Nicols Alonso Vante

List of Publications by Year in Descending Order

204 papers	7,333 citations	46 h-index	79 g-index
212 ext. papers	8,019 ext. citations	5.4 avg, IF	6.2 L-index

#	Paper	IF	Citations
204	Synthesis and electrocatalytic performance of N-doped graphene embedded with Co/CoO nanoparticles towards oxygen evolution and reduction reactions. *Catalysis Communications*, **2022**, 164, 106428	3.2	1
203	Highly active oxygen evolution reaction electrocatalyst based on defective-CeO2-x decorated MOF(Ni/Fe). *Electrochimica Acta*, **2022**, 403, 139630	6.7	1
202	Electrochemical interfaces on chalcogenides: Some structural perspectives and synergistic effects of single-surface active sites. *Current Opinion in Electrochemistry*, **2022**, 33, 100955	7.2	
201	Heterostructures based on transition metal chalcogenides and layered double hydroxides for enhanced water splitting. *Current Opinion in Electrochemistry*, **2022**, 101016	7.2	1
200	Recent Progress on Transition Metal Based Layered Double Hydroxides Tailored for Oxygen Electrode Reactions. *Catalysts*, **2021**, 11, 1394	4	2
199	Strengthening oxygen reduction activity and stability of carbon-supported platinum nanoparticles by fluorination. *Electrochimica Acta*, **2021**, 399, 139409	6.7	0
198	Boosting oxygen reduction activity and enhancing stability through structural transformation of layered lithium manganese oxide. *Nature Communications*, **2021**, 12, 3136	17.4	12
197	The effect on the electrocatalytic activity of the chemical interaction of selenium with palladium centers: oxygen reduction and methanol oxidation reactions in alkaline medium. *Journal of Physics Condensed Matter*, **2021**, 33,	1.8	1
196	Understanding the oxophilic effect on the hydrogen electrode reaction through PtM nanostructures. *Journal of Solid State Electrochemistry*, **2021**, 25, 187-194	2.6	5
195	Rational defect and anion chemistries in Co3O4 for enhanced oxygen evolution reaction. *Applied Catalysis B: Environmental*, **2021**, 281, 119535	21.8	45
194	Oxygen vacancies engineering by coordinating oxygen-buffering CeO2 with CoO nanorods as efficient bifunctional oxygen electrode electrocatalyst. *Journal of Energy Chemistry*, **2021**, 59, 615-625	12	11
193	FeCo nanoalloys embedded in nitrogen-doped carbon nanosheets/bamboo-like carbon nanotubes for the oxygen reduction reaction. *Inorganic Chemistry Frontiers*, **2021**, 8, 109-121	6.8	8
192	The Cerium/Boron Insertion Impact in Anatase Nano-Structures on the Photo-Electrochemical and Photocatalytic Response. *Surfaces*, **2021**, 4, 54-65	2.9	
191	High oxygen reduction reaction activity and durability of Pt catalyst photo-deposited on SnO2-coated and uncoated multi-walled carbon nanotubes. *Journal of Electroanalytical Chemistry*, **2021**, 896, 115147	4.1	
190	NiO/Ni/CNT as an Efficient Hydrogen Electrode Catalyst for a Unitized Regenerative Alkaline Microfluidic Cell. *ACS Applied Energy Materials*, **2020**, 3, 4746-4755	6.1	7
189	Photoelectrochemical hydrogen production (PEC H2) **2020**, 255-289		2
188	Unitized Regenerative Alkaline Microfluidic Cell Based on Platinum Group Metal-Free Electrode Materials. *ACS Applied Energy Materials*, **2020**, 3, 7397-7403	6.1	5

187	Insight into the Mechanisms of High Activity and Stability of Iridium Supported on Antimony-Doped Tin Oxide Aerogel for Anodes of Proton Exchange Membrane Water Electrolyzers. *ACS Catalysis*, **2020**, 10, 2508-2516	13.1	36
186	The Oxygen Reduction and Hydrogen Evolution Reactions on Carbon Supported Cobalt Diselenide Nanostructures. *Journal of the Electrochemical Society*, **2020**, 167, 026507	3.9	9
185	Alkaline hydrogen electrode and oxygen reduction reaction on PtxNi nanoalloys. *Journal of Electroanalytical Chemistry*, **2020**, 857, 113449	4.1	10
184	Oxygen reduction reaction on nanostructured Pt-based electrocatalysts: A review. *International Journal of Hydrogen Energy*, **2020**, 45, 31775-31797	6.7	53
183	Chemistry, Surface Electrochemistry, and Electrocatalysis of Carbon-Supported Palladium-Selenized Nanoparticles. *ACS Applied Energy Materials*, **2020**, 3, 11434-11444	6.1	6
182	The induced effect of chemical and photo-assisted deposition of molybdenum sulfide on carbon towards the hydrogen evolution reaction. *Journal of Electroanalytical Chemistry*, **2020**, 874, 114459	4.1	
181	In Situ Self-Supporting Cobalt Embedded in Nitrogen-Doped Porous Carbon as Efficient Oxygen Reduction Electrocatalysts. *ChemElectroChem*, **2020**, 7, 4024-4030	4.3	2
180	Cobalt-Based Multicomponent Oxygen Reduction Reaction Electrocatalysts Generated by Melamine Thermal Pyrolysis with High Performance in an Alkaline Hydrogen/Oxygen Microfuel Cell. *ACS Applied Materials & Interfaces*, **2020**, 12, 21605-21615	9.5	25
179	Boosting the mineralization of reactive black 5 dye with Y- or H2-doped anatase phase: Equivalent induced photocatalytic effect. *Journal of Electroanalytical Chemistry*, **2019**, 852, 113521	4.1	1
178	Platinum nanoparticles photo-deposited on SnO2-C composites: An active and durable electrocatalyst for the oxygen reduction reaction. *Electrochimica Acta*, **2019**, 316, 162-172	6.7	28
177	Nitrogen-Doped Ordered Mesoporous Carbons Supported Co3O4 Composite as a Bifunctional Oxygen Electrode Catalyst. *Surfaces*, **2019**, 2, 229-240	2.9	6
176	Physics, Chemistry and Surface Properties **2019**, 1-34		
175	Electrocatalysis and Remediation **2019**, 225-276		
174	The Hydrogen Electrode Reaction **2019**, 75-141		
173	Oxygen Reduction/Evolution Reaction **2019**, 143-186		
172	The Hydrogen Oxidation Reaction in Alkaline Medium: An Overview. *Electrochemical Energy Reviews* , **2019**, 2, 312-331	29.3	33
171	DEMS studies of the ethanol electro-oxidation on TiOC supported Pt catalysts□support effects for higher CO2 efficiency. *Electrochimica Acta*, **2019**, 304, 80-86	6.7	10
170	Red-Shifted Absorptions of Cation-Defective and Surface-Functionalized Anatase with Enhanced Photoelectrochemical Properties. *ACS Omega*, **2019**, 4, 10929-10938	3.9	2

169	The Hydrogen Evolution Reaction on Nanostructured Molybdenum Disulfide **2019**, 63,		3
168	**2019**,		3
167	Template-free synthesis of three-dimensional NiFe-LDH hollow microsphere with enhanced OER performance in alkaline media. *Journal of Energy Chemistry*, **2019**, 33, 130-137	12	60
166	Chalcogenide Materials for Energy Conversion. *Nanostructure Science and Technology*, **2018**,	0.9	19
165	Precious Versus Non-precious Electrocatalyst Centers. *Nanostructure Science and Technology*, **2018**, 101-168	0.9	
164	Effect of Supports on Catalytic Centers. *Nanostructure Science and Technology*, **2018**, 169-201	0.9	
163	Fuel Cell Electrocatalysis. *Nanostructure Science and Technology*, **2018**, 27-60	0.9	1
162	Environmental Catalysis. *Nanostructure Science and Technology*, **2018**, 61-99	0.9	
161	Photocatalysis an enhancer of electrocatalytic process. *Current Opinion in Electrochemistry*, **2018**, 9, 114-120	7.2	7
160	Improved Electrocatalytic Performance of Tailored Metal-Free Nitrogen-Doped Ordered Mesoporous Carbons for the Oxygen Reduction Reaction. *ChemElectroChem*, **2018**, 5, 1899-1904	4.3	14
159	Selenium Decorated Reduced Graphene Oxide Supported CoSe2 Nanoparticles as Efficient Electrochemical Catalyst for the Oxygen Reduction Reaction. *ChemElectroChem*, **2018**, 5, 3287-3292	4.3	7
158	Experimental Protocol for HOR and ORR in Alkaline Electrochemical Measurements. *Journal of the Electrochemical Society*, **2018**, 165, J3001-J3007	3.9	38
157	The oxophilic and electronic effects on anchored platinum nanoparticles on sp2 carbon sites: The hydrogen evolution and oxidation reactions in alkaline medium. *Electrochimica Acta*, **2018**, 283, 1829-1834	6.7	21
156	Surfactant-Assisted Fabrication of Cubic Cobalt Oxide Hybrid Hollow Spheres as Catalysts for the Oxygen Reduction Reaction. *ChemElectroChem*, **2018**, 5, 2192-2198	4.3	6
155	Membraneless micro-fuel-cell designs for portable applications **2018**, 125-159		3
154	Micro-fuel Cells. *Nanostructure Science and Technology*, **2018**, 203-222	0.9	1
153	Molybdenum Doping Augments Platinum-Copper Oxygen Reduction Electrocatalyst. *ChemSusChem* , **2018**, 11, 193-201	8.3	23
152	Impact of the anodization time on the photocatalytic activity of TiO nanotubes. *Beilstein Journal of Nanotechnology*, **2018**, 9, 2628-2643	3	9

151	Recent Advances of Cobalt-Based Electrocatalysts for Oxygen Electrode Reactions and Hydrogen Evolution Reaction. *Catalysts*, **2018**, 8, 559	4	66
150	Chalcogenide Electrocatalysts for Energy Conversion Fuel Cell **2018**, 419-445		3
149	Chalcogenides and Carbon Nanostructures: Great Applications for PEM Fuel Cells **2018**,		2
148	Tuning the Adsorption Properties of Layered Double Hydroxides to Tailor Highly Active Oxygen Bifunctional Electrocatalysts. *Journal of the Electrochemical Society*, **2017**, 164, F491-F498	3.9	8
147	Nitrogen-Doped Reduced Graphite Oxide as a Support for CoSe Electrocatalyst for Oxygen Reduction Reaction in Alkaline Media. *Journal of the Electrochemical Society*, **2017**, 164, F658-F666	3.9	14
146	Probing ethanol oxidation mechanism with in-situ FTIR spectroscopy via photodeposited Pt nanoparticles onto titania. *Journal of Electroanalytical Chemistry*, **2017**, 799, 228-234	4.1	5
145	Electrocatalytic Cobalt Nanoparticles Interacting with Nitrogen-Doped Carbon Nanotube in Situ Generated from a Metal-Organic Framework for the Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces*, **2017**, 9, 2541-2549	9.5	113
144	Support Interaction Effect of Platinum Nanoparticles on Non-, Y-, Ce-Doped Anatase and Its Implication on the ORR in Acid and Alkaline Media. *ChemElectroChem*, **2017**, 4, 3264-3275	4.3	17
143	Electrochemistry of Nanocrystalline La0.5Sr0.5MnO3 Perovskite for the Oxygen Reduction Reaction in Alkaline Medium. *Electrocatalysis*, **2017**, 8, 450-458	2.7	8
142	Carbon fiber paper supported interlayer space enlarged Ni2Fe-LDHs improved OER electrocatalytic activity. *Electrochimica Acta*, **2017**, 258, 554-560	6.7	31
141	Advanced bifunctional electrocatalyst generated through cobalt phthalocyanine tetrasulfonate intercalated Ni2Fe-layered double hydroxides for a laminar flow unitized regenerative micro-cell. *Journal of Power Sources*, **2017**, 361, 21-30	8.9	31
140	Highly photoactive Brookite and Anatase with enhanced photocatalytic activity for the degradation of indigo carmine application. *Applied Catalysis B: Environmental*, **2016**, 198, 471-479	21.8	16
139	Enhanced oxygen reduction reaction stability on platinum nanoparticles photo-deposited onto oxide-carbon composites. *Applied Catalysis B: Environmental*, **2016**, 187, 291-300	21.8	42
138	An easy and cheap chemical route using a MOF precursor to prepare Pd□Cu electrocatalyst for efficient energy conversion cathodes. *Journal of Catalysis*, **2016**, 338, 135-142	7.3	24
137	Selective CoSe 2 /C cathode catalyst for passive air-breathing alkaline anion exchange membrane □direct methanol fuel cell (AEM-□DMFC). *International Journal of Hydrogen Energy*, **2016**, 41, 19595-19600	6.7	13
136	Morphological impact onto organic fuel oxidation of nanostructured palladium synthesized via carbonyl chemical route. *Journal of Electroanalytical Chemistry*, **2016**, 765, 79-86	4.1	4
135	What Can We Learn in Electrocatalysis, from Nanoparticulated Precious and/or Non-Precious Catalytic Centers Interacting with Their Support?. *Catalysts*, **2016**, 6, 145	4	13
134	On the Availability of Active Sites for the Hydrogen Peroxide and Oxygen Reduction Reactions on Highly Dispersed Platinum Nanoparticles. *ChemElectroChem*, **2016**, 3, 1705-1712	4.3	12

133	Carbon supported Pt-Y2O3 and Pt-Gd2O3 nanoparticles prepared via carbonyl chemical route towards oxygen reduction reaction: Kinetics and stability. *International Journal of Hydrogen Energy*, **2016**, 41, 19601-19609	6.7	11
132	A highly efficient and stable oxygen reduction reaction on Pt/CeOx/C electrocatalyst obtained via a sacrificial precursor based on a metal-organic framework. *Applied Catalysis B: Environmental*, **2016**, 189, 39-50	21.8	53
131	Synergistic effect of Yttrium and pyridine-functionalized carbon nanotube on platinum nanoparticles toward the oxygen reduction reaction in acid medium. *Journal of Catalysis*, **2016**, 344, 712-721	7.3	11
130	Influence of sp(3)-sp(2) Carbon Nanodomains on Metal/Support Interaction, Catalyst Durability, and Catalytic Activity for the Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces*, **2016**, 8, 23260-9	9.5	70
129	Nanostructured palladium tailored via carbonyl chemical route towards oxygen reduction reaction. *Electrochimica Acta*, **2015**, 173, 771-778	6.7	18
128	Recharge processes of paramagnetic centers during illumination in nitrogen-doped nanocrystalline titanium dioxide. *Chemical Physics Letters*, **2015**, 635, 241-244	2.5	6
127	The Effect of Support on Advanced Pt-based Cathodes towards the Oxygen Reduction Reaction. State of the Art. *Electrochimica Acta*, **2015**, 179, 108-118	6.7	44
126	Electronic interaction between platinum nanoparticles and nitrogen-doped reduced graphene oxide: effect on the oxygen reduction reaction. *Journal of Materials Chemistry A*, **2015**, 3, 11891-11904	13	108
125	Thermally Induced Strains on the Catalytic Activity and Stability of Pt□M2O3/C (M=Y or Gd) Catalysts towards Oxygen Reduction Reaction. *ChemCatChem*, **2015**, 7, 1573-1582	5.2	19
124	The Effect of Carbon-Based Substrates onto Non-Precious and Precious Electrocatalytic Centers. *ECS Transactions*, **2015**, 69, 35-42	1	7
123	CoSe2 Supported on Nitrogen-Doped Carbon Nanohorns as a Methanol-Tolerant Cathode for Air-Breathing Microlaminar Flow Fuel Cells. *ChemElectroChem*, **2015**, 2, 1339-1345	4.3	30
122	Comprehensive characterization and understanding of micro-fuel cells operating at high methanol concentrations. *Beilstein Journal of Nanotechnology*, **2015**, 6, 2000-6	3	13
121	Substrate Effects on the Catalytic Center of CoSe2 for Oxygen Reduction Reaction. *ECS Transactions*, **2015**, 64, 1-9	1	2
120	Mixed-oxide Ti1□WxO2 as support for (photo)-electrochemical processes. *Applied Catalysis B: Environmental*, **2014**, 147, 756-763	21.8	4
119	The interplay between hydrogen evolution reaction and nitrate reduction on boron-doped diamond in aqueous solution: the effect of alkali cations. *Electrochimica Acta*, **2014**, 117, 420-425	6.7	13
118	Yttrium oxide/gadolinium oxide-modified platinum nanoparticles as cathodes for the oxygen reduction reaction. *ChemPhysChem*, **2014**, 15, 2136-44	3.2	39
117	Photohole Trapping Induced Platinum Cluster Nucleation on the Surface of TiO2 Nanoparticles. *Journal of Physical Chemistry C*, **2014**, 118, 1111-1117	3.8	12
116	Electronic modification of Pt via Ti and Se as tolerant cathodes in air-breathing methanol microfluidic fuel cells. *Physical Chemistry Chemical Physics*, **2014**, 16, 13820-6	3.6	13

115	Transition Metal Chalcogenides for Oxygen Reduction Electrocatalysts in PEM Fuel Cells **2014**, 157-182		6
114	Fabrication and evaluation of a passive alkaline membrane micro direct methanol fuel cell. *International Journal of Hydrogen Energy*, **2014**, 39, 5406-5413	6.7	23
113	Proton Conductive Areas on Sulfonated Poly(Arylene Ketone) Multiblock Copolymer Electrolyte Membrane Studied by Current-Sensing Atomic Force Microscopy. *Electrochemistry*, **2014**, 82, 369-375	1.2	7
112	The effect of tuning and origin of tolerance to organics of platinum catalytic centers modified by selenium. *Physica Status Solidi (A) Applications and Materials Science*, **2014**, 211, 2030-2034	1.6	7
111	The Effect of Substrates at Cathodes in Low-temperature Fuel Cells. *ChemElectroChem*, **2014**, 1, 37-46	4.3	27
110	Correlation between surface chemical composition with catalytic activity and selectivity of organic-solvent synthesized Pt□i nanoparticles. *Journal of Materials Chemistry A*, **2013**, 1, 8798	13	15
109	Effect of Co substitution for Fe in Sr2FeMoO6 on electrocatalytic properties for oxygen reduction in alkaline medium. *Ionics*, **2013**, 19, 1155-1162	2.7	7
108	Enhanced HER and ORR behavior on photodeposited Pt nanoparticles onto oxide□carbon composite. *Journal of Solid State Electrochemistry*, **2013**, 17, 1913-1921	2.6	18
107	Induced electronic modification of Pt nanoparticles deposited onto graphitic domains of carbon materials by UV irradiation. *Electrochemistry Communications*, **2013**, 29, 12-16	5.1	18
106	Spectroelectrochemical Probing of the Strong Interaction between Platinum Nanoparticles and Graphitic Domains of Carbon. *ACS Catalysis*, **2013**, 3, 1940-1950	13.1	60
105	Performance Study of Platinum Nanoparticles Supported onto MWCNT in a Formic Acid Microfluidic Fuel Cell System. *Journal of the Electrochemical Society*, **2013**, 160, F859-F866	3.9	19
104	Enhancing oxygen reduction reaction activity and stability of platinum via oxide-carbon composites. *Catalysis Today*, **2013**, 202, 36-43	5.3	70
103	Electroreduction of species in alkaline medium on Pt nanoparticles. *Electrochimica Acta*, **2013**, 88, 358-364	4.7	8
102	Transition Metal Chalcogenides for Oxygen Reduction. *Lecture Notes in Energy*, **2013**, 417-436	0.4	5
101	Tailoring and Tuning the Tolerance of a Pt Chalcogenide Cathode Electrocatalyst to Methanol. *ChemCatChem*, **2013**, 5, 701-705	5.2	8
100	Towards Understanding the Essential Role Played by the Platinum-Support Interaction on Electrocatalytic Activity. *ECS Transactions*, **2013**, 45, 25-33	1	5
99	Carbon-supported cubic CoSe2 catalysts for oxygen reduction reaction in alkaline medium. *Electrochimica Acta*, **2012**, 72, 129-133	6.7	66
98	Functionalizing Effect of Increasingly Graphitic Carbon Supports on Carbon-Supported and TiO2□arbon Composite-Supported Pt Nanoparticles. *Journal of Physical Chemistry C*, **2012**, 116, 21788-21794	3.8	42

97	In situ photoelectrochemical/photocatalytic study of a dye discoloration in a microreactor system using TiO2 thin films. *Environmental Science and Pollution Research*, **2012**, 19, 3751-62	5.1	12
96	Characterization of Recrystallized Sintered Silicon Substrates for Photovoltaic's Solar Cells. *Energy Procedia*, **2012**, 27, 13-20	2.3	3
95	Tolerant chalcogenide cathodes of membraneless micro fuel cells. *ChemSusChem*, **2012**, 5, 1488-94	8.3	48
94	Tailoring nanostructured catalysts for electrochemical energy conversion systems. *Nanotechnology Reviews*, **2012**, 1, 427-453	6.3	10
93	Structural and photoelectrochemical properties of Ti1−xWxO2 thin films deposited by magnetron sputtering. *Surface and Coatings Technology*, **2011**, 205, S265-S270	4.4	13
92	Functionalized-carbon nanotube supported electrocatalysts and buckypaper-based biocathodes for glucose fuel cell applications. *Electrochimica Acta*, **2011**, 56, 7659-7665	6.7	40
91	Synthesis, electrochemical characterization and molecular dynamics studies of surface segregation of platinum nano-alloy electrocatalysts. *Physical Chemistry Chemical Physics*, **2011**, 13, 9201-8	3.6	14
90	Preparation and Characterization of Pt/C and Pt/TiO2 Electrocatalysts by Liquid Phase Photodeposition. *Topics in Catalysis*, **2011**, 54, 512-518	2.3	18
89	Oxygen reduction reaction increased tolerance and fuel cell performance of Pt and RuxSey onto oxide–carbon composites. *Journal of Power Sources*, **2011**, 196, 4290-4297	8.9	33
88	Oxide Substrate Effect Toward Electrocatalytic Enhancement of Platinum and Ruthenium–Selenium Catalysts. *Electrocatalysis*, **2011**, 2, 181-191	2.7	23
87	Electro-reduction of nitrate species on Pt-based nanoparticles: Surface area effects. *Catalysis Today* , **2011**, 166, 201-204	5.3	29
86	Metal–Support Interactions between Nanosized Pt and Metal Oxides (WO3 and TiO2) Studied Using X-ray Photoelectron Spectroscopy. *Journal of Physical Chemistry C*, **2011**, 115, 20153-20159	3.8	275
85	Chalcogenide metal centers for oxygen reduction reaction: Activity and tolerance. *Electrochimica Acta*, **2011**, 56, 1009-1022	6.7	105
84	Carbon supported ruthenium chalcogenide as cathode catalyst in a microfluidic formic acid fuel cell. *Journal of Power Sources*, **2011**, 196, 1324-1328	8.9	40
83	5 Structure and Reactivity of Transition Metal Chalcogenides toward the Molecular Oxygen Reduction Reaction. *Modern Aspects of Electrochemistry*, **2011**, 255-300		6
82	Platinum and non-platinum nanomaterials for the molecular oxygen reduction reaction. *ChemPhysChem*, **2010**, 11, 2732-44	3.2	80
81	Probing metal substrate interaction of Pt nanoparticles: Structural XRD analysis and oxygen reduction reaction. *Applied Catalysis A: General*, **2010**, 377, 167-173	5.1	63
80	Oxygen reduction reaction selectivity of RuxSey in formic acid solutions. *Journal of Electroanalytical Chemistry*, **2010**, 648, 78-84	4.1	12

79	The effect of diluting ruthenium by iron in RuxSey catalyst for oxygen reduction. *Electrochimica Acta*, **2010**, 55, 7575-7580	6.7	17
78	Nanostructured platinum becomes alloyed at oxide-composite substrate. *Electrochemistry Communications*, **2010**, 12, 1772-1775	5.1	56
77	Substrate effect on oxygen reduction electrocatalysis. *Electrochimica Acta*, **2010**, 55, 7558-7563	6.7	71
76	Decorated nanotube buckypaper as electrocatalyst for glucose fuel cells **2009**,		1
75	Structure Phase Transition and Oxygen Reduction Activity in Acidic Medium of Carbon-Supported Cobalt Selenide Nanoparticles. *ECS Transactions*, **2009**, 25, 167-173	1	8
74	Carbon-Supported CoSe2 Nanoparticles for Oxygen Reduction Reaction in Acid Medium. *Fuel Cells*, **2009**, 10, NA-NA	2.9	7
73	Oxygen reduction reaction on carbon-supported CoSe2 nanoparticles in an acidic medium. *Electrochimica Acta*, **2009**, 54, 5252-5256	6.7	110
72	The assessment of nanocrystalline surface defects on real versus model catalysts probed via vibrational spectroscopy of adsorbed CO. *Surface Science*, **2009**, 603, 1892-1899	1.8	22
71	Ruthenium cluster-like chalcogenide as a methanol tolerant cathode catalyst in air-breathing laminar flow fuel cells. *Electrochimica Acta*, **2009**, 54, 4384-4388	6.7	65
70	Structural and electrochemical studies of Au-Pt nanoalloys. *Physical Chemistry Chemical Physics*, **2009**, 11, 3573-9	3.6	91
69	In situ Free-Surfactant Synthesis and ORR- Electrochemistry of Carbon-Supported Co3S4 and CoSe2 Nanoparticles. *Chemistry of Materials*, **2008**, 20, 26-28	9.6	223
68	Carbon Monoxide Oxidation as a Probe for PtRu Particle Surface Structure. *Journal of Physical Chemistry C*, **2008**, 112, 18521-18530	3.8	9
67	Tailoring of metal cluster-like materials for the molecular oxygen reduction reaction. *Pure and Applied Chemistry*, **2008**, 80, 2103-2114	2.1	20
66	Electro-reduction of Nitrate and Nitrite Ions on Carbon-Supported Pt Nanoparticles. *ECS Transactions*, **2008**, 15, 385-393	1	7
65	Electrochemistry of platinum nanoparticles supported in polypyrrole (PPy)/C composite materials. *Journal of Solid State Electrochemistry*, **2008**, 12, 569-574	2.6	37
64	Nonprecious metal catalysts for the molecular oxygen-reduction reaction. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 1792-1806	1.3	151
63	Surface electrochemistry of CO as a probe molecule on carbon-supported Se-surface modified Ru nanoparticles via infrared reflection absorption spectroscopy. *Physical Chemistry Chemical Physics*, **2007**, 9, 5693-9	3.6	5
62	Genesis of RuxSey Nanoparticles by Pyrolysis of Ru4Se2(CO)11: A Combined X-ray in Situ and DFT Study. *Journal of Physical Chemistry C*, **2007**, 111, 3908-3913	3.8	24

61	Selenium becomes metallic in Ru-Se fuel cell catalysts: an EC-NMR and XPS investigation. *Journal of the American Chemical Society*, **2007**, 129, 15140-1	16.4	102
60	Activity of platinum-gold alloys for glucose electrooxidation in biofuel cells. *Journal of Physical Chemistry B*, **2007**, 111, 10329-33	3.4	146
59	Chalcogenide oxygen reduction reaction catalysis: X-ray photoelectron spectroscopy with Ru, Ru/Se and Ru/S samples emersed from aqueous media. *Electrochimica Acta*, **2007**, 52, 5759-5765	6.7	72
58	Electrochemical behavior of nitrogen gas species adsorbed onto boron-doped diamond (BDD) electrodes. *Langmuir*, **2007**, 23, 11413-6	4	14
57	Photoelectrochemical characterization of p-type silicon electrodes covered with tunnelling nitride dielectric films. *Thin Solid Films*, **2007**, 515, 7376-7381	2.2	6
56	Novel Non-Precious Metal Electrocatalysts for Oxygen Reduction Based on Nanostructured Cobalt Chalcogenide. *ECS Transactions*, **2007**, 11, 67-73	1	11
55	Electrochemical Behaviour of Platinum Nanoparticles Supported on Polypyrrole (PPy)/C Composite. *ECS Transactions*, **2007**, 6, 93-103	1	2
54	Novel Chalcogenide-Based Materials for Oxygen Reduction Reaction. *ECS Transactions*, **2007**, 6, 289-296	1	2
53	Sequential treatment via Trametes versicolor and UV/TiO2/Ru(x)Se(y) to reduce contaminants in waste water resulting from the bleaching process during paper production. *Chemosphere*, **2007**, 67, 793-801	3.4	62
52	Glucose Oxidation on Au-Pt Nanoparticles in a Membrane-Less Biofuel Cell. *ECS Transactions*, **2007**, 6, 9-17	1	2
51	Carbonyl Tailored Electrocatalysts. *Fuel Cells*, **2006**, 6, 182-189	2.9	76
50	Oxygen Reduction Electrocatalysis at Chalcogen-Modified Ruthenium Cathodes. *ECS Transactions*, **2006**, 3, 171-179	1	3
49	Oxygen Reduction Reaction on Ruthenium and Rhodium Nanoparticles Modified with Selenium and Sulfur. *Journal of the Electrochemical Society*, **2006**, 153, A869	3.9	155
48	Synthesis and electrochemical characterization of a novel platinum chalcogenide electrocatalyst with an enhanced tolerance to methanol in the oxygen reduction reaction. *Electrochemistry Communications*, **2006**, 8, 1487-1491	5.1	70
47	Electrooxidation of acetaldehyde on platinum-modified Ti/Ru0.3Ti0.7O2 electrodes. *Electrochimica Acta*, **2006**, 51, 2800-2808	6.7	18
46	Electrocatalytic oxidation of lactose on gold nanoparticle modified carbon in carbonate buffer. *Journal of Applied Electrochemistry*, **2006**, 36, 147-151	2.6	11
45	Methanol tolerant oxygen reduction on carbon-supported PtNi alloy nanoparticles. *Journal of Electroanalytical Chemistry*, **2005**, 576, 305-313	4.1	193
44	Oxygen and carbon monoxide interaction on novel clusters like ruthenium: a WAXS study. *Journal of Catalysis*, **2005**, 232, 395-401	7.3	16

43	High Methanol Tolerance of Carbon-Supported Pt-Cr Alloy Nanoparticle Electrocatalysts for Oxygen Reduction. *Journal of the Electrochemical Society*, **2005**, 152, A704	3.9	60
42	Study of the electrooxidation of ethanol on hydrophobic electrodes by DEMS and HPLC. *Electrochimica Acta*, **2004**, 49, 3917-3925	6.7	30
41	Photocatalytic oxidation on nanostructured chalcogenide modified titanium dioxide. *Solar Energy Materials and Solar Cells*, **2004**, 83, 347-362	6.4	11
40	Tailoring, Structure, and Activity of Carbon-Supported Nanosized PtCr Alloy Electrocatalysts for Oxygen Reduction in Pure and Methanol-Containing Electrolytes. *Journal of Physical Chemistry B*, **2004**, 108, 1938-1947	3.4	222
39	Semiconductor Photooxidation of Pollutants Dissolved in Water: A Kinetic Model for Distinguishing between Direct and Indirect Interfacial Hole Transfer. I. Photoelectrochemical Experiments with Polycrystalline Anatase Electrodes under Current Doubling and Absence of Recombination. *Journal of Physical Chemistry B*, **2004**, 108, 15172-15181	3.4	138
38	Structure and Electrocatalytic Activity of Carbon-Supported PtNi Alloy Nanoparticles Toward the Oxygen Reduction Reaction. *Journal of Physical Chemistry B*, **2004**, 108, 11024-11034	3.4	281
37	The CO-adsorbate electrooxidation on ruthenium cluster-like materials. *Journal of Electroanalytical Chemistry*, **2003**, 554-555, 379-384	4.1	8
36	Structural and Electrochemical Studies of PtSn Nanoparticulate Catalysts. *Langmuir*, **2003**, 19, 10885-10891	4	28
35	Surface state capture cross sections at Si/electrolyte interfaces determined by combined microwave reflection/photocurrent measurements. *Physical Chemistry Chemical Physics*, **2003**, 5, 3984-3987	3.6	1
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