

# Paulo R Bueno

## List of Publications by Year in descending order

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200  
papers

7,360  
citations

53751

45  
h-index

76872

74  
g-index

201  
all docs

201  
docs citations

201  
times ranked

6381  
citing authors

#	ARTICLE	IF	CITATIONS
1	A new SnO <sub>2</sub> -based varistor system. Journal of Materials Science Letters, 1995, 14, 692.	0.5	272
2	SnO <sub>2</sub> , ZnO and related polycrystalline compound semiconductors: An overview and review on the voltage-dependent resistance (non-ohmic) feature. Journal of the European Ceramic Society, 2008, 28, 505-529.	2.8	252
3	Theoretical models for ac impedance of finite diffusion layers exhibiting low frequency dispersion. Journal of Electroanalytical Chemistry, 1999, 475, 152-163.	1.9	228
4	Preparation and characterization of ceria nanospheres by microwave-hydrothermal method. Materials Letters, 2008, 62, 4509-4511.	1.3	206
5	An optimised electrochemical biosensor for the label-free detection of C-reactive protein in blood. Biosensors and Bioelectronics, 2013, 39, 94-98.	5.3	192
6	Role of oxygen at the grain boundary of metal oxide varistors: A potential barrier formation mechanism. Applied Physics Letters, 2001, 79, 48-50.	1.5	163
7	Investigation of the electrical properties of SnO <sub>2</sub> varistor system using impedance spectroscopy. Journal of Applied Physics, 1998, 84, 3700-3705.	1.1	150
8	A polaronic stacking fault defect model for CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> material: an approach for the origin of the huge dielectric constant and semiconducting coexistent features. Journal Physics D: Applied Physics, 2009, 42, 055404.	1.3	143
9	Surface Passivation of Nanoporous TiO <sub>2</sub> via Atomic Layer Deposition of ZrO <sub>2</sub> for Solid-State Dye-Sensitized Solar Cell Applications. Journal of Physical Chemistry C, 2009, 113, 18385-18390.	1.5	141
10	Reaction Pathway to the Synthesis of Anatase via the Chemical Modification of Titanium Isopropoxide with Acetic Acid. Chemistry of Materials, 2008, 20, 143-150.	3.2	140
11	Title is missing!. Journal of Materials Science Letters, 1997, 16, 634-638.	0.5	127
12	Synthesis and characterization of mesoporous TiO <sub>2</sub> nanostructured films prepared by a modified sol-gel method for application in dye solar cells. Ceramics International, 2011, 37, 1017-1024.	2.3	105
13	Microstructure and electric properties of a SnO <sub>2</sub> based varistor. Ceramics International, 1999, 25, 1-6.	2.3	102
14	Nature of the Schottky-type barrier of highly dense SnO <sub>2</sub> systems displaying nonohmic behavior. Journal of Applied Physics, 2000, 88, 6545-6548.	1.1	99
15	Non-Ohmic and dielectric properties of a Ca <sub>2</sub> Cu <sub>2</sub> Ti <sub>4</sub> O <sub>12</sub> polycrystalline system. Applied Physics Letters, 2006, 89, 212102.	1.5	98
16	Nanostructured Li Ion Insertion Electrodes. 1. Discussion on Fast Transport and Short Path for Ion Diffusion. Journal of Physical Chemistry B, 2003, 107, 8868-8877.	1.2	92
17	Effect of oxidizing and reducing atmospheres on the electrical properties of dense SnO <sub>2</sub> -based varistors. Journal of the European Ceramic Society, 2001, 21, 161-167.	2.8	86
18	Capacitance Spectroscopy: A Versatile Approach To Resolving the Redox Density of States and Kinetics in Redox-Active Self-Assembled Monolayers. Journal of Physical Chemistry B, 2012, 116, 8822-8829.	1.2	85

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19	Preparation of CeO <sub>2</sub> by a simple microwave-hydrothermal method. Solid State Ionics, 2009, 180, 288-291.	1.3	81
20	The capacitive sensing of NS1 Flavivirus biomarker. Biosensors and Bioelectronics, 2017, 87, 949-956.	5.3	80
21	A Dielectric Model of Self-Assembled Monolayer Interfaces by Capacitive Spectroscopy. Langmuir, 2012, 28, 9689-9699.	1.6	79
22	Comparing label free electrochemical impedimetric and capacitive biosensing architectures. Biosensors and Bioelectronics, 2014, 57, 96-102.	5.3	77
23	Title is missing!. Journal of Materials Science: Materials in Electronics, 1999, 10, 321-327.	1.1	75
24	Label free redox capacitive biosensing. Biosensors and Bioelectronics, 2013, 50, 437-440.	5.3	74
25	An impedimetric biosensor to test neat serum for dengue diagnosis. Sensors and Actuators B: Chemical, 2015, 213, 150-154.	4.0	74
26	Impedance Spectroscopy Analysis of the Effect of TiO <sub>2</sub> Blocking Layers on the Efficiency of Dye Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 12415-12421.	1.5	73
27	Sensitive Affimer and Antibody Based Impedimetric Label-Free Assays for C-Reactive Protein. Analytical Chemistry, 2012, 84, 6553-6560.	3.2	68
28	Label-free Capacitive Diagnostics: Exploiting Local Redox Probe State Occupancy. Analytical Chemistry, 2014, 86, 2559-2564.	3.2	67
29	Redox Capacitive Assaying of C-Reactive Protein at a Peptide Supported Aptamer Interface. Analytical Chemistry, 2018, 90, 3005-3008.	3.2	66
30	Electrical properties of the SnO <sub>2</sub> -based varistor. Journal of Materials Science: Materials in Electronics, 1998, 9, 159-165.	1.1	65
31	Dye-sensitized solar cell architecture based on indium-tin oxide nanowires coated with titanium dioxide. Scripta Materialia, 2007, 57, 277-280.	2.6	64
32	Measuring Quantum Capacitance in Energetically Addressable Molecular Layers. Analytical Chemistry, 2014, 86, 1337-1341.	3.2	62
33	Dielectric spectroscopy analysis of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> polycrystalline systems. Applied Physics Letters, 2006, 89, 191117.	1.5	60
34	Nanoscale effects and polaronic relaxation in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ . Solid State Communications, 2011, 151, 173-176.	0.9	59
35	Elucidating Capacitance and Resistance Terms in Confined Electroactive Molecular Layers. Analytical Chemistry, 2013, 85, 411-417.	3.2	58
36	Perspectives on and Precautions for the Uses of Electric Spectroscopic Methods in Label-free Biosensing Applications. ACS Sensors, 2019, 4, 2216-2227.	4.0	56

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37	Evaluation of the effect of the stoichiometric ratio of Ca/Cu on the electrical and microstructural properties of the $\text{CaCu}_{3-x}\text{Ti}_4\text{O}_{12}$ polycrystalline system. Journal Physics D: Applied Physics, 2009, 42, 185503.	1.3	55
38	Analysis of the admittance-frequency and capacitance-voltage of dense $\text{SnO}_2$ -CoO-based varistor ceramics. Journal of Applied Physics, 2002, 91, 6007-6014.	1.1	53
39	Sintering and mass transport features of $(\text{Sn,Ti})\text{O}_2$ polycrystalline ceramics. Journal of the European Ceramic Society, 2003, 23, 887-896.	2.8	53
40	Sol-gel synthesis of mesoporous $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ thin films and their gas sensing response. Journal of Solid State Chemistry, 2010, 183, 1209-1214.	1.4	53
41	Synchrotron Structural Characterization of Electrochemically Synthesized Hexacyanoferrates Containing $\text{K}^+$ : A Revisited Analysis of Electrochemical Redox. Journal of Physical Chemistry C, 2008, 112, 13264-13271.	1.5	50
42	The effect of cooling rate during hydrothermal synthesis of ZnO nanorods. Journal of Crystal Growth, 2009, 311, 4102-4108.	0.7	49
43	Impedance spectroscopy analysis of $\text{TiO}_2$ thin film gas sensors obtained from water-based anatase colloids. Sensors and Actuators B: Chemical, 2009, 139, 447-452.	4.0	48
44	Nanoscale origins of super-capacitance phenomena. Journal of Power Sources, 2019, 414, 420-434.	4.0	48
45	A dual marker label free electrochemical assay for Flavivirus dengue diagnosis. Biosensors and Bioelectronics, 2018, 100, 519-525.	5.3	46
46	Dynamic Processes in the Coloration of $\text{WO}_3$ by Lithium Insertion. Journal of the Electrochemical Society, 2001, 148, E302.	1.3	45
47	Capacitance spectroscopy and density functional theory. Physical Chemistry Chemical Physics, 2015, 17, 9375-9382.	1.3	45
48	Nature of potential barrier in $(\text{Ca}_{1/4}\text{Cu}_{3/4})\text{TiO}_3$ polycrystalline perovskite. Solid State Communications, 2006, 138, 1-4.	0.9	44
49	Elucidating Redox-Level Dispersion and Local Dielectric Effects within Electroactive Molecular Films. Analytical Chemistry, 2014, 86, 1997-2004.	3.2	44
50	Synthesis and electrochromic behavior of lithium-doped $\text{WO}_3$ films. Journal of Non-Crystalline Solids, 2001, 290, 115-121.	1.5	43
51	Changeover during in Situ Compositional Modulation of Hexacyanoferrate (Prussian Blue) Material. Journal of the American Chemical Society, 2006, 128, 17146-17152.	6.6	42
52	Penicillinase-based amperometric biosensor for penicillin G. Electrochemistry Communications, 2014, 38, 131-133.	2.3	42
53	Electrochromic properties of lithium doped $\text{WO}_3$ films prepared by the sol-gel process. Electrochimica Acta, 2001, 46, 1977-1981.	2.6	41
54	Ionic conductivity of $\text{Bi}_4\text{Ti}_0.2\text{V}_{1.8}\text{O}_{10.7}$ polycrystalline ceramics obtained by the polymeric precursor route. Materials Letters, 2003, 57, 2540-2544.	1.3	41

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55	Low-Voltage Varistor Based on (Sn,Ti)O <sub>2</sub> Ceramics. Journal of the American Ceramic Society, 2002, 85, 282-284.	1.9	41
56	Importance of oxygen atmosphere to recover the ZnO-based varistors properties. Journal of Materials Science, 2006, 41, 6221-6227.	1.7	41
57	Common Principles of Molecular Electronics and Nanoscale Electrochemistry. Analytical Chemistry, 2018, 90, 7095-7106.	3.2	40
58	Effect of the addition of ZnO seeds on the electrical proprieties of ZnO-based varistors. Materials Chemistry and Physics, 2003, 80, 512-516.	2.0	39
59	Admittance and dielectric spectroscopy of polycrystalline semiconductors. Journal of the European Ceramic Society, 2007, 27, 4313-4320.	2.8	39
60	Impedance-derived electrochemical capacitance spectroscopy for the evaluation of lectin-glycoprotein binding affinity. Biosensors and Bioelectronics, 2014, 62, 102-105.	5.3	39
61	Charge transport and energy storage at the molecular scale: from nanoelectronics to electrochemical sensing. Chemical Society Reviews, 2020, 49, 7505-7515.	18.7	39
62	Sol-gel nonhydrolytic synthesis of a hybrid organic-inorganic electrolyte for application in lithium-ion devices. Solid State Ionics, 2004, 166, 83-88.	1.3	38
63	Conventional and microwave sintering of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> /CaTiO <sub>3</sub> ceramic composites: non-ohmic and dielectric properties. Journal Physics D: Applied Physics, 2008, 41, 152004.	1.3	38
64	Comparative Electrical Behavior at Low and High Current of SnO <sub>2</sub> and ZnO-Based Varistors. Journal of the American Ceramic Society, 2008, 91, 2402-2404.	1.9	38
65	Nanoscale electromechanical properties of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> ceramics. Journal of Applied Physics, 2011, 110, .	1.1	37
66	Redox-tagged peptide for capacitive diagnostic assays. Biosensors and Bioelectronics, 2015, 68, 281-287.	5.3	37
67	Doping saturation in dye-sensitized solar cells based on ZnO:Ga nanostructured photoanodes. Electrochimica Acta, 2011, 56, 6503-6509.	2.6	36
68	Density functional theory and an experimentally-designed energy functional of electron density. Physical Chemistry Chemical Physics, 2016, 18, 25984-25992.	1.3	36
69	Comparative degradation of ZnO- and SnO <sub>2</sub> -based polycrystalline non-ohmic devices by current pulse stress. Journal Physics D: Applied Physics, 2008, 41, 122002.	1.3	35
70	Dielectric behaviour of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> -epoxy composites. Materials Research, 2008, 11, 85-88.	0.6	35
71	The dielectric suppress and the control of semiconductor non-Ohmic feature of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> by means of tin doping. Applied Physics Letters, 2011, 98, 132906.	1.5	35
72	Immittance Electroanalysis in Diagnostics. Analytical Chemistry, 2015, 87, 944-950.	3.2	35

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73	Relaxation processes in the coloration of amorphous WO <sub>3</sub> thin films studied by combined impedance and electro-optical measurements. <i>Journal of Applied Physics</i> , 2004, 96, 853-859.	1.1	34
74	Separation of dielectric and space charge polarizations in CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> •CaTiO <sub>3</sub> composite polycrystalline systems. <i>Applied Physics Letters</i> , 2007, 90, 142912.	1.5	34
75	Coloring ionic trapping states in WO <sub>3</sub> and Nb <sub>2</sub> O <sub>5</sub> electrochromic materials. <i>Electrochimica Acta</i> , 2008, 53, 5533-5539.	2.6	34
76	Quantum capacitance as a reagentless molecular sensing element. <i>Nanoscale</i> , 2017, 9, 15362-15370.	2.8	34
77	Grain-boundary segregation and precipitates in La <sub>2</sub> O <sub>3</sub> and Pr <sub>2</sub> O <sub>3</sub> doped SnO <sub>2</sub> •CoO-based varistors. <i>Journal of the European Ceramic Society</i> , 2003, 23, 1875-1880.	2.8	33
78	A Comparative Study of Thermal Conductivity in ZnO- and SnO <sub>2</sub> -Based Varistor Systems. <i>Journal of the American Ceramic Society</i> , 2005, 88, 2629-2631.	1.9	33
79	Electrostatic force microscopy as a tool to estimate the number of active potential barriers in dense non-Ohmic polycrystalline SnO <sub>2</sub> devices. <i>Applied Physics Letters</i> , 2006, 89, 152102.	1.5	33
80	Serological point-of-care and label-free capacitive diagnosis of dengue virus infection. <i>Biosensors and Bioelectronics</i> , 2020, 151, 111972.	5.3	33
81	P-type semiconducting gas sensing behavior of nanoporous rf sputtered CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> thin films. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	32
82	Real-time monitoring and kinetic parameter estimation of the affinity interaction of jArtinM and rArtinM with peroxidase glycoprotein by the electrogravimetric technique. <i>Biosensors and Bioelectronics</i> , 2010, 26, 36-42.	5.3	32
83	Structural analysis of pure and LiCF <sub>3</sub> SO <sub>3</sub> -doped amorphous WO <sub>3</sub> electrochromic films and discussion on coloration kinetics. <i>Journal of Applied Physics</i> , 2004, 96, 2102-2109.	1.1	31
84	Synthesis of SnO <sub>2</sub> by chemical routes and its use in varistors production. <i>Journal of the European Ceramic Society</i> , 2007, 27, 3893-3896.	2.8	31
85	Label-free capacitive assaying of biomarkers for molecular diagnostics. <i>Nature Protocols</i> , 2020, 15, 3879-3893.	5.5	31
86	Photoluminescent CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> •Based Thin Films Synthesized by a Sol•Gel Method. <i>Journal of the American Ceramic Society</i> , 2008, 91, 4162-4164.	1.9	30
87	Sensitive label-free electron chemical capacitive signal transduction for D-dimer electroanalysis. <i>Electrochimica Acta</i> , 2015, 182, 946-952.	2.6	30
88	Electrochromic properties of undoped and lithium doped Nb <sub>2</sub> O <sub>5</sub> films prepared by the sol•gel method. <i>Electrochimica Acta</i> , 2001, 46, 2113-2118.	2.6	29
89	Hybrid Organic•Inorganic Polymer:• A New Approach for the Development of Decoupled Polymer Electrolytes. <i>Chemistry of Materials</i> , 2005, 17, 4561-4563.	3.2	29
90	Optimized Diagnostic Assays Based on Redox Tagged Bioreceptive Interfaces. <i>Analytical Chemistry</i> , 2015, 87, 12137-12144.	3.2	29

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91	Thermal conductivity features of ZnO-based varistors using the laser-pulse method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 371, 377-381.	2.6	28
92	Resistive-Switching Behavior in Polycrystalline $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ Nanorods. ACS Applied Materials & Interfaces, 2011, 3, 500-504.	4.0	28
93	The Mesoscopic Electrochemistry of Molecular Junctions. Scientific Reports, 2016, 6, 18400.	1.6	28
94	Sensitivity of $\text{SnO}_2$ non-ohmic behavior to the sintering process and to the addition of $\text{La}_2\text{O}_3$ . Journal of the European Ceramic Society, 2001, 21, 1179-1185.	2.8	27
95	$\text{Li}^+$ insertion into pure and doped amorphous $\text{WO}_3$ films. Correlations between coloration kinetics, charge and mass accumulation. Solid State Ionics, 2003, 158, 415-426.	1.3	27
96	Mechanism for Interplay between Electron and Ionic Fluxes in $\text{K}_2\text{Fe}[\text{Fe}(\text{CN})_6]\cdot x\text{H}_2\text{O}$ Compounds. Journal of Physical Chemistry B, 2006, 110, 2715-2722.	1.2	27
97	Comparison of non-Ohmic accelerated ageing of the ZnO- and $\text{SnO}_2$ -based voltage dependent resistors. Journal Physics D: Applied Physics, 2009, 42, 015503.	1.3	27
98	Electrochromic Switching Mechanism of Iron Hexacyanoferrates Molecular Compounds: The Role of $\text{Fe}^{2+}(\text{CN})_6$ Vacancies. Journal of Physical Chemistry C, 2009, 113, 9916-9920.	1.5	27
99	Nonohmic behavior of $\text{SnO}_2$ -MnO polycrystalline ceramics. II. Analysis of admittance and dielectric spectroscopy. Journal of Applied Physics, 2004, 96, 3811-3817.	1.1	26
100	Crossover from capacitive to pseudoinductive charge-relaxation in organic-polymeric light-emitting diodes. Applied Physics Letters, 2005, 87, 013505.	1.5	26
101	Graphene-based protein biomarker detection. Bioanalysis, 2015, 7, 725-742.	0.6	26
102	Espectroscopia de impedância eletroquímica aplicada ao estudo das reações heterogêneas em eletrodos dimensionalmente estáveis. Química Nova, 2006, 29, 796-804.	0.3	25
103	Nanoscale Electrochemistry of Molecular Contacts. SpringerBriefs in Applied Sciences and Technology, 2018, , .	0.2	25
104	An outlook on electrochemical approaches for molecular diagnostics assays and discussions on the limitations of miniaturized technologies for point-of-care devices. Sensors and Actuators Reports, 2022, 4, 100087.	2.3	25
105	The Influence of Excess Precipitate on the Non-Ohmic Properties of $\text{SnO}_2$ -Based Varistors. , 2003, 10, 63-68.		24
106	The failure analyses on ZnO varistors used in high tension devices. Journal of Materials Science, 2005, 40, 5591-5596.	1.7	24
107	Impedance spectroscopy analysis of $\text{SnO}_2$ thick-films gas sensors. Journal of Materials Science: Materials in Electronics, 2008, 19, 1169-1175.	1.1	24
108	Quartz Crystal Microbalance monitoring the real-time binding of lectin with carbohydrate with high and low molecular mass. Microchemical Journal, 2008, 89, 153-158.	2.3	24

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109	Electronic Perspective on the Electrochemistry of Prussian Blue Films. Journal of the Electrochemical Society, 2009, 156, P74.	1.3	24
110	Electrochemical performance of cathodes based on LiMn2O4 spinel obtained by combustion synthesis. Journal of Power Sources, 2001, 97-98, 447-449.	4.0	23
111	Influence of La2O3, Pr2O3 and CeO2 on the nonlinear properties of SnO2 multicomponent varistors. Materials Chemistry and Physics, 2002, 74, 150-153.	2.0	22
112	Nonohmic behavior of SnO2-MnO polycrystalline ceramics. I. Correlations between microstructural morphology and nonohmic features. Journal of Applied Physics, 2004, 96, 2693-2700.	1.1	22
113	Mapping the ionic fingerprints of molecular monolayers. Physical Chemistry Chemical Physics, 2017, 19, 15098-15109.	1.3	22
114	Chemical Hardness of Mesoscopic Electrochemical Systems Directly Analyzed from Experimental Data. Journal of Physical Chemistry C, 2019, 123, 21213-21223.	1.5	22
115	Dielectric relaxation and dc conductivity on the PVOH-CF3COONH4 polymer system. Ionics, 2009, 15, 537-544.	1.2	21
116	Pseudocapacitance phenomena and applications in biosensing devices. Electrochimica Acta, 2019, 306, 175-184.	2.6	21
117	Kinetic Aspects of Ion Exchange in $\text{KhFek}[\text{Fe}(\text{CN})_6]\text{I} \cdot \text{mH}_2\text{O}$ Compounds: A Combined Electrical and Mass Transfer Functions Approach. Journal of Physical Chemistry B, 2006, 110, 19352-19363.	1.2	20
118	Mesoscopic behaviour of multi-layered graphene: the meaning of supercapacitance revisited. Physical Chemistry Chemical Physics, 2017, 19, 6792-6806.	1.3	20
119	Ferroelectric and microstructural characteristics of SrBi2Ta2O9 thin films crystallized by the rapid thermal annealing process. Journal of Applied Physics, 2001, 89, 3416-3419.	1.1	19
120	Influence of degradation on the electrical conduction process in ZnO and SnO2-based varistors. Journal of Applied Physics, 2010, 108, .	1.1	19
121	The self-assembly of redox active peptides: Synthesis and electrochemical capacitive behavior. Biopolymers, 2016, 106, 357-367.	1.2	19
122	Comparing glucose and urea enzymatic electrochemical and optical biosensors based on polyaniline thin films. Analytical Methods, 2020, 12, 4199-4210.	1.3	19
123	How Cr2O3 influences the microstructure and nonohmic features of the SnO2(Cox, Mn1-x)O-based varistor system. Journal of the European Ceramic Society, 2006, 26, 1221-1229.	2.8	18
124	Reagentless Detection of Low-Molecular-Weight Triamterene Using Self-Doped TiO2 Nanotubes. Analytical Chemistry, 2018, 90, 7651-7658.	3.2	17
125	Resonant x-ray diffraction as a tool to calculate mixed valence ratios: Application to Prussian Blue materials. Applied Physics Letters, 2008, 92, 264103.	1.5	16
126	Grain size effect on the electrical response of SnO2 thin and thick film gas sensors. Materials Research, 2009, 12, 83-87.	0.6	16



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127	Electron transfer and conductance quantum. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 26109-26112.	1.3	16
128	Measuring quantum conductance and capacitance of graphene using impedance-derived capacitance spectroscopy. <i>Carbon</i> , 2021, 184, 821-827.	5.4	16
129	Mechanical Properties and Dimensional Effects of ZnO- and SnO <sub>2</sub> -Based Varistors. <i>Journal of the American Ceramic Society</i> , 2008, 91, 3105-3108.	1.9	15
130	Glycoprotein assay based on the optimized immittance signal of a redox tagged and lectin-based receptive interface. <i>Biosensors and Bioelectronics</i> , 2016, 83, 368-378.	5.3	15
131	Field effect in molecule-gated switches and the role of target-to-receptor size ratio in biosensor sensitivity. <i>Biosensors and Bioelectronics</i> , 2019, 127, 215-220.	5.3	15
132	The nanoscopic principles of capacitive ion sensing interfaces. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 3770-3774.	1.3	15
133	Impact of surface roughness on the self-assembling of molecular films onto gold electrodes for label-free biosensing applications. <i>Electrochimica Acta</i> , 2021, 378, 138137.	2.6	15
134	Introducing mesoscopic charge transfer rates into molecular electronics. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 10828-10832.	1.3	14
135	Impedance of carrier injection at the metal-organic interface mediated by surface states in electron-only tris(8-hydroxyquinoline) aluminium (Alq <sub>3</sub> ) thin layers. <i>Chemical Physics Letters</i> , 2008, 455, 242-248.	1.2	13
136	Kinetics of interface state-limited hole injection in 1,1'-naphthylphenylbiphenyl diamine (1,1'-NPD) thin layers. <i>Synthetic Metals</i> , 2009, 159, 480-486.	2.1	13
137	Critical Water Effect on the Plasmon Band and Visible Light Activity of Au/ZnO Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2014, 118, 2018-2027.	1.5	13
138	The influence of area/volume ratio on microstructure and non-Ohmic properties of SnO <sub>2</sub> -based varistor ceramic blocks. <i>Journal of Materials Science: Materials in Electronics</i> , 2009, 20, 49-54.	1.1	12
139	Electrical relaxation in proton conductor composites based on (NH <sub>4</sub> )H <sub>2</sub> PO <sub>4</sub> /TiO <sub>2</sub> . <i>Ionics</i> , 2009, 15, 329-336.	1.2	12
140	The effect of TiO <sub>2</sub> on the microstructural and electrical properties of low voltage varistor based on (Sn,Ti)O <sub>2</sub> ceramics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 457-461.	0.8	12
141	Electrogravimetric Real-Time and in Situ Michaelis-Menten Enzymatic Kinetics: Progress Curve of Acetylcholinesterase Hydrolysis. <i>Journal of Physical Chemistry B</i> , 2010, 114, 16605-16610.	1.2	12
142	Evaluating the Equilibrium Association Constant between ArtinM Lectin and Myeloid Leukemia Cells by Impedimetric and Piezoelectric Label Free Approaches. <i>Biosensors</i> , 2014, 4, 358-369.	2.3	12
143	Conceptual density functional theory for electron transfer and transport in mesoscopic systems. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 6184-6195.	1.3	12
144	EQCM study during lithium insertion/deinsertion processes in Nb <sub>2</sub> O <sub>5</sub> films prepared by polymeric precursor method. <i>Solid State Ionics</i> , 2005, 176, 1175-1180.	1.3	11

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145	Optimized electrochemical biosensor for human prostatic acid phosphatase. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 1106-1112.	4.0	11
146	A nanoscale redox-active composite as a low-fouling interface for capacitive assaying. <i>Sensors and Actuators B: Chemical</i> , 2019, 291, 493-501.	4.0	11
147	Electrochemical impedance spectroscopy as a tool to estimate thickness in PB films. <i>Electrochemistry Communications</i> , 2006, 8, 371-374.	2.3	10
148	Relationship between grainâ€¦boundary capacitance and bulk shallow donors in SnO<sub>2</sub> polycrystalline semiconductor. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 1694-1698.	0.8	10
149	Lowâ€¦Temperature Sputtering Deposition of Aligned Polycrystalline CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> Nanorods. <i>Journal of the American Ceramic Society</i> , 2010, 93, 51-54.	1.9	9
150	INSEL: an in silico method for optimizing and exploring biorecognition assays. <i>Chemical Communications</i> , 2013, 49, 10868.	2.2	9
151	Quantum Mechanical Meaning of the Charge Transfer Resistance. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3151-3162.	1.5	9
152	Quantitative structural analysis of the transition from LT-LixCoO2 to HT-LixCoO2 using the rietveld method: correlation between structure and electrochemical performance. <i>Journal of Power Sources</i> , 2004, 125, 103-113.	4.0	8
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