study and Hardware Design) P Ray - 2014

☆ 99 Artículos relacionados

### NON-INVASIVE BLOOD GLUCOSE ANALYSIS BASED ON GALVANIC SKIN RESPONSE FOR DIABETIC PATIENTS

U Snekhalatha, T Rajalakshmi... - Biomedical ..., 2018 - World Scientific

Diabetes is a chronic disease due to the lack of production of hormone insulin by the beta cells in the islets of Langerhans. Many diabetic patients often draw a small amount of blood to measure the glucose level every day. This vital information is needed to control their daily ...

☆ 99 Citado por 1 Artículos relacionados

# [PDF] B ioinformatics and D iabetes B ioinformatics and D iabetes B ioinformatics and D iabetes

A Nawaz, P Øhlckers, S Sælid, M Jacobsen, MN Akram - oap-journals.org

Diabetes is a metabolic disorder that results in human body due to insulin deficiency, insulin resistance or both. In the management of diabetes, glucose monitoring technology has been used for the last three decades. The aim of this review article is to describe concise and ...

☆ 99 Artículos relacionados Las 5 versiones ⇒

# [HTML] Estimation of blood glucose by non-invasive method using photoplethysmography

S Habbu, M Dale, R Ghongade - Sādhanā, 2019 - Springer

This paper presents a system which estimates blood glucose level (BGL) by non-invasive method using Photoplethysmography (PPG). Previous studies have shown better estimation of blood glucose level using an optical sensor. An optical sensor based data acquisition ...

☆ 99 Citado por 2 Artículos relacionados Las 4 versiones >>>

# [PDF] Blood glucose monitoring techniques: recent advances, challenges and future perspectives

TW Gamessa, <u>D Suman</u>... - International Journal of ..., 2018 - d.researchbib.com Blood glucose monitor is a fundamental tool to maintain and control blood glucose levels for routine management of diabetes and complications associated with it. There have been continuous scientific advances and achievements in biosensors for the development of ...

☆ 99 Citado por 2 Artículos relacionados Las 4 versiones 
≫

#### [PDF] Glucose Monitoring Technologies and Challenges: An Update

D Bisht, V Yadav, P Saha... - The International Journal ..., 2019 - conscientiabeam.com Diabetes is a Greek-derived term, which means—to pass throughll and Mellitus means—sweetll, collectively recognized as Diabetes Mellitus, the silent epidemic. Diabetes Mellitus is an ancient disease, proclaimed by Egyptians and Indians approximately 3000 ...

☆ 99 Las 3 versiones >>>

### Artículo 4: 13 Citas (12 Mostradas)

[1990] Dieck-Assad, G. "Development Of A State Space Boiler Model For Process Optimization," SIMULATION, Vol. 55, Number 4, pages 201-213, October 1990.

# Effect of loop configuration on steam drum level control for a multiple drum interconnected loops pressure tube type boiling water reactor

AJ Gaikwad, PK Vijayan, K lyer... - ... on Nuclear Science, 2009 - ieeexplore.ieee.org
For AHWR (Advanced Heavy Water Reactor), a pressure tube type Boiling Water Reactor
(BWR) with parallel inter-connected loops, the Steam Drum (SD) level control is closely
related to Main Heat Transport (MHT) coolant inventory and sustained heat removal through ...

☆ 99 Citado por 7 Artículos relacionados Las 4 versiones Web of Science: 5

### Modeling and simulation of furnace pulse firing improvements using fuzzy control

A Cadena-Ramírez, A Favela-Contreras... - ..., 2017 - journals.sagepub.com

Pulse firing offers significant process and productivity benefits, such as improved temperature uniformity and high heat transfer rates to the product load through maximum system turndown and utilizes the system's burners at their most efficient firing rates ...

☆ 99 Citado por 6 Artículos relacionados Las 6 versiones

### [HTML] Systematic building-testing of dynamic models for training simulators

L Barrero, R Canales, D Juárez-Romero... - Computers & chemical ..., 2003 - Elsevier A scheme to build and to test models of process units for power plant simulators is presented. The stages of this scheme consist of:(1) the mathematical model of each piece of equipment;(2) a set of standard procedures for every model: to set parameters, to evaluate ...

☆ 99 Citado por 2 Artículos relacionados Las 4 versiones Web of Science: 1

### [PDF] 大型锅炉长期动态特性研究中的烟气计算模型

李运泽, 杨献勇-热能动力工程, 2003 - researchgate.net

为了简便,准确,快速地解决大容量锅炉汽轮机组长期动态特性研究中的烟气放热计算问题,本文针对现有仿真用烟气放热模型的主要不足,由大容量锅炉热力计算的杜卜斯基-卜劳赫公式推导出新的仿真与动态特性分析用炉膛烟气放热模型;并通过简要的分析...

#### [PDF] Dynamic modelling and simulation of an industrial boiler system

WA Chiu - 1997 - era.library.ualberta.ca

The main objective of this thesis is to develop a first-principles dynamic nodel for an industrial boiler system. The purpose of the model was to provide-a means of investigating the dynamic behaviour, in particular the stability, of an industrial steam and power ...

☆ 99 Citado por 1 Artículos relacionados Las 2 versiones

# [PDF] DISEÑO DE UN SISTEMA DE CONTROL DE NIVEL DE AGUA PARA EL DOMO DE UNA CALDERA TIPO

BW ACUATUBULAR, AEVALV AREZ - repositorio.itesm.mx

En este trabajo se busca desarrollar un sistema de control que permita llevar el manejo del comportamiento del nivel de agua en el domo de una caldera. Este se desarrolló a partir de la búsqueda de un modelo matemático que describiera el comportamiento del proceso a ...

☆ 99 Artículos relacionados >>>

### [PDF] On Using Fuzzy Logic Controller in Determination and Performance of Industrial Boiler

MN EZE, FU ILO, OC UGWU - 2015 - pdfs.semanticscholar.org

This paper focus on the performance of an industrial boiler using fuzzy logic controller. The parameter of the various industrial boilers is subjected to the change due to change in the environment or atmosphere. This parameter may be categorized as steam, pressure and ...

☆ 99 Artículos relacionados >>>

### X-Windows simulation of steam power plants based on physics principles

JM Giron-Sierra, JA Gomez-Pulido... - Proceedings of 1993 ..., 1993 - ieeexplore.ieee.org We have developed a simulation of the thermodynamic cycle of Rankine, frequently used by steam power plants. We adhered to the Object Oriented new archetype of programming, using C++. The simulation is based on a model we built from physics principles, with ...

☆ 99 Citado por 1 Artículos relacionados Las 5 versiones

### Long-term Dynamic Characteristics Model of a Power Plant Thermodynamic System

YZ Li, J Wang, XY Yang - ... of Engineering for Thermal Energy and ..., 2005 - en.cnki.com.cn The long-term dynamic characteristics of a thermodynamic system are of major significance to the design of simulation or control systems for various types of thermal power plants. Through a rational analysis and simplification of relevant mechanism a mathematical model ...

### [PDF] Enhancing the Performance of An Industrial Boiler Using Fuzzy Logic Controller

MN Eze, CA Mgbachi, JU Chiwetalu - ijmrem.com

------ABSTRACT------

This paper focus on the performance of an industrial boiler using fuzzy logic controller. The parameter of the various industrial boilers are subjected to the change due to change in the ...

### [CITAS] OBJECT ORIENTED MODELLING AND SIMULATION OF INDUSTRIAL THERMODYNAMIC CYCLES

# [PDF] Model of a Heat Recovery Steam Generator (HRSG) Process and Simulation in Steady State and Transient Operation

JL Vega-Fonseca, I Hernández-Ramírez... - pdfs.semanticscholar.org

This paper provides the main characteristics of a modeling and simulation tool to analyze the steady state and transient operation of a HRSG (Heat Recovery Steam Generator) when they are subject to load changes. The HRSG model includes the following modules ...

☆ 99 Artículos relacionados Las 5 versiones ⇒

### <u>Artículo 5: 12 Citas (todas mostradas)</u>

[2006] Arriaga-de-Valle, E. and Dieck-Assad, G. "Modeling and Simulation of a Fuzzy Supervisory Controller for an Industrial Boiler", SIMULATION, The transaction of the Society for Modeling and Simulation International, Vol. 82, No. 12, pp. 841-850, December 2006.

### Fuzzy algorithm control effectiveness on drum boiler simulated dynamics

D Pelusi, L Vazquez, D Diaz... - 2013 36th International ..., 2013 - ieeexplore.ieee.org

The optimal control of parameters in a system assumes an important role in industrial processes. Models based on boiler-turbine plant are proposed in various applications. The target of this paper is to apply intelligent techniques on a boiler simulator to improve the ...

☆ 99 Citado por 17 Artículos relacionados Las 5 versiones

# [PDF] Importance of tree-elements boiler drum level control its installation in power plant

SK Chakrabory, N Manna, S Dey - International Journal of ..., 2014 - academia.edu
Conversion of water into steam is the primary function of a utility boiler. The steam pressure
is used to turn a steam turbine thus, generating electricity. Within the boiler drum there exists
a steam/water interface. Boiler steam drum water level is one of the important parameters of ...

\$\frac{1}{12}\$ 99 Citado por 12 Artículos relacionados Las 3 versiones \$\text{\$\infty}\$

# Effect of loop configuration on steam drum level control for a multiple drum interconnected loops pressure tube type boiling water reactor

AJ Gaikwad, PK Vijayan, K lyer... - ... on Nuclear Science, 2009 - ieeexplore.ieee.org
For AHWR (Advanced Heavy Water Reactor), a pressure tube type Boiling Water Reactor
(BWR) with parallel inter-connected loops, the Steam Drum (SD) level control is closely
related to Main Heat Transport (MHT) coolant inventory and sustained heat removal through ...

☆ 99 Citado por 7 Artículos relacionados Las 4 versiones Web of Science: 5

## Selection of steam drum level control method for multiple drum interacting loops pressure tube-type BWR

AJ Gaikwad, PK Vijayan, S Bhartiya... - ... on Nuclear Science, 2011 - ieeexplore.ieee.org
Three element Steam Drum (SD) Level Controller has been conventionally used for most of
the boilers, Nuclear power plant steam generator & Boiling Water Reactor (BWRs). Based
on the process dynamic studies it was found that this scheme does not work properly for an ...

☆ 99 Citado por 9 Artículos relacionados Las 3 versiones Web of Science: 3

### Modeling and simulation of furnace pulse firing improvements using fuzzy control

A Cadena-Ramírez, A Favela-Contreras... - ..., 2017 - journals.sagepub.com

Pulse firing offers significant process and productivity benefits, such as improved temperature uniformity and high heat transfer rates to the product load through maximum system turndown and utilizes the system's burners at their most efficient firing rates ...

☆ 99 Citado por 6 Artículos relacionados Las 6 versiones

### Main steam temperature control based on GA-BP optimised fuzzy neural network

Z Tian - ... Journal of Engineering Systems Modelling and ..., 2017 - inderscienceonline.com The high inertia and long time-delay characteristics of main steam temperature control system in a thermal power plant will reduce the system control performance. In order to solve this problem, a genetic algorithm-back propagation (GA-BP) optimised fuzzy neural network ...

☆ 99 Citado por 4 Artículos relacionados Las 2 versiones Web of Science: 1

### Comparative analysis of cascade fuzzy logic controllers for boiler water level control

AC Thomas, <u>YV Hote</u>, <u>S Saxena</u> - 2014 Annual IEEE India ..., 2014 - ieeexplore.ieee.org Water level control in boilers is an age old control problem that has challenged the frontiers of control engineering. More so the control problem offered by a marine boiler is even more intriguing. In this paper, a comparative study of cascade fuzzy logic controller for boiler water ...

☆ 99 Citado por 1 Artículos relacionados Las 2 versiones

#### Steam drum process dynamics and level control of a pressure tube BWR

AJ Gaikwad, PK Vijayan, <u>S Bhartiya</u>, <u>R Kumar</u>... - ..., 2010 - hanser-elibrary.com Abstract The Advanced Heavy Water Reactor (AHWR) is a pressure tube type light water cooled heavy water moderated Boiling Water Reactor (BWR) with natural circulation at all power levels. It has parallel inter-connected loops with 452 boiling channels in the Main ...

☆ 99 Citado por 1 Artículos relacionados Las 5 versiones

#### [PDF] ANOMALY DETECTION IN THERMAL POWER PLANT

L Gnanaprakash - ijmtes.com

Coal fired thermal power plants use coal as fuel for efficient working of the plant. Thermal plant working depends on burning coal particles that are passed through the conveyor belt and powdered through pulverization process. When powdered coal is passed into the boiler ...

☆ 99

### Modelo matemático no espaço de estados de uma caldeira de vapor aquatubular

AF Bianco, V dos RA Ferreira... - Proceeding Series of ..., 2015 - proceedings.sbmac.org.br Este artigo trata da modelagem de uma caldeira aquatubular baseado no modelo proposto em [2]. Nele, um modelo não linear é definido e, posteriormente linearizado, a fim de obter o modelamento em espaço de estados do sistema. A partir da obtenção deste novo modelo, o ...

☆ 99 Artículos relacionados Las 2 versiones ⇒>>

### Otimização da malha de cogeração de energia em usina de açúcar e álcool.

G Cittadino - teses.usp.br

A matriz elétrica brasileira é baseada em energias renováveis e principalmente, na energia hidráulica. Frente a algumas crises que o país viveu, faz-se necessário encontrar fontes alternativas de produção de energia elétrica que possam auxiliar a principal fonte ...

# [PDF] Model of a Heat Recovery Steam Generator (HRSG) Process and Simulation in Steady State and Transient Operation

JL Vega-Fonseca, I Hernández-Ramírez... - pdfs.semanticscholar.org

This paper provides the main characteristics of a modeling and simulation tool to analyze the steady state and transient operation of a HRSG (Heat Recovery Steam Generator) when they are subject to load changes. The HRSG model includes the following modules ...

### Artículo 6: 11 Citas (9 mostradas)

[2000] Ramírez-Barajas J., Soto R., Dieck-Assad G., "A fuzzy logic based AGC algorithm for a radio communication system," FUZZ-IEEE-2000 Conference, May 7-10, 2000, San Antonio, Texas, U.S.A. [LIBRO] Design of analog fuzzy logic controllers in CMOS technologies: implementation, test and application

C Dualibe, M Verleysen, P Jespers - 2007 - books.google.com

Fuzzy Logic is a computational paradigm capable of modelling the own uncertainness of human beings. Fuzzy reasoning is nothing else than a Fuzzy Logic-based formalism for encoding human knowledge or common sense in a numerical framework. Indeed, the ...

☆ 99 Citado por 54 Artículos relacionados Las 9 versiones 
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### Application of fuzzy logic in engineering problems

A Gad, M Farooq - IECON'01. 27th Annual Conference of the ..., 2001 - ieeexplore.ieee.org In today's fast paced world of increasing and innovative new technology, fuzzy logic is a practical mathematical addition to classic Boolean logic. We can see its applications in many fields of science and engineering. This paper gives a general overview with a large ...

☆ 99 Citado por 25 Artículos relacionados Las 5 versiones

# On designing mixed-signal programmable fuzzy logic controllers as embedded subsystems in standard CMOS technologies

C Dualibel, P Jespers... - Symposium on Integrated ..., 2001 - ieeexplore.ieee.org
A digitally-programmable analogue fuzzy logic controller (FLC) is presented. Input and
output signals are processed in the analog domain whereas the parameters of the controller
are stored in a built-in digital memory. Some new functional blocks have been designed ...

☆ 99 Citado por 17 Artículos relacionados Las 8 versiones

### A survey of recent advances in fuzzy logic in communication systems

<u>G Kaur, ML Singh</u> - International Journal of Applied Engineering ..., 2009 - go.galegroup.com Fuzzy systems, including fuzzy logic and fuzzy set theory, provide a rich and meaningful addition to standard logic. Fuzzy Logic provides a simple way to arrive at a definite conclusion based upon vague, ambiguous, imprecise, noisy, or missing input information ...

☆ 99 Citado por 4 Artículos relacionados

### CMOS mixed signal design of fuzzy logic based systems

SH Kirtane, AY Deshmukh, <u>PR Bajaj...</u> - 2008 First International ..., 2008 - ieeexplore.ieee.org Limits to precision impose limits to the complexity of analog circuits, hence fuzzy analog controllers are usually oriented to fast low-power systems with low medium complexity. This paper presents a strategy to preserve most of the advantages of an analog implementation ...

☆ 99 Citado por 2 Artículos relacionados Las 3 versiones

#### [PDF] Intelligent CDMA systems

<u>G Kaur</u>, ML Singhb - Proc. International Conference on" ..., 2004 - researchgate.net Direct-sequence Code-division multiple-access (DS-CDMA) has emerged as proper format for communication systems. As a result of multiple-access interference (MAI), inter-symbol interference (ISI), narrowband interference (NBI) and nonlinearities in channels, DS-CDMA ...

☆ 99 Citado por 1 Artículos relacionados Las 6 versiones ⇒

#### Improved AGC method for B3G MIMO-OFDM system

Y Bing, <u>YU He</u>, <u>X Tao</u> - The Journal of China Universities of Posts and ..., 2007 - Elsevier Automatic gain control (AGC) has an important role in multi-input multi-output-orthogonal frequency-division multiplexing (MIMO-OFDM) system, especially, when receiving antennas are distributed. In recent years, much work has been done on efficiency and simplification of ...

☆ 99 Citado por 1 Artículos relacionados Las 6 versiones.

### [PDF] Mixed Signal Design of Fuzzy Logic based Systems

S Kirtane, AY Deshmnukh, PR Bajaj, AG Keskar - memory - ijssst.info

Limits to precision impose limits to the complexity of analog circuits, hence fuzzy analog controllers are usually oriented to fast low-power systems with low medium complexity. This paper presents a strategy to preserve most of the advantages of an analog implementation ...

☆ 99 Artículos relacionados >>>

# [PDF] Performance Enhancement of Digital Communication Systems Using Fuzzy Logic

D Kaur - ... Journal of Computer Science Issues (IJCSI), 2012 - pdfs.semanticscholar.org The objective is to study the various fuzzy logic techniques being used for minimization of Multiple Access Interference (MAI) in CDMA. These techniques will be compared and their applicability for the enhancement of digital communication systems with different ...

☆ 99 Artículos relacionados Las 4 versiones >>>

### Artículo 7: 10 Citas (9 mostradas)

[2010] MA Leminszka, G Dieck-Assad, SO Martínez, JE Garza, "Modelación del nivel de ácido láctico para atletas de alto rendimiento", Revista mexicana de ingeniería biomédica 31 (1), 41-56

# El lactato sanguíneo y su correlación con biomarcadores salivales, como indicadores de la intensidad del ejercicio

<u>FGM Abril</u>, RIQ Burgos - REVISTA SALUD, HISTORIA Y SANIDAD, 2011 - agenf.org Objetivo: La concentración del acido láctico en el entrenamiento deportivo ha sido la herramienta más confiable de medición de la intensidad del esfuerzo desde el sistema metabólico. Realizar una revisión teórica de los métodos de medición del ácido láctico para ...

☆ 99 Artículos relacionados Las 2 versiones ⇒
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### Lactic acid modelling during ischemia in high performance athletes

MA Leminszka, G Dieck-Assad... - Revista Mexicana de ..., 2010 - medigraphic.com
The following article proposes a dynamic model to measure lactic acid for high performance
athletes in ischaemia, in other words, when there is a blood flow reduction (source of
oxygen). An introduction to the lactate regulation in ischaemia is presented to describe the ...

☆ 99 Artículos relacionados Las 2 versiones ⇒
>>>

### [PDF] Lactato como biomarcador del rendimiento deportivo en deportistas de halterofilia del Valle del Cauca

SSC Sánchez, D Carolina... - Encuentro ..., 2018 - investigacion.endeporte.edu.co Los biomarcadores sanguíneos son productos metabólicos medibles que permiten monitorear objetivamente el proceso de entrenamiento. Su análisis contribuye a una oportunidad de mejora del rendimiento deportivo. El lactato es un intermediario en el ...

☆ 99 >>>

# Lactato sanguíneo a partir de biomarcadores salivales. Un estudio con indicadores fisiológicos en ciclistas de la ciudad de Tunja (Colombia) durante prueba de ...

<u>FG Manrique-Abril</u>, RIQ Burgos... - Archivos de ..., 2017 - revistasum.umanizales.edu.co Objetivo. Determinar la correlación entre las proteínas totales salivales y el lactato salival con las concentraciones de lactato en sangre en ciclistas, como un punto de partida para construir un modelo no invasivo de medición de lactato sanguíneo. En atletas de alto ...

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#### Lactic acid modelling in high performance athletes

MA Leminszka, G Dieck-Assad... - Revista Mexicana de ..., 2010 - medigraphic.com The following article proposes a model to perform a non-invasive measurement of lactic acid. The model could be used effectively to measure lactic acid in high performance athletes. Several models are presented that intend to correlate measurable physical ...

☆ 99 Artículos relacionados Las 2 versiones ⇒>

### Valoración de perfil renal y ácido láctico pre y post entrenamiento en deportistas del Centro de Educación Física de la ESPOCH.

LJ Colcha Tene - 2018 - dspace.espoch.edu.ec

The objective of this research was to determine the values of renal profile and lactic acid before and after training in the athletes of the physical education center of the ESPOCH, the study was conducted with a population of 101 athletes from different disciplines, the same as ...

☆ 99 Artículos relacionados ⇒>>

# LACTATO SANGUINEO A PARTIR DE BIOMARCADORES SALIVALES. UN STUDIO CON INDICADORES FISIOLOGICOS EN CICLISTAS DE LA CIUDAD DE TUNJA ...

RIQ Burgos, <u>FM Abril</u>, <u>GMH Amaya</u> - Archivos de Medicina, 2017 - go.gale.com Objetivo: determinar la correlación entre las proteínas totales salivales y el lactato salival con las concentraciones de lactato en sangre en ciclistas, como un punto de partida para construir un modelo no invasivo de medición de lactato sanguíneo. En atletas de alto ...

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# Análisis de los Mecanismos de Producción y de Remoción de Lactato en Sangre, en las distintas posiciones en el Equipo de Futbol Femenino del IMRDS (Instituto ...

AL Montoya Nuñez, OF Garzón Colmenares - 2018 - repositorio.ucundinamarca.edu.co La finalidad de este proyecto, fue la aplicación del test estándar de lactato establecido por el doctor Olbrecth. J con el fin de analizar los mecanismos del ritmo máximo de producción de lactato y el porcentaje de remoción de lactato en sangre de seis deportistas del equipo ...

☆ 99 Artículos relacionados >>>

# [PDF] La Fibromialgia en la jurisprudencia Española. Herramienta FMCheck de Valoración

MTV Herrero, LC García, SD Bueno... - Archivos de Medicina ..., 2017 - redalyc.org La fibromialgia se define como un estado doloroso generalizado que no afecta a las articulaciones, sino a zonas musculares y raquis con una exagerada sensibilidad a la presión en unos puntos determinados, así lo recoge la Organización Mundial de la Salud ...

#### **Artículo 8: 8 Citas**

#### [2019] Dynamic Simulation of a Crude Oil Destillation Plant Using ASPEN-HYSYS

D Sotelo, A Favela-Contreras, F Beltrán-Carbajal, G Dieck-Assad, ... International Journal of Control, Automation and Systems 18 (2), 229-241

#### Genetic algorithm for energy commitment in a power system supplied by multiple energy carriers

M Dehghani, M Mardaneh, OP Malik, JM Guerrero... - Sustainability, 2020 - mdpi.com In recent years, energy consumption has notably been increasing. This poses a challenge to the power grid operators due to the management and control of the energy supply and ... ☆ Guardar 切 Citar Citado por 10 Artículos relacionados Las 11 versiones >>>

[PDF] mdpi.com

#### [нтмь] Reduction of carbon footprint of the production and field transport of highviscosity oils in the Arctic region

G Buslaev, V Morenov, Y Konvaev... - ... and Processing-Process .... 2021 - Elsevier Despite the efforts to green the global economy, the non-renewable resources are still one of the major components of energy mix. The growing energy demand and depletion of ...

[HTML] sciencedirect.com

☆ Guardar 切 Citar Citado por 9 Artículos relacionados Las 2 versiones

#### Hydrogen production from swine manure biogas via steam reforming of methane (SRM) and water gas shift (WGS): A ecological, technical, and economic analysis

JGF Madeira, EM Oliveira, MV Springer... - international journal of ..., 2021 - Elsevier Inadequate management of swine manure can lead to contamination of watercourses, groundwater, soil, and air, representing a risk to the sustainability and expansion of pig ... [PDF] researchgate.net

☆ Guardar 夘 Citar Citado por 3 Artículos relacionados Las 4 versiones

#### [PDF] RIGOROUS DYNAMIC SIMULATION OF A DEHYDRATION AND DESALTING CRUDE OIL UNIT USING ASPEN HYSYS®.

C Sotelo, A Favela-Contreras... - International Journal of ..., 2021 - ijsimm.com Considering that two-thirds of world oil production receive a treatment after extraction to remove water and salt contents, one of the most important processes to avoid operational ... [PDF] ijsimm.com

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#### Optimization of the aromatic precursor recovery procedure in column (C-63) of RA1K-skikda using Aspen HYSYS

N Malfi, C Sobhi, OM Mecelti, S Mogalli... - Materials Today ..., 2021 - Elsevier Because of the acceding demand on the products of the petrochemical industry, Naphtha is required to have such a high fraction of components which could easily transform to ...

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### A simulation-based analysis for the performance of thermal solar energy for pyrolysis applications

M Lameh, A Abbas, F Azizi... - International Journal of ..., 2021 - Wiley Online Library Solid plastic waste presents a perplexing waste disposal challenge, which has increased in importance due to increasing demand for plastic products over the last century. Chemical ...

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#### Simulação Processual das Unidades de Destilação Atmosférica e de Fracionamento de Gasolina SR da Fábrica I da Refinaria de Sines

ISF Santos - 2019 - run.unl.pt

O presente trabalho teve como principal objetivo a construção de um modelo de simulação rigoroso prato-a-prato da unidade de destilação atmosférica e de fracionamento de ...

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### [PDF] unl.pt

### Study cases methodology in process dynamic and industrial plants control subject

AM Borreguero, JM García-Vargas... - Computer ..., 2020 - Wiley Online Library Dynamic simulation has been incorporated into Chemical Engineering Master at the University of Castilla-La Mancha as a teaching tool together with working cases. Concretely ...

☆ Guardar 切 Citar Artículos relacionados

### Libro 1: 7 citas (6 mostradas)

[2000] Dieck-Assad G., Instrumentación, Acondicionamiento Electrónico y Adquisición de Datos, Editorial Trillas, 1st. Edition, Mexico January 2000, ISBN 968-24-6064-6.

#### [LIBRO] Greenhouse design and control

P Ponce, <u>A Molina</u>, P Cepeda, E Lugo, <u>B MacCleery</u> - 2014 - content.taylorfrancis.com Since weather conditions are changing dramatically around the planet, new forms of cultivation are needed more than ever. A greenhouse is one of the best options for improving the autonomous cultivation process; thus, researchers are looking for ways of ...

#### Control de dirección de un vehículo autónomo

GJ Palacios Garza - 2000 - repositorio.itesm.mx

La presente tesis propone el desarrollo de un vehículo que sigue una trayectoria dada, controlando su dirección y su velocidad. El vehículo se clasifica como semiautónomo, ya que el cálculo de la trayectoria la realiza el usuario. El controlador que aquí se desarrolla se ...

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# Compensación de Distorsión Armónica Total en Inversores de Voltaje con Carga No Lineal Mediante PWM con Invección de Armónicas-Edición Única

JLE Carrales - 2007 - repositorio.itesm.mx

En terminales de salida de las fuentes de potencia de CA, uno de los parámetros de desempeño que se requiere optimizar es el THD del voltaje. En esta tesis, se plantea minimizar el THD mediante técnicas de modulación de ancho de pulso con inyección de ...

☆ 99 Artículos relacionados ⇒>>

### Medición de Parámetros Eléctricos y Análisis Económico Enfocado al Entorno Nacional-Edición Única

CV Parada - repositorio.itesm.mx

Los sistemas de medición de parámetros eléctricos son muy utilizados actualmente en la industria y se encuentran disponibles en varias presentaciones dependiendo fundamentalmente de sus características de análisis y despliegue de los mismos. El ...

☆ 99 Artículos relacionados >>>

# [PDF] Desarrollo de un Módulo de Comunicación Serial-Ethernet para Aplicaciones de Monitoreo y Control Remoto-Edición Única

EER Noriega - repositorio.itesm.mx

Esta tesis presenta a un módulo de comunicación capaz de acoplar una comunicación serial asincrona con una comunicación de red en una red ethernet. El módulo está orientado a acoplarse a dispositivos como microcontroladores, procesadores digitales de ...

\$\frac{1}{12}\$ 99 Artículos relacionados \$\frac{1}{2}\$\$

гстая Tacometro virtual

OO Torres Hernández - Torres Hernández Oscar Osvaldo

☆ 99 Artículos relacionados

#### [PDF] Instituto Tecnológico y de Estudios Superiores de Monterrey

C No, CP ÁLVAREZ - 2008 - repositorio.itesm.mx

2. METODOLOGÍA ECONOMETRICA PARA CONOCER LAS CARACTERÍSTICAS DEL IMPUESTO......

169 3. CARACTERÍSTICAS DEL IMPUESTO ...

☆ 99 Artículos relacionados Las 6 versiones ⇒
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#### Artículo 9: 6 citas

[2017] A Cadena-Ramírez, A Favela-Contreras, G Dieck-Assad, "Modeling and simulation of furnace pulse firing improvements using fuzzy control, Simulation 93 (6), 477-487.

### [PDF] Pulse firing as a combustion control method-Part

MG Ricci - heat-processing.com

The pulse firing technique is a combustion control method developed many years ago and applied almost worldwide. Its main features and related pros and cons, in comparison with the Amplitude-Modulating control, should be well known as it has been described in several ...

☆ 99 Artículos relacionados Las 4 versiones >>> [PDF] 2-DIMENSIONAL CFD SIM FIRED PYROLYS

<u>FA Ishola</u>, PN Onwar, IE Ogun, <u>IE Ogunrinola</u>... - Technology, 2018 - researchgate.net With the aid of a Computers progr to mimic the interactions of fluids with working conditions usually referred to exhibited a steady state, a for a gas-fired pyrolytic furnace verifie used to create the physical design of th simulation. The resulting analysis disp the furnace such to ...

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### [PDF] Parameters for Design and Construction of a Pilot Scale Pyrolysis Gas-Furnace

A Ishola Felix, AA Kehinde, O Ajayi Oluseyi ... - ieomsociety.org

The objective of this study is to analyse the design parameters for a pyrolysis furnace designed and built for experimental purposes using the principle of heat transfer. The furnace was made of a casing of low carbon steel sheets inside which the refractory bricks ...

☆ 99 >>

### Thermal Modelling for A Pilot Scale Pyrolytic Furnace for Production of Carbon Black

FA Ishola, AO Inegbenebor... - Journal of Physics ..., 2019 - iopscience.iop.org
Carbon black (CB) is a very important material useful for various modern applications. There
are a lot of attention currently on the extraction of a form of CB obtainable from waste tyres
which is usually referred to as pyrolytic Carbon black (CBp). The authors investigated the ...

### [PDF] Parameters for Design and Construction of a Pilot Scale Pyrolysis Gas-Furnace

AO Inegbenebor - researchgate.net

The objective of this study is to analyse the design parameters for a pyrolysis furnace designed and built for experimental purposes using the principle of heat transfer. The furnace was made of a casing of low carbon steel sheets inside which the refractory bricks ...

# АЭРОДИНАМИКА СТРУЙ, ВЗАИМОДЕЙСТВУЮЩИХ С ПЛОСКОЙ ПОВЕРХНОСТЬЮ

ИА Прибытков, СИ Кондрашенко - Известия высших учебных ..., 2019 - fermet.misis.ru Аннотация Проведено исследование особенностей развития одиночной свободной струи высокотемпературного азота при взаимодействии с плоской поверхностью. Расчет процесса теплообмена при нагреве атакующими струями весьма трудно ...

### Artículo 10: 6 citas

[2011] Bautista F., Martinez-Chapa S.O., Rossetto O., Dieck-Assad G., "An Ultra-Low-Voltage 94.2 dB SNR CT-12 Modulator for Implantable and Portable Applications," IEEE International Conference in Electronics, Circuits and Systems (ICECS) December 2010.

#### A Process-Tolerant, Low-Voltage, Inverter-Based OTA for Continuous-Time $\Sigma - \Delta$ ADC

<u>A Ismail</u>, <u>I Mostafa</u> - IEEE Transactions on Very Large Scale ..., 2016 - ieeexplore.ieee.org Inverter-based implementation of operational-transconductance amplifiers is an attractive approach for low-voltage realization of analog subsystems. However, the high sensitivity of inverterlike amplifiers' performance to process and temperature variations limit the ...

☆ 99 Citado por 12 Artículos relacionados Las 2 versiones Web of Science: 7

### A low voltage inverter-based continuous-time sigma delta analog-to-digital converter in 65nm CMOS technology

<u>A Essawy</u>, <u>A Ismail</u> - 2014 IEEE Faible Tension Faible ..., 2014 - ieeexplore.ieee.org
In this work an inverted-based low-voltage implementation for continuous-time sigma delta
analog-to-digital converters is proposed. The proposed implementation is applied to a thirdorder single loop modulator. The loop filter is implemented using active RC integrators. A 50 ...

☆ 99 Citado por 10 Artículos relacionados Las 2 versiones

### A 0.75 V continuous-time sigma-delta analog-to-digital converter in CMOS technology

A Essawy, A Ismail, M Dessouky - 2014 International Caribbean ..., 2014 - ieeexplore.ieee.org In this work, a low-voltage implementation for continuous-time  $\Sigma\Delta$  analog-to-digital converters is proposed. The low-voltage implementation technique is based on implementing the sigma delta integrators using CMOS inverters. The proposed technique is ...

☆ 99 Artículos relacionados Las 2 versiones

### Low Noise Front-End and ADC for Real-Time ECG System in CMOS Process

G Pablo, VF Emanuel, B Eduardo... - 2019 IEEE 10th Latin ..., 2019 - ieeexplore.ieee.org
This paper presents the design and experimental results of a digital acquisition system
based on a chopper-stabilized Instrumentation Amplifier with Common-Mode feedback for
CMRR enhancement. Chopping techniques are used to remove both offset and flicker noise ...

☆ 99 Artículos relacionados

### A Tunable Inverter-Based, Low-Voltage OTA for Continuous-Time ΣΔ ADC

I Mostafa, A Ismail - 2015 28th IEEE International System-on ..., 2015 - ieeexplore.ieee.org Inverter-based implementation of operational-transconductance amplifiers (OTAs) is an attractive approach for low-voltage realization of analog sub-systems. However, the high sensitivity of inverter-like amplifiers performance to process and temperature variations limits ...

☆ 99 Artículos relacionados

# Data converters using continuous time sigma delta modulators with VCO-based integrator and quantizer for ultra low power applications

N Narasimman - 2017 - dr.ntu.edu.sg

Ultra-low power operation is highly desirable for circuits and systems, which run on strict power budgets. The demand has increased with the rise in applications, which work on harvested energy such as autonomous sensor nodes. Data converters are an inevitable part ...

#### **Artículo 11: 4 citas**

[2018] C Sotelo, A Favela-Contreras, F Beltrán-Carbajal, G Dieck-Assad, "A novel discrete-time nonlinear model predictive control based on state space model", International Journal of Control, Automation and Systems 16 (6), 2688-2696.

# Design of the Linear Quadratic Structure Based Predictive Functional Control for Industrial Processes Against Partial Actuator Failures Using GA Optimization

X Hu, H Zou, <u>L Wang</u> - International Journal of Control, Automation and ..., 2019 - Springer This paper addresses the genetic algorithm (GA) optimization and the linear quadratic (LQ) structure based predictive functional control (PFC) for batch processes under non-repetitive unknown disturbances and partial actuator faults. First, by adopting the extended non ...

☆ 99 Artículos relacionados

### Effective Mathematical Model of Synchronous Machine with Turn-to-turn Shortcircuit of Rotor Winding for Adaptive Methods of Identification

VI Polishchuk, KV Baratova - 2019 International Conference on ..., 2019 - ieeexplore.ieee.org A number of requirements are shown for perspective discrete mathematical models: fine discretisation pitch, the guaranteed asymptotic stability, obvious type of numerical methods, program and algorithmic optimization of calculations. In this paper the application of bilinear ...

### UKF Based Nonlinear Offset-free Model Predictive Control for Ship Dynamic Positioning Under Stochastic Disturbances

F Deng, HL Yang, LJ Wang, WM Yang - International Journal of Control ..., 2019 - Springer This paper presents the schemes of nonlinear offset-free model predictive control (MPC) for reference tracking of ship dynamic positioning (DP) systems, in the presence of slow-varying stochastic disturbances and input constraints. Two offset-free MPC strategies for nonlinear ...

☆ 99

### A Constrained Predictive Controller for AUV and Computational Optimization Using Laguerre Functions in Unknown Environments

<u>AJ Rashidi</u>, B Karimi, A Khodaparast - International Journal of Control ... - Springer In this paper, a predictive controller approach is proposed for depth and steer control of an Autonomous Underwater Vehicle (AUV). The predictive controller is an advanced control technique that performs control in form of online at any sampling time. AUV control has a lot ...

### Artículo 12: 3 citas (todas mostradas)

[2016] S Soroori, JM Rodriguez-Delgado, H Kido, G Dieck-Assad, M Madou, "The use of polybutene for controlling the flow of liquids in centrifugal microfluidic systems", Microfluidics and Nanofluidics 20 (1), 26 Wireless valving for centrifugal microfluidic disc

MA Zainal, <u>YM Yunos</u>, <u>RA Rahim</u>... - Journal of ..., 2017 - ieeexplore.ieee.org
This paper reports a selective wireless active valve mechanism for a centrifugal microfluidic disc operated using field frequency modulation techniques. The device utilizes a planar inductor-capacitor resonant circuit as a heater to heat up the wax-based valve in a ...

☆ 99 Citado por 6 Artículos relacionados Web of Science: 2

#### Lab-on-a-Disc platform for automated chemical cell lysis

MJ Seo, JC Yoo - Sensors, 2018 - mdpi.com

Chemical cell lysis is an interesting topic in the research to Lab-on-a-Disc (LOD) platforms on account of its perfect compatibility with the centrifugal spin column format. However, standard procedures followed in chemical cell lysis require sophisticated non-contact ...

☆ 99 Citado por 3 Artículos relacionados Las 8 versiones Web of Science: 1 ≫

#### A study to investigate fluid-solid interaction effects on fluid flow in micro scales

M Chen, L Cheng, R Cao, C Lyu - Energies, 2018 - mdpi.com

Due to micro-nanopores in tight formation, fluid-solid interaction effects on fluid flow in porous media cannot be ignored. In this paper, a novel model which can characterize micro-fluid flow in micro scales is proposed. This novel model has a more definite physical ...

☆ 99 Citado por 3 Artículos relacionados Las 9 versiones ⇒

### Artículo 13: 3 citas (3 disertaciones no mostradas)

[2011] J Gomez-Quinones, VH Perez-Gonzalez, H Moncada-Hernandez, G Dieck-Assad, "A multi-channel sinusoidal generator for electrokinetic stimulation of microfluidic platforms, "2011 IEEE Electronics, Robotics and Automotive Mechanics Conference, 20-25.

#### Artículo 14: 3 citas

[1994] Malpica-Romero, A., Dieck-Assad, G. "Fuzzy Environmental Control of Surgical Rooms in Hospitals," NAFIPS/NASA Fuzzy Control conference, San Antonio, Texas, December 1994.

### [HTML] Fuzzy expert system design for operating room air-condition control systems

N Etik, <u>N Allahverdi, IU Sert, I Saritas</u> - Expert Systems with Applications, 2009 - Elsevier In this study, a controlled fuzzy expert system (FES) was designed to provide the conditions necessary for operating rooms. For this purpose, existing operating rooms have been studied to see if there are more useful, reliable and comfortable ones. How an operating ...

☆ 99 Citado por 53 Artículos relacionados Las 3 versiones Web of Science: 24

### Fuzzy expert system design for operating room air-condition control systems

<u>I Saritas</u>, N Etik, <u>N Allahverdi</u>, <u>IU Sert</u> - Proceedings of the 2007 ..., 2007 - dl.acm.org In this study, a controlled fuzzy expert system (FES) was designed to provide the conditions necessary for operating rooms. For this purpose, real operating rooms have been studied to see if there are more useful, reliable and comfortable ones. How a operating room can be ...

☆ 99 Citado por 14 Artículos relacionados Las 3 versiones

# [PDF] Simulating The Air-Condition Controlling In Operating Room And Improvement

F Mohammadi, S Jafari - International Journal of Artificial ..., 2012 - researchgate.net In this study we have tried necessary condition and suitable for air balance and temperature in the operating room, using a fuzzy expert controller system and thermal cameras are designed. Condition for implementation and simulation of this system has been studied to ...

☆ 99 Artículos relacionados Las 7 versiones ⇒

#### Artículo 15: 5 citas

[2020] Study of the Efectiveness of Interactive Videos in Applied Electronics Courses

G Dieck-Assad, J. M. Hinojosa-Olivares, J. Colomer-Ferrarons

International Journal on Interactive Design and Manufacturing (IJIDeM), Vol. 14 (3), Springer, 983-1001

Comparing Competency Assessment in Electronics Engineering Education with and without Industry Training Partner by Challenge-Based Learning oriented to ...

1 mdni oom

<u>G Dieck-Assad</u>, A Ávila-Ortega, <u>OI González Peña</u> - Sustainability, 2021 - mdpi.com This study assessed the "creation of technological solutions for electronic devices" competencies evaluation when faculty-industry liaison is available. This experience at ...

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Active Learning Approaches for Sustainable Energy Engineering Education

<u>P Caratozzolo</u>, <u>S Rosas-Melendez</u>... - 2021 IEEE Green ..., 2021 - ieeexplore.ieee.org International groups of stakeholders are currently involved in the redefinition of the objectives of sustainable engineering education. They are releasing different reports where ...

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This study assessed the "creation of technological solutions for electronic devices" competencies evaluation when faculty-industry liaison is available. This experience at ...

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EDUCATION 4.0 FRAMEWORK: ENRICHING ACTIVE LEARNING WITH VIRTUAL AND TECHNOLOGICAL TOOLS

P Caratozzolo... - Proceedings of the ..., 2021 - tiikmpublishing.com

At the beginning of 2020, many educators were still unclear what exactly it meant to design teaching-learning processes in the Fourth Industrial Revolution, "Education 4.0". Despite this ...

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Learning through screens: How gestures, facial expressions, and motivational statements influence foreign language learning experience online

SA Zahra - 2021 - essay.utwente.nl

The present study aims to discover the influence of instructor's gestures, facial expression, and motivational statements in video lectures on learning outcome, satisfaction, purchase ...

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Articulo 16 (3 citas)

[2021] Dieck-Assad, Graciano, Omar I. González Peña, and José M. Rodríguez-Delgado. <u>Evaluation of Emergency First Response's Competency in Undergraduate College Students: Enhancing Sustainable Medical Education in the Community for Work Occupational Safety</u>

International Journal of Environmental Research and Public Health 18, no. 15: 7814

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<u>G Dieck-Assad</u>, A Ávila-Ortega, <u>OI González Peña</u> - Sustainability, 2021 - mdpi.com This study assessed the "creation of technological solutions for electronic devices"

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G Dieck-Assad, JM Rodríguez-Delgado... - Sensors, 2021 - mdpi.com

CMOS microelectronics design has evolved tremendously during the last two decades. The evolution of CMOS devices to short channel designs where the feature size is below 1000 ...

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