

Paula E Colavita

List of Publications by Year in descending order

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79
papers

2,418
citations

147786

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3679
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical Detection of Isolated Nanoscale Defects in 2D Transition Metal Dichalcogenides. <i>Journal of Physical Chemistry C</i> , 2022, 126, 11636-11641.	3.1	8
2	Aggregation of protein therapeutics enhances their immunogenicity: causes and mitigation strategies. <i>RSC Chemical Biology</i> , 2021, 2, 1004-1020.	4.1	55
3	Controlling the Carbon-Bio Interface via Glycan Functional Adlayers for Applications in Microbial Fuel Cell Bioanodes. <i>Molecules</i> , 2021, 26, 4755.	3.8	2
4	Nanoscaffold effects on the performance of air-cathodes for microbial fuel cells: Sustainable Fe/N-carbon electrocatalysts for the oxygen reduction reaction under neutral pH conditions. <i>Bioelectrochemistry</i> , 2021, 142, 107937.	4.6	8
5	Bioinspired electro-permeable glycans on carbon: Fouling control for sensing in complex matrices. <i>Carbon</i> , 2020, 158, 519-526.	10.3	3
6	Tailored glycosylated anode surfaces: Addressing the exoelectrogen bacterial community via functional layers for microbial fuel cell applications. <i>Bioelectrochemistry</i> , 2020, 136, 107621.	4.6	14
7	Reactive Plasma N-Doping of Amorphous Carbon Electrodes: Decoupling Disorder and Chemical Effects on Capacitive and Electrocatalytic Performance. <i>Frontiers in Chemistry</i> , 2020, 8, 593932.	3.6	4
8	Porous Carbon Microparticles as Vehicles for the Intracellular Delivery of Molecules. <i>Frontiers in Chemistry</i> , 2020, 8, 576175.	3.6	5
9	Understanding the Carbon-Bio Interface: Influence of Surface Chemistry and Buffer Composition on the Adsorption of Phospholipid Liposomes at Carbon Surfaces. <i>ACS Applied Bio Materials</i> , 2020, 3, 997-1007.	4.6	3
10	Capacitive storage at nitrogen doped amorphous carbon electrodes: structural and chemical effects of nitrogen incorporation. <i>RSC Advances</i> , 2019, 9, 4063-4071.	3.6	15
11	Untangling Cooperative Effects of Pyridinic and Graphitic Nitrogen Sites at Metal-Free N-Doped Carbon Electrocatalysts for the Oxygen Reduction Reaction. <i>Small</i> , 2019, 15, e1902081.	10.0	57
12	Influence of carbon nanostructure and oxygen moieties on dopamine adsorption and charge transfer kinetics at glassy carbon surfaces. <i>Electrochimica Acta</i> , 2019, 304, 221-230.	5.2	21
13	Electrocatalysis of N-doped carbons in the oxygen reduction reaction as a function of pH: N-sites and scaffold effects. <i>Carbon</i> , 2019, 148, 224-230.	10.3	32
14	Continuous Flow Synthesis of Platinum Nanoparticles in Porous Carbon as Durable and Methanol-Tolerant Electrocatalysts for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2018, 5, 62-70.	3.4	18
15	Emerging trends in metal oxide electrocatalysis: Bifunctional oxygen catalysis, synergies and new insights from in situ studies. <i>Current Opinion in Electrochemistry</i> , 2018, 7, 208-215.	4.8	27
16	Bioinspired Aryldiazonium Carbohydrate Coatings: Reduced Adhesion of Foulants at Polymer and Stainless Steel Surfaces in a Marine Environment. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 1141-1151.	6.7	14
17	Evolution of oxygen functionalities in graphene oxide and its impact on structure and exfoliation: An oxidation time based study. <i>Materials Chemistry and Physics</i> , 2018, 220, 417-425.	4.0	16
18	Photocatalytic Initiation of Radical Thiolene Reactions Using Carbon-Bi ₂ O ₃ Nanocomposites. <i>ACS Applied Nano Materials</i> , 2018, 1, 4120-4126.	5.0	19

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19	Spontaneous Aryldiazonium Grafting for the Preparation of Functional Cyclodextrin-Modified Materials. ACS Applied Bio Materials, 2018, 1, 825-832.	4.6	4
20	Experimental and Computational Study of Dopamine as an Electrochemical Probe of the Surface Nanostructure of Graphitized N-Doped Carbon. Journal of Physical Chemistry C, 2018, 122, 20763-20773.	3.1	33
21	Nanoplasmonic Sensing at the Carbon-Bio Interface: Study of Protein Adsorption at Graphitic and Hydrogenated Carbon Surfaces. Langmuir, 2017, 33, 4198-4206.	3.5	14
22	Template-free synthesis of mesoporous manganese oxides with catalytic activity in the oxygen evolution reaction. Sustainable Energy and Fuels, 2017, 1, 780-788.	4.9	31
23	Determination of surface zeta-potential and isoelectric point of carbon surfaces using tracer particle suspensions. Surface and Interface Analysis, 2017, 49, 781-787.	1.8	11
24	Combined Optoelectronic and Electrochemical Study of Nitrogenated Carbon Electrodes. Journal of Physical Chemistry C, 2017, 121, 6596-6604.	3.1	22
25	Improving the performance of porous nickel foam for water oxidation using hydrothermally prepared Ni and Fe metal oxides. Sustainable Energy and Fuels, 2017, 1, 207-216.	4.9	38
26	Electrochromic Nickel Oxide Films for Smart Window Applications. International Journal of Electrochemical Science, 2016, 11, 6636-6647.	1.3	60
27	Quantifying Graphitic Edge Exposure in Graphene-Based Materials and Its Role in Oxygen Reduction Reactions. ACS Catalysis, 2016, 6, 5215-5221.	11.2	44
28	The goldilocks electrolyte: examining the performance of iron/nickel oxide thin films as catalysts for electrochemical water splitting in various aqueous NaOH solutions. Journal of Materials Chemistry A, 2016, 4, 11397-11407.	10.3	47
29	Low-Overpotential High-Activity Mixed Manganese and Ruthenium Oxide Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. ACS Catalysis, 2016, 6, 2408-2415.	11.2	139
30	Laser-driven rapid functionalization of carbon surfaces and its application to the fabrication of fluorinated adsorbers. RSC Advances, 2016, 6, 82924-82932.	3.6	2
31	Thermally Prepared Mn ₂ O ₃ /RuO ₂ /Ru Thin Films as Highly Active Catalysts for the Oxygen Evolution Reaction in Alkaline Media. ChemElectroChem, 2016, 3, 1847-1855.	3.4	19
32	Stable hydrophilic poly(dimethylsiloxane) via glycan surface functionalization. Polymer, 2016, 106, 1-7.	3.8	14
33	Modulation of Protein Fouling and Interfacial Properties at Carbon Surfaces via Immobilization of Glycans Using Aryldiazonium Chemistry. Scientific Reports, 2016, 6, 24840.	3.3	30
34	Green Synthesis of Metal Nanoparticles via Natural Extracts: The Biogenic Nanoparticle Corona and Its Effects on Reactivity. ACS Sustainable Chemistry and Engineering, 2015, 3, 1610-1617.	6.7	75
35	Enhanced Antifouling Properties of Carbohydrate Coated Poly(ether sulfone) Membranes. ACS Applied Materials & Interfaces, 2015, 7, 17238-17246.	8.0	29
36	Template-free ultraspray pyrolysis synthesis of N/Fe-doped carbon microspheres for oxygen reduction electrocatalysis. Journal of Materials Chemistry A, 2015, 3, 18920-18927.	10.3	25

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37	Carbohydrate Coatings via Aryldiazonium Chemistry for Surface Biomimicry. <i>Chemistry of Materials</i> , 2013, 25, 4122-4128.	6.7	22
38	Natural reducing agents for electroless nanoparticle deposition: Mild synthesis of metal/carbon nanostructured microspheres. <i>Materials Chemistry and Physics</i> , 2013, 140, 343-349.	4.0	14
39	In Situ and Real Time Characterization of Spontaneous Grafting of Aryldiazonium Salts at Carbon Surfaces. <i>Chemistry of Materials</i> , 2013, 25, 1144-1152.	6.7	32
40	Electroless deposition and characterization of Fe/FeOx nanoparticles on porous carbon microspheres: structure and surface reactivity. <i>Journal of Materials Chemistry A</i> , 2013, 1, 6043.	10.3	4
41	Heterogeneous Charge Transfer at the Amorphous Carbon/Solution Interface: Effect on the Spontaneous Attachment of Aryldiazonium Salts. <i>Journal of Physical Chemistry C</i> , 2013, 117, 22768-22777.	3.1	12
42	The Oxygen Evolution Reaction at Manganese Oxide Films in Base: Kinetics and Mechanism. <i>ECS Transactions</i> , 2013, 53, 59-77.	0.5	18
43	Incandescent porous carbon microspheres to light up cells: solution phenomena and cellular uptake. <i>Journal of Materials Chemistry</i> , 2012, 22, 432-439.	6.7	33
44	Spontaneous Grafting of Nitrophenyl Groups on Amorphous Carbon Thin Films: A Structure-Reactivity Investigation. <i>Chemistry of Materials</i> , 2012, 24, 1031-1040.	6.7	36
45	Study of the spontaneous attachment of polycyclic aryldiazonium salts onto amorphous carbon substrates. <i>RSC Advances</i> , 2012, 2, 6527.	3.6	7
46	Fluorine-Fluorine Interactions in the Solid State: An Experimental and Theoretical Study. <i>Journal of Physical Chemistry A</i> , 2012, 116, 1435-1444.	2.5	132
47	Nanotextured gold coatings on carbon nanofiber scaffolds as ultrahigh surface-area electrodes. <i>Journal of Power Sources</i> , 2012, 198, 393-401.	7.8	22
48	In Situ Studies of the Adsorption Kinetics of 4-Nitrobenzenediazonium Salt on Gold. <i>Langmuir</i> , 2011, 27, 13029-13036.	3.5	19
49	Photochemically Triggered Alkylthiol Reactions on Highly Ordered Pyrolytic Graphite. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10196-10204.	3.1	12
50	Photochemical Grafting of Alkenes onto Carbon Surfaces: Identifying the Roles of Electrons and Holes. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4067-4074.	3.1	38
51	Influence of Surface Termination and Electronic Structure on the Photochemical Grafting of Alkenes to Carbon Surfaces. <i>Journal of Physical Chemistry C</i> , 2009, 113, 1526-1535.	3.1	23
52	Dipolar Chromophore Functional Layers in Organic Field Effect Transistors. <i>Advanced Materials</i> , 2008, 20, 4180-4184.	21.0	10
53	Grafting of molecular layers to oxidized gallium nitride surfaces via phosphonic acid linkages. <i>Surface Science</i> , 2008, 602, 2382-2388.	1.9	49
54	Birge-Sponer Estimation of the C-H Bond Dissociation Energy in Chloroform Using Infrared, Near-Infrared, and Visible Absorption Spectroscopy. An Experiment in Physical Chemistry. <i>Journal of Chemical Education</i> , 2008, 85, 1276.	2.3	10

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55	Enhancement of Photochemical Grafting of Terminal Alkenes at Surfaces via Molecular Mediators: The Role of Surface-Bound Electron Acceptors. <i>Journal of Physical Chemistry C</i> , 2008, 112, 5102-5112.	3.1	28
56	Photo-induced surface functionalization of carbon surfaces: The role of photoelectron ejection. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008, 26, 925-931.	2.1	7
57	Single-crystal silicon/silicon dioxide multilayer heterostructures based on nanomembrane transfer. <i>Applied Physics Letters</i> , 2007, 90, 183107.	3.3	19
58	A Novel Method to Fabricate Multiple-layer SOI -- Single-Crystal Si Nanomembrane Transfer and Stacking. <i>ECS Transactions</i> , 2007, 6, 333-338.	0.5	0
59	Direct Photopatterning and SEM Imaging of Molecular Monolayers on Diamond Surfaces: Mechanistic Insights into UV-Initiated Molecular Grafting. <i>Langmuir</i> , 2007, 23, 11623-11630.	3.5	31
60	Photochemical Grafting of <i>n</i> -Alkenes onto Carbon Surfaces: the Role of Photoelectron Ejection. <i>Journal of the American Chemical Society</i> , 2007, 129, 13554-13565.	13.7	74
61	Functional Self-Assembled Monolayers for Optimized Photoinduced Charge Transfer in Organic Field Effect Transistors. <i>Advanced Materials</i> , 2007, 19, 4353-4357.	21.0	42
62	Development of Patterns for Digital Image Correlation Measurements at Reduced Length Scales. <i>Experimental Mechanics</i> , 2007, 47, 63-77.	2.0	123
63	Fine-Structure Measurements of Oxygen A Band Absorbance for Estimating the Thermodynamic Average Temperature of the Earth's Atmosphere. An Experiment in Physical and Environmental Chemistry. <i>Journal of Chemical Education</i> , 2006, 83, 263.	2.3	1
64	Covalent Photochemical Functionalization of Amorphous Carbon Thin Films for Integrated Real-Time Biosensing. <i>Langmuir</i> , 2006, 22, 9598-9605.	3.5	96
65	Photochemical Functionalization of Gallium Nitride Thin Films with Molecular and Biomolecular Layers. <i>Langmuir</i> , 2006, 22, 8121-8126.	3.5	74
66	Functionalized Vertically Aligned Carbon Nanofibers as Scaffolds for Immobilization and Electrochemical Detection of Redox-Active Proteins. <i>Chemistry of Materials</i> , 2006, 18, 4415-4422.	6.7	77
67	Effects of Metal Coating on Self-Assembled Monolayers on Gold. 2. Copper on an Oligo(Phenylene-Ethynylene) Monolayer. <i>Langmuir</i> , 2005, 21, 12268-12277.	3.5	11
68	Clustering Effects on Discontinuous Gold Film NanoCells. <i>Journal of Nanoscience and Nanotechnology</i> , 2004, 4, 907-917.	0.9	34
69	Development of patterns for nanoscale strain measurements: I. Fabrication of imprinted Au webs for polymeric materials. <i>Nanotechnology</i> , 2004, 15, 1812-1817.	2.6	45
70	Growth and Characterization of a Porous Aluminum Oxide Film Formed on an Electrically Insulating Support. <i>Electrochemical and Solid-State Letters</i> , 2003, 6, B42.	2.2	44
71	Construction of a Nanowell Electrode Array by Electrochemical Gold Stripping and Ion Bombardment. <i>Electrochemical and Solid-State Letters</i> , 2003, 6, C112.	2.2	8
72	Valence and core photoemission in M@C60 (M = Be, Mg, Ca). <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2002, 35, 1421-1438.	1.5	33

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73	Construction and Characterization of a Nanowell Electrode Array. Nano Letters, 2002, 2, 641-645.	9.1	41
74	Effects of Metal Coating on Self-Assembled Monolayers on Gold. 1. Copper on Dodecanethiol and Octadecanethiol. Langmuir, 2002, 18, 8503-8509.	3.5	19
75	Carbon tetrachloride hydrodechlorination with organometallics-based platinum and palladium catalysts on MgO. Journal of Molecular Catalysis A, 2002, 182-183, 157-166.	4.8	38
76	Theoretical study of the valence and core photoemission spectra of C60. Physical Chemistry Chemical Physics, 2001, 3, 4481-4487.	2.8	36
77	Theoretical Study of Photoionization Processes in Fe(C5H5)2. Journal of Physical Chemistry A, 2001, 105, 9800-9812.	2.5	6
78	EXAFS analysis of the L3 edge of Ce in CeO2: effects of multi-electron excitations and final-state mixed valence. Journal of Synchrotron Radiation, 1999, 6, 34-42.	2.4	41
79	Characterisation of heterogeneous catalysts by EXAFS. Catalysis Today, 1998, 41, 261-275.	4.4	30