Vessela Tsakova

List of Publications by Year
in descending order

74 papers	2,001 citations	218677 26 h-index	265206 42 g-index
75 all docs	75 docs citations	75 times ranked	1637 citing authors

#	Article	IF	Citations
1	Nucleation, growth and branching of polyaniline from microelectrode experiments. Electrochimica Acta, 1992, 37, 2255-2261.	5.2	152
2	Gold Nanoparticles in Nonenzymatic Electrochemical Detection of Sugars. Electroanalysis, 2006, 18, 1937-1942.	2.9	124
3	How to affect number, size, and location of metal particles deposited in conducting polymer layers. Journal of Solid State Electrochemistry, 2008, 12, 1421-1434.	2.5	90
4	Electrocatalytically active nanocomposite from palladium nanoparticles and polyaniline: Oxidation of hydrazine. Sensors and Actuators B: Chemical, 2010, 150, 271-278.	7.8	89
5	Crystallization kinetics of Pd in composite films of PEDT. Journal of Electroanalytical Chemistry, 2001, 500, 574-583.	3.8	87
6	Au nanoparticleâ€"polyaniline nanocomposite layers obtained through layer-by-layer adsorption for the simultaneous determination of dopamine and uric acid. Electrochimica Acta, 2011, 56, 3693-3699.	5.2	71
7	Anodic polymerization of 3,4-ethylenedioxythiophene from aqueous microemulsions. Electrochimica Acta, 2001, 46, 759-768.	5.2	70
8	Electrochemical formation and stability of polyaniline films. Electrochimica Acta, 1991, 36, 1579-1583.	5.2	64
9	Electrochemical microsystem technologies: from fundamental research to technical systems. Electrochimica Acta, 1999, 44, 3605-3627.	5.2	61
10	Electrosynthesis and analytical characterisation of polypyrrole thin films modified with copper nanoparticles. Journal of Materials Chemistry, 2001, 11, 1434-1440.	6.7	61
11	Growth of polyaniline films under pulse potentiostatic conditions. Journal of Electroanalytical Chemistry, 1993, 346, 85-97.	3.8	59
12	Electrochemical incorporation of copper in polyaniline layers. Electrochimica Acta, 2001, 46, 4213-4222.	5.2	54
13	Title is missing!. Journal of Applied Electrochemistry, 2002, 32, 701-707.	2.9	40
14	Electroless versus electrodriven deposition of silver crystals in polyaniline. Electrochimica Acta, 2005, 50, 5616-5623.	5.2	37
15	Probabilistic aspects of mercury electro-deposition on a platinum single crystal cathodeâ€"I. Electrochimica Acta, 1985, 30, 133-142.	5.2	35
16	Conducting polymers in electrochemical sensing: factors influencing the electroanalytical signal. Analytical and Bioanalytical Chemistry, 2016, 408, 7231-7241.	3.7	35
17	Silver electrocrystallization at polyaniline-coated electrodes. Electrochimica Acta, 2004, 49, 913-921.	5.2	33
18	Conductometric transducing in electrocatalytical sensors: Detection of ascorbic acid. Electrochemistry Communications, 2006, 8, 643-646.	4.7	33

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19	Electrochemical formation of bi-metal (copperâ€“palladium) electrocatalyst supported on poly-3,4-ethylenedioxythiophene. Electrochimica Acta, 2006, 52, 816-824.	5.2	33
20	Electrochemical deposition of copper in polyaniline films â€” number density and spatial distribution of deposited metal clusters. Electrochemistry Communications, 2000, 2, 511-515.	4.7	32
21	Electrochemical polymerization of 3,4-ethylenedioxythiophene in the presence of dodecylsulfate and polysulfonic anionsâ€"An acoustic impedance study. Electrochimica Acta, 2014, 122, 21-27.	5.2	32
22	Nucleation of silver on a polyaniline-coated platinum electrode. Electrochimica Acta, 1991, 36, 1151-1155.	5.2	28
23	Role of polymer synthesis conditions for the copper electrodeposition in polyaniline. Electrochemistry Communications, 2001, 3, 312-316.	4.7	28
24	Composition of the microemulsion and its influence on the polymerisation and redox activation of PEDOT. Journal of Electroanalytical Chemistry, 2003, 547, 125-133.	3.8	28
25	Ascorbic Acid Oxidation at Nonmodified and Copper-Modified Polyaniline and Poly-ortho-methoxyaniline Coated Electrodes. Electroanalysis, 2006, 18, 807-813.	2.9	27
26	Palladium-modified polysulfonic acid-doped polyaniline layers for hydrazine oxidation in neutral solutions. Journal of Electroanalytical Chemistry, 2011, 661, 186-191.	3.8	26
27	Electrochemical synthesis and characterization of TiO2-polyaniline composite layers. Journal of Applied Electrochemistry, 2007, 38, 63-69.	2.9	25
28	An acoustic impedance study of PEDOT layers obtained in aqueous solution. Electrochimica Acta, 2016, 190, 285-293.	5.2	24
29	Role of the anionic dopant of poly(3,4-ethylenedioxythiophene) for the electroanalytical performance: electrooxidation of acetaminophen. Electrochimica Acta, 2015, 179, 343-349.	5.2	23
30	TiO2/WO3 hybrid structures produced through a sacrificial polymer layer technique for pollutant photo- and photoelectrooxidation under ultraviolet and visible light illumination. Journal of Applied Electrochemistry, 2012, 42, 121-129.	2.9	22
31	Copper modified poly(3,4-ethylenedioxythiophene). Synthetic Metals, 2004, 141, 287-292.	3.9	21
32	Analytical Applications of Electrodes Modified by Gold Nanoparticles: Dopamine Detection. Journal of Nanoscience and Nanotechnology, 2009, 9, 2407-2412.	0.9	21
33	Title is missing!. Journal of Applied Electrochemistry, 2002, 32, 709-715.	2.9	20
34	Comparative study on the electrochemical synthesis of polyaniline in the presence of mono- and poly(2-acrylamido-2-methyl-1-propanesulfonic) acid. Thin Solid Films, 2009, 517, 6681-6688.	1.8	20
35	Copper-modified poly(3,4-ethylenedioxythiophene) layers for selective determination of dopamine in the presence of ascorbic acid: I. Role of the polymer layer thickness. Journal of Solid State Electrochemistry, 2010, 14, 1947-1955.	2.5	19
36	Copper modified poly(3,4-ethylenedioxythiophene). Synthetic Metals, 2004, 141, 281-285.	3.9	18

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37	Copper electrocrystallization in PEDOT in presence and absence of copperâ€“polymer-stabilized species. Electrochimica Acta, 2005, 50, 1669-1674.	5.2	18
38	Effect of substrate transformations on the kinetics and thermodynamics of electrochemical phase formation. Electrochimica Acta, 1986, 31, 971-975.	5.2	17
39	Electrochemical formation and copper modification of poly-o-methoxyaniline. Thin Solid Films, 2005, 493, 88-95.	1.8	17
40	Microgravimetric study on the formation and redox behavior of poly(2-acrylamido-2-methyl-1-propanesulfonate)-doped thin polyaniline layers. Electrochimica Acta, 2011, 56, 4803-4811.	5.2	17
41	Electroanalytical determination of caffeic acid â€“ Factors controlling the oxidation reaction in the case of PEDOT-modified electrodes. Electrochimica Acta, 2019, 293, 439-446.	5.2	17
42	Voltammetric and conductometric behavior of nanocomposites of polyaniline and gold nanoparticles prepared by layer-by-layer technique. Journal of Solid State Electrochemistry, 2010, 14, 1261-1268.	2.5	16
43	Electroanalytical applications of nanocomposites from conducting polymers and metallic nanoparticles prepared by layer-by-layer deposition. Pure and Applied Chemistry, 2010, 83, 345-358.	1.9	14
44	Copper-modified poly(3,4-ethylenedioxythiophene) layers for selective determination of dopamine in the presence of ascorbic acid: II Role of the characteristics of the metal deposit. Journal of Solid State Electrochemistry, 2010, 14, 1957-1965.	2.5	13
45	Polyaniline doped with poly(acrylamidomethylpropanesulphonic acid): electrochemical behaviour and conductive properties in neutral solutions. Chemical Papers, 2013, 67, .	2.2	13
46	Poly(3,4-ethylenedioxythiophene)-modified electrodes for tryptophan voltammetric sensing. Journal of Electroanalytical Chemistry, 2019, 848, 113309.	3.8	13
47	Electrochemical formation and properties of thin polyaniline films on Au(111) and p-Si(111). Applied Physics A: Materials Science and Processing, 2007, 87, 405-409.	2.3	12
48	Electrochemically-Obtained Polysulfonic-Acids Doped Polyaniline Filmsâ€"A Comparative Study by Electrochemical, Microgravimetric and XPS Methods. Polymers, 2020, 12, 1050.	4.5	12
49	Theory of progressive nucleation and growth accounting for the ohmic drop in the electrolyte. I. Journal of Applied Electrochemistry, 1990, 20, 301-306.	2.9	11
50	Silver particles-modified polysulfonic acid-doped polyaniline layers: electroless deposition of silver in slightly acidic and neutral solutions. Journal of Solid State Electrochemistry, 2011, 15, 2553-2561.	2.5	11
51	High-density Pd nanoparticles distribution on PEDOT obtained through electroless metal deposition on pre-reduced polymer layers. Electrochimica Acta, 2017, 253, 128-133.	5.2	11
52	Theory of electrochemical nucleation and growthâ€"revisited?. Journal of Solid State Electrochemistry, 2020, 24, 2183-2185.	2.5	11
53	Electroreduction of Nitrate at Copper Electrodes and Copper-PANI Composite Layers. Zeitschrift Fur Physikalische Chemie, 2007, 221, 1123-1136.	2.8	10
54	Formation and electroanalytical performance of polyanilineâ€“palladium nanocomposites obtained via Layer-by-Layer adsorption and electroless metal deposition. Electrochimica Acta, 2013, 90, 157-165.	5.2	10

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55	Glycerol oxidation on Pd nanocatalysts obtained on PEDOT-coated graphite supports. Electrochimica Acta, 2019, 306, 643-650.	5.2	10
56	Automated Layerâ€byâ€Layer Deposition of Polyelectrolytes in Flow Mode. Macromolecular Materials and Engineering, 2009, 294, 441-444.	3.6	8
57	Pd-modified PEDOT layers obtained through electroless metal depositionâ€"electrooxidation of glycerol. Journal of Solid State Electrochemistry, 2016, 20, 3015-3023.	2.5	8
58	Electrochemical nucleation of mercury on platinum in the presence of organic additives. Journal of Applied Electrochemistry, 1989, 19, 819-822.	2.9	7
59	Temperature-treated polyaniline layers as support for Pd catalysts: electrooxidation of glycerol in alkaline medium. Journal of Solid State Electrochemistry, 2015, 19, 2811-2818.	2.5	7
60	Angular Dependence of Raman Spectra for Electroactive Polymer Films on a Platinum Electrode. Russian Journal of Electrochemistry, 2019, 55, 175-183.	0.9	7
61	Electroless deposition of silver on poly(3, 4-ethylenedioxythiophene): role of the organic ions used in the course of electrochemical synthesis. Chemical Papers, 2017, 71, 339-346.	2.2	6
62	Electroless deposition of palladium nanoparticles on poly(3,4-ethylene-dioxythiophene)â€"role of the electrode substrate. Journal of Solid State Electrochemistry, 2018, 22, 1901-1908.	2.5	6
63	Polysulfonate-doped polyanilinesâ€"oxidation of ascorbic acid and dopamine in neutral solution. Journal of Solid State Electrochemistry, 2020, 24, 3113-3123.	2.5	6
64	Glycerol oxidation at Pd nanocatalysts obtained through spontaneous metal deposition on carbon substrates. Electrochimica Acta, 2022, 427, 140871.	5.2	6
65	Conductive Polymer-Based Materials for Medical Electroanalytic Applications. Modern Aspects of Electrochemistry, 2013, , 283-342.	0.2	5
66	Carbon screen-printed electrodes for substrate-assisted electroless deposition of palladium. Journal of Electroanalytical Chemistry, 2021, 897, 115617.	3.8	5
67	Spontaneous Carbon-Support-Induced Metal Deposition. ACS Omega, 2022, 7, 3158-3166.	3.5	5
68	Probabilistic aspects of mercury electrodeposition on a platinum single crystal cathodeâ€"II. Electrochimica Acta, 1990, 35, 339-343.	5.2	4
69	Graphite electrode-assisted electroless deposition of palladium in the absence and presence of poly(3,4-ethylenedioxythiophene) coatings. Synthetic Metals, 2019, 247, 18-25.	3.9	4
70	PEDOT-supported Pd nanocatalysts â€" oxidation of formic acid. Electrochimica Acta, 2021, 374, 137931.	5.2	4
71	Electrochemically Obtained Polysulfonates Doped Poly(3,4-ethylenedioxythiophene) Filmsâ€"Effects of the Dopantâ€™s Chain Flexibility and Molecular Weight Studied by Electrochemical, Microgravimetric and XPS Methods. Polymers, 2021, 13, 2438.	4.5	4
72	Role of the doping ions for the electrocrystallization of silver on poly(3,4-ethylenedyoxythiophene)-modified electrodes. Electrochimica Acta, 2016, 217, 218-225.	5.2	3

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73	Electrochemistry of Electroactive Materials. Electrochimica Acta, 2011, 56, 3417-3418.	5.2	0
74	Alexander Milchevâ€”a tribute on the occasion of his 70th birthday. Journal of Solid State Electrochemistry, 2013, 17, 277-278.	2.5	0