Boris Lakard

List of Publications by Year in descending order

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85 papers	2,552 citations	136950 32 h-index	214800 47 g-index
85 all docs	85 docs citations	85 times ranked	2988 citing authors

#	Article	IF	Citations
1	Ammonia gas sensor based on electrosynthesized polypyrrole films. Talanta, 2009, 78, 199-206.	5.5	142
2	Urea potentiometric biosensor based on modified electrodes with urease immobilized on polyethylenimine films. Biosensors and Bioelectronics, 2004, 19, 1641-1647.	10.1	129
3	Electrochemical Biosensing of Dopamine Neurotransmitter: A Review. Biosensors, 2021, 11, 179.	4.7	98
4	Effect of electrolyte solvent on the morphology of polypyrrole films: Application to the use of polypyrrole in pH sensors. Synthetic Metals, 2008, 158, 453-461.	3.9	97
5	Electrochemical Biosensors Based on Conducting Polymers: A Review. Applied Sciences (Switzerland), 2020, 10, 6614.	2.5	91
6	Urea potentiometric enzymatic biosensor based on charged biopolymers and electrodeposited polyaniline. Biosensors and Bioelectronics, 2011, 26, 4139-4145.	10.1	88
7	Potentiometric miniaturized pH sensors based on polypyrrole films. Sensors and Actuators B: Chemical, 2007, 122, 101-108.	7.8	87
8	Characterization of the surface properties of polypyrrole films: Influence of electrodeposition parameters. Synthetic Metals, 2011, 161, 2498-2505.	3.9	74
9	Ammonia gas sensors based on polypyrrole films: Influence of electrodeposition parameters. Sensors and Actuators B: Chemical, 2012, 171-172, 431-439.	7.8	68
10	Potentiometric pH sensors based on electrodeposited polymers. Polymer, 2005, 46, 12233-12239.	3.8	65
11	Effect of various parameters on the conductivity of free standing electrosynthesized polypyrrole films. Synthetic Metals, 2010, 160, 2180-2185.	3.9	58
12	Quantitative self-powered electrochromic biosensors. Chemical Science, 2017, 8, 1995-2002.	7.4	58
13	Gas Sensors Based on Electrodeposited Polymers. Metals, 2015, 5, 1371-1386.	2.3	56
14	Retention of Cu(II)â€“ and Ni(II)â€“polyaminocarboxylate complexes by ultrafiltration assisted with polyamines. Desalination, 2010, 258, 87-92.	8.2	54
15	Multi-analyte determination of dopamine and catechol at single-walled carbon nanotubes â€“ Conducting polymer â€“ Tyrosinase based electrochemical biosensors. Journal of Electroanalytical Chemistry, 2015, 744, 53-61.	3.8	53
16	Miniaturized pH biosensors based on electrochemically modified electrodes with biocompatible polymers. Biosensors and Bioelectronics, 2004, 19, 595-606.	10.1	52
17	Development of Amperometric Biosensors Based on Nanostructured Tyrosinase-Conducting Polymer Composite Electrodes. Sensors, 2013, 13, 6759-6774.	3.8	51
18	Electrochromic biosensors based on screen-printed Prussian Blue electrodes. Sensors and Actuators B: Chemical, 2019, 290, 591-597.	7.8	46

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19	Flexible Sensors Based on Conductive Polymers. Chemosensors, 2022, 10, 97.	3.6	45
20	Polyelectrolyte modification of ultrafiltration membrane for removal of copper ions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 435, 170-177.	4.7	43
21	Full characterization of polypyrrole thin films electrosynthesized in room temperature ionic liquids, water or acetonitrile. Electrochimica Acta, 2014, 137, 298-310.	5.2	43
22	Morphological and adhesive properties of polypyrrole films synthesized by sonoelectrochemical technique. Synthetic Metals, 2010, 160, 2540-2545.	3.9	42
23	Doping properties of PEDOT films electrosynthesized under high frequency ultrasound irradiation. Ultrasonics Sonochemistry, 2011, 18, 140-148.	8.2	39
24	Ab initio study of the polymerization mechanism of poly(p-phenylenediamine). Computational and Theoretical Chemistry, 2003, 638, 177-187.	1.5	38
25	Elaboration and characterization of polyaniline films electrodeposited on tin oxides. Synthetic Metals, 2011, 161, 2162-2169.	3.9	38
26	pH Sensing at Pt Electrode Surfaces Coated with Linear Polyethylenimine from Anodic Polymerization of Ethylenediamine. Journal of the Electrochemical Society, 2001, 148, E435.	2.9	37
27	Microstructured electrodeposited polypyrroleâ€“phthalocyanine hybrid material, from morphology to ammonia sensing. Journal of Materials Chemistry, 2012, 22, 25246.	6.7	37
28	Elaboration of ammonia gas sensors based on electrodeposited polypyrroleâ€”Cobalt phthalocyanine hybrid films. Talanta, 2013, 117, 45-54.	5.5	37
29	Use of sinusoidal voltages with fixed frequency in the preparation of tyrosinase based electrochemical biosensors for dopamine electroanalysis. Sensors and Actuators B: Chemical, 2017, 240, 801-809.	7.8	36
30	Adsorption of Ni(II) ions on colloidal hybrid organicâ€“inorganic silica composites. Colloids and Surfaces B: Biointerfaces, 2012, 93, 1-7.	5.0	34
31	Ab initio study of amino acids containing hydroxy groups (serine, threonine and tyrosine). Computational and Theoretical Chemistry, 2004, 681, 183-189.	1.5	33
32	In situ electrodeposition of biocomposite materials by sinusoidal voltages on microelectrodes array for tyrosinase based amperometric biosensor development. Sensors and Actuators B: Chemical, 2013, 181, 136-143.	7.8	32
33	Application of original assemblies of polyelectrolytes, urease and electrodeposited polyaniline as sensitive films of potentiometric urea biosensors. Electrochimica Acta, 2014, 148, 53-61.	5.2	32
34	Development of miniaturized pH biosensors based on electrosynthesized polymer films. Analytica Chimica Acta, 2007, 597, 313-321.	5.4	29
35	Theoretical study of the vibrational spectra of polyethylenimine and polypropylenimine. Computational and Theoretical Chemistry, 2004, 685, 83-87.	1.5	28
36	Charge properties of membranes modified by multilayer polyelectrolyte adsorption. Journal of Colloid and Interface Science, 2010, 344, 221-227.	9.4	28

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37	Ab initio study of the electronic and structural properties of the crystalline polyethyleneimine polymer. Journal of Chemical Physics, 2004, 120, 9376-9382.	3.0	26
38	Surface modification of p-Si by a polyethylenimine coating: influence of the surface pre-treatment. Application to a potentiometric transducer as pH sensor. Electrochimica Acta, 2002, 47, 2597-2602.	5.2	25
39	Synthesis and characterization of polyaniline-silica composites: Raspberry vs core-shell structures. Where do we stand?. Journal of Colloid and Interface Science, 2017, 502, 184-192.	9.4	24
40	Effects of polypyrrole modified electrode functionalization on potentiometric pH responses. Synthetic Metals, 2010, 160, 1073-1080.	3.9	22
41	Investigation of pharmaceutically active ionic liquids as electrolyte for the electrosynthesis of polypyrrole and active component in controlled drug delivery. Electrochimica Acta, 2016, 211, 950-961.	5.2	21
42	A straightforward procedure for the synthesis of silica@polyaniline core-shell nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 573, 237-245.	4.7	21
43	Synthesis of polymer materials for use as cell culture substrates. Electrochimica Acta, 2007, 53, 1114-1126.	5.2	20
44	Morphological characterization and analytical application of poly(3,4-ethylenedioxythiophene)â€“Prussian blue composite films electrodeposited in situ on platinum electrode chips. Thin Solid Films, 2011, 519, 7754-7762.	1.8	20
45	Novel in situ electrochemical deposition of platinum nanoparticles by sinusoidal voltages on conducting polymer films. Synthetic Metals, 2012, 162, 193-198.	3.9	20
46	Preparation of polyelectrolyte-modified membranes for heavy metal ions removal. Environmental Technology (United Kingdom), 2017, 38, 2476-2485.	2.2	20
47	Ab initio study of the electrochemical polymerization mechanism of Ï‰â€“diamines. Journal of Chemical Physics, 2001, 115, 7219-7226.	3.0	19
48	Characterization of charge properties of an ultrafiltration membrane modified by surface grafting of poly(allylamine) hydrochloride. Journal of Colloid and Interface Science, 2009, 333, 335-340.	9.4	19
49	Electrochemically deposited polyethyleneimine films and their characterization. Synthetic Metals, 2010, 160, 1359-1364.	3.9	18
50	Investigation of Polycarbazoles Thin Films Prepared by Electrochemical Oxidation of Synthesized Carbazole Derivatives. Frontiers in Materials, 2019, 6, .	2.4	17
51	Functionalization of organic membranes by polyelectrolyte multilayer assemblies: Application to the removal of copper ions from aqueous solutions. Journal of Colloid and Interface Science, 2012, 376, 202-208.	9.4	16
52	From the Solution Processing of Hydrophilic Molecules to Polymer-Phthalocyanine Hybrid Materials for Ammonia Sensing in High Humidity Atmospheres. Sensors, 2014, 14, 13476-13495.	3.8	15
53	Fully-printed and silicon free self-powered electrochromic biosensors: Towards naked eye quantification. Sensors and Actuators B: Chemical, 2020, 306, 127535.	7.8	15
54	Ab initio and DFT study of aliphatic diamines. Computational and Theoretical Chemistry, 2002, 584, 15-36.	1.5	13

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55	Glow discharge optical emission spectroscopy: a complementary technique to analyze thin electrodeposited polyaniline films. Thin Solid Films, 2014, 550, 27-35.	1.8	12
56	Electrosynthesis and characterization of polymer films on silicon substrates for applications in micromanipulation. Synthetic Metals, 2012, 162, 2370-2378.	3.9	11
57	Elaboration and characterization of carboxylic acid-functionalized polypyrrole films. Synthetic Metals, 2016, 220, 247-254.	3.9	11
58	Electrochemical preparation and physicochemical study of polymers obtained from carbazole and N-((methoxycarbonyl)methyl)carbazole. Synthetic Metals, 2020, 270, 116584.	3.9	10
59	Ab initio study of the electrochemical polymerization mechanism leading from DETA to PEI. Computational and Theoretical Chemistry, 2002, 593, 133-141.	1.5	9
60	Fabrication of a miniaturized cell using microsystem technologies for electrochemical applications. Electrochimica Acta, 2005, 50, 1863-1869.	5.2	9
61	Towards carboxylic acid-functionalized aniline monomers: Chemical synthesis, electropolymerization and characterization. Progress in Organic Coatings, 2016, 99, 429-436.	3.9	9
62	Use of Modified Colloids and Membranes to Remove Metal Ions from Contaminated Solutions. Colloids and Interfaces, 2018, 2, 19.	2.1	9
63	Flexible and conductive multilayer films based on the assembly of PEDOT:PSS and water soluble polythiophenes. Organic Electronics, 2017, 46, 263-269.	2.6	8
64	Poly(allylamine) plasma polymer coatings for an efficient retention of Ni(II) ions by ultrafiltration membranes. Plasma Processes and Polymers, 2019, 16, 1800134.	3.0	8
65	Predictive tools for selection of appropriate polyelectrolyte multilayer film for the functionalization of organic membranes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 486, 153-160.	4.7	7
66	Influence of pre-grafted pyrrole-based silane on the electrodeposition and chemical properties of polypyrrole films. Synthetic Metals, 2018, 246, 220-229.	3.9	7
67	pH-Responsive PEG/PAA Multilayer Assemblies for Reversible Adhesion of Micro-Objects. ACS Applied Polymer Materials, 2020, 2, 5646-5653.	4.4	7
68	Characterization of an ultrafiltration membrane modified by sorption of branched polyethyleneimine. Desalination and Water Treatment, 2009, 1, 186-193.	1.0	6
69	PEDOT-PSS based 2-in-1 step-by-step films: A refined study. Synthetic Metals, 2014, 194, 38-46.	3.9	6
70	Self-assembly of polyelectrolytes for the removal of metal cations from aqueous solutions. Journal of Environmental Chemical Engineering, 2015, 3, 763-769.	6.7	6
71	Electrodeposition Behavior, Physicochemical Properties and Corrosion Resistance of Niâ€“Co Coating Modified by Gelatin Additive. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 1059-1069.	1.1	6
72	Chemical and biological sensors based on modified electrodes with electropolymerized diamines. , 2001, , 561-571.		6

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73	In vitro induction of differentiation by retinoic acid in an immortalized olfactory neuronal cell line. Acta Histochemica, 2007, 109, 111-121.	1.8	5
74	Novel strategy to prepare polyanilineâ€"Modified SiO2/TiO2 composite particles. Synthetic Metals, 2013, 181, 104-109.	3.9	5
75	Development of new sticky and conducting polymer surfaces for MEMS applications. Synthetic Metals, 2021, 276, 116757.	3.9	5
76	Investigation of electrochemical oxidative coupling of 3 and 6 substituted carbazoles. Journal of Electroanalytical Chemistry, 2021, 894, 115356.	3.8	5
77	Combined elastic neutron scattering experiments and molecular dynamics simulations on the concentrated liquid electrolyte NaIÂ·3.3NH3. Journal of Molecular Liquids, 2003, 108, 1-19.	4.9	4
78	Evaluation of Adhesion Forces for the Manipulation of Micro-Objects in Submerged Environment through Deposition of pH Responsive Polyelectrolyte Layers. Langmuir, 2016, 32, 102-111.	3.5	3
79	Elaboration of thin colloidal silica films with controlled thickness and wettability. Comptes Rendus Chimie, 2016, 19, 665-673.	0.5	3
80	Conductive multilayer film based on composite materials made of conjugated polyelectrolytes and inorganic particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 586, 124290.	4.7	3
81	Elaboration of Transparent Polymeric Films Trapping Copper Ions by Complexation. Journal of the Electrochemical Society, 2004, 151, C245.	2.9	1
82	Electrochemical polymerization of 1,2-ethanedithiol as a new way to synthesize polyethylenedisulfide. Polymer, 2008, 49, 1743-1747.	3.8	1
83	Investigation of polycarbazoles thin films prepared by electrochemical oxidation of 3- and 9-substituted carbazoles. Progress in Organic Coatings, 2022, 162, 106563.	3.9	1
84	Electrodeposited Copolymer Films with Tunable Conductivity. Electrochem, 2020, 1, 358-366.	3.3	0
85	Electrodeposition and Characterization of Conducting Polymer Films Obtained from Carbazole and 2-(9H-carbazol-9-yl)acetic Acid. Electrochem, 2022, 3, 322-336.	3.3	0