Assocâ€profâ€dr Steen U Pedersen

List of Publications by Year
in descending order

113 papers	3,682 citations	126907 33 h-index	155660 55 g-index
117 all docs	117 docs citations	117 times ranked	4031 citing authors

#	Article	IF	Citations
1	Postfunctionalization of Self-Immolative Poly(dithiothreitol) Using Steglich Esterification. Macromolecules, 2022, 55, 5788-5794.	4.8	2
2	A novel approach toward attachment of graphene oxide on copper using electrochemical grafting of an organic interlayer with enhanced corrosion performance. Progress in Organic Coatings, 2021, 154, 106185.	3.9	8
3	Highly Scalable Conversion of Blood Protoporphyrin to Efficient Electrocatalyst for CO 2 â€toâ€CO Conversion. Advanced Materials Interfaces, 2021, 8, 2100067.	3.7	4
4	Mechanistic Elucidation of Dimer Formation and Strategies for Its Suppression in Electrochemical Reduction of <i>Fac</i>â€Mn(bpy)(CO)₃Br. ChemElectroChem, 2021, 8, 2108-2114.	3.4	17
5	Dualâ€Responsive Material Based on Catecholâ€Modified Selfâ€Immolative Poly(Disulfide) Backbones. Angewandte Chemie, 2021, 133, 21713-21719.	2.0	4
6	Dualâ€Responsive Material Based on Catecholâ€Modified Selfâ€Immolative Poly(Disulfide) Backbones. Angewandte Chemie - International Edition, 2021, 60, 21543-21549.	13.8	27
7	Promoting Selective Generation of Formic Acid from CO₂ Using Mn(bpy)(CO)₃Br as Electrocatalyst and Triethylamine/Isopropanol as Additives. Journal of the American Chemical Society, 2021, 143, 20491-20500.	13.7	24
8	Synthesis and depolymerization of self-immolative poly(disulfide)s with saturated aliphatic backbones. Polymer Chemistry, 2021, 13, 85-90.	3.9	6
9	Ligand-Controlled Product Selectivity in Electrochemical Carbon Dioxide Reduction Using Manganese Bipyridine Catalysts. Journal of the American Chemical Society, 2020, 142, 4265-4275.	13.7	114
10	Achieving Nearâ€Unity CO Selectivity for CO₂ Electroreduction on an Ironâ€Decorated Carbon Material. ChemSusChem, 2020, 13, 6360-6369.	6.8	8
11	Polymer Brush Coating and Adhesion Technology at Scale. Polymers, 2020, 12, 1475.	4.5	16
12	Stimuli-responsive degrafting of polymer brushes via addressable catecholato-metal attachments. Polymer Chemistry, 2020, 11, 5572-5577.	3.9	9
13	Facile Access to Disulfide/Thiol Containing Poly(glycidyl methacrylate) Brushes as Potential Rubber Adhesive Layers. ACS Applied Polymer Materials, 2020, 2, 2380-2388.	4.4	8
14	Synthesis and Closed-Loop Recycling of Self-Immolative Poly(dithiothreitol). Macromolecules, 2020, 53, 4685-4691.	4.8	22
15	Evaluation of the Electrocatalytic Reduction of Carbon Dioxide using Rhenium and Ruthenium Bipyridine Catalysts Bearing Pendant Amines in the Secondary Coordination Sphere. Organometallics, 2020, 39, 1480-1490.	2.3	30
16	Hydrosilane-Modified Poly(2-Hydroxyethyl Methacrylate) Brush as a Nanoadhesive for Efficient Silicone Bonding. ACS Omega, 2019, 4, 12130-12135.	3.5	3
17	Supported molecular catalysts for the heterogeneous CO2 electroreduction. Current Opinion in Electrochemistry, 2019, 15, 148-154.	4.8	40
18	Two-phase bipolar electrografting. Electrochimica Acta, 2019, 317, 61-69.	5.2	7

#	Article	IF	Citations
19	Electrochemical grafting of heterocyclic molecules on glassy carbon and platinum using heteroaromatic iodonium salts or iodo-substituted heteroaromatics. Electrochimica Acta, 2018, 261, 356-364.	5.2	6
20	Graphene inclusion controlling conductivity and gas sorption of metalâ€“organic framework. RSC Advances, 2018, 8, 13921-13932.	3.6	13
21	Highly Efficient Rubber-to-Stainless Steel Bonding by Nanometer-Thin Cross-linked Polymer Brushes. ACS Omega, 2018, 3, 17511-17519.	3.5	10
22	Efficient bonding of ethylene-propylene-diene M-class rubber to stainless steel using polymer brushes as a nanoscale adhesive. International Journal of Adhesion and Adhesives, 2018, 87, 31-41.	2.9	11
23	Facile Synthesis of Iron- and Nitrogen-Doped Porous Carbon for Selective CO₂ Electroreduction. ACS Applied Nano Materials, 2018, 1, 3608-3615.	5.0	21
24	Selective CO₂ Reduction to CO in Water using Earth-Abundant Metal and Nitrogen-Doped Carbon Electrocatalysts. ACS Catalysis, 2018, 8, 6255-6264.	11.2	267
25	Bipolar electrochemistryâ€”A wireless approach for electrode reactions. Current Opinion in Electrochemistry, 2017, 2, 13-17.	4.8	116
26	Enhanced Catalytic Activity of Cobalt Porphyrin in CO₂ Electroreduction upon Immobilization on Carbon Materials. Angewandte Chemie, 2017, 129, 6568-6572.	2.0	62
27	Enhanced Catalytic Activity of Cobalt Porphyrin in CO₂ Electroreduction upon Immobilization on Carbon Materials. Angewandte Chemie - International Edition, 2017, 56, 6468-6472.	13.8	305
28	Covalent Modification of Glassy Carbon Surfaces by Electrochemical Grafting of Aryl Iodides. Langmuir, 2017, 33, 3217-3222.	3.5	26
29	Efficient Graphene Production by Combined Bipolar Electrochemical Intercalation and High-Shear Exfoliation. ACS Omega, 2017, 2, 6492-6499.	3.5	20
30	On the Kinetic and Thermodynamic Properties of Aryl Radicals Using Electrochemical and Theoretical Approaches. ChemElectroChem, 2017, 4, 3212-3221.	3.4	12
31	Scalable carbon dioxide electroreduction coupled to carbonylation chemistry. Nature Communications, 2017, 8, 489.	12.8	54
32	Hierarchical MoS₂nanosheets on flexible carbon felt as an efficient flow-through electrode for dechlorination. Environmental Science: Nano, 2017, 4, 2286-2296.	4.3	23
33	Controlled electropolymerisation of a carbazole-functionalised iron porphyrin electrocatalyst for CO₂ reduction. Chemical Communications, 2016, 52, 5864-5867.	4.1	48
34	Electrochemical procedure for constructing poly(phenylene sulfide) brushes on glassy carbon and stainless steel. Journal of Polymer Science Part A, 2016, 54, 91-98.	2.3	3
35	Wohlâ€Ziegler Bromination of Electrografted Films for Optimizing Atom Transfer Radical Polymerization. Electroanalysis, 2016, 28, 2849-2854.	2.9	3
36	Electroinduced Intercalation of Tetraalkylammonium Ions at the Interface of Graphene Grown on Copper, Platinum, and Iridium. ChemElectroChem, 2016, 3, 2202-2211.	3.4	10

#	Article	IF	Citations
37	Hydrophilic Polymer Brush Layers on Stainless Steel Using Multilayered ATRP Initiator Layer. ACS Applied Materials & Interfaces, 2016, 8, 30616-30627.	8.0	18
38	Functionalizing Arrays of Transferred Monolayer Graphene on Insulating Surfaces by Bipolar Electrochemistry. Langmuir, 2016, 32, 6289-6296.	3.5	17
39	Grafting of Aryl Diazonium, Iodonium, and Sulfonium Salts in Unusual Patterns by Exploiting the Potential Gradient in Bipolar Electrochemistry. ChemElectroChem, 2016, 3, 495-501.	3.4	31
40	One-step preparation of bifunctionalized surfaces by bipolar electrografting. RSC Advances, 2016, 6, 3882-3887.	3.6	23
41	Facile electrochemical transfer of large-area single crystal epitaxial graphene from Ir(1â€‰1â€‰1). Journal Physics D: Applied Physics, 2015, 48, 115306.	2.8	23
42	Patterned Carboxylation of Graphene Using Scanning Electrochemical Microscopy. Langmuir, 2015, 31, 4443-4452.	3.5	9
43	Electrochemical Behaviour of HOPG and CVDâ€Grown Graphene Electrodes Modified with Thick Anthraquinone Films by Diazonium Reduction. Electroanalysis, 2014, 26, 2619-2630.	2.9	29
44	Durability of PEEK adhesive to stainless steel modified with aryldiazonium salts. International Journal of Adhesion and Adhesives, 2014, 51, 1-12.	2.9	27
45	Highâ€versus Lowâ€Quality Graphene: A Mechanistic Investigation of Electrografted Diazoniumâ€Based Films for Growth of Polymer Brushes. Small, 2014, 10, 922-934.	10.0	23
46	Controlled Electrochemical Carboxylation of Graphene To Create a Versatile Chemical Platform for Further Functionalization. Langmuir, 2014, 30, 6622-6628.	3.5	21
47	Improved Adhesion Between PMMA and Stainless Steel Modified with PMMA Brushes. ACS Applied Materials & Interfaces, 2014, 6, 21308-21315.	8.0	31
48	Superhydrophilic Polyelectrolyte Brush Layers with Imparted Anti-Icing Properties: Effect of Counter ions. ACS Applied Materials & Interfaces, 2014, 6, 6487-6496.	8.0	115
49	Surface-Attached Poly(glycidyl methacrylate) as a Versatile Platform for Creating Dual-Functional Polymer Brushes. Macromolecules, 2014, 47, 5081-5088.	4.8	52
50	Surface grafted glycopolymer brushes to enhance selective adhesion of HepG2 cells. Journal of Colloid and Interface Science, 2013, 404, 207-214.	9.4	28
51	Electrochemically assisted grafting of asymmetric alkynyl(aryl)iodonium salts on glassy carbon with focus on the alkynyl/aryl grafting ratio. Journal of Electroanalytical Chemistry, 2013, 710, 41-47.	3.8	10
52	Electrochemical Polymerization of Allylamine Copolymers. Langmuir, 2013, 29, 3791-3796.	3.5	8
53	On Electrogenerated Acid-Facilitated Electrografting of Aryltriazenes to Create Well-Defined Aryl-Tethered Films. Langmuir, 2013, 29, 5181-5189.	3.5	5
54	Electron Transport through a Diazonium-Based Initiator Layer to Covalently Attached Polymer Brushes of Ferrocenylmethyl Methacrylate. Langmuir, 2013, 29, 13595-13604.	3.5	29

#	Article	IF	Citations
55	Conducting and ordered carbon films obtained by pyrolysis of covalently attached polyphenylene and polyanthracene layers on silicon substrates. Journal of Materials Chemistry, 2012, 22, 18172.	6.7	10
56	A practical electromediated ipso-hydroxylation of aryl and alkyl boronic acids under an air atmosphere. Chemical Communications, 2012, 48, 7203.	4.1	48
57	Elucidation of the Mechanism of Redox Grafting of Diazotated Anthraquinone. Langmuir, 2012, 28, 9573-9582.	3.5	23
58	Redox Grafting of Diazotated Anthraquinone as a Means of Forming Thick Conducting Organic Films. Langmuir, 2012, 28, 1267-1275.	3.5	43
59	Attractive double-layer forces and charge regulation upon interaction between electrografted amine layers and silica. Journal of Colloid and Interface Science, 2012, 385, 225-234.	9.4	11
60	Synthesis of Î²-Cyclodextrin Diazonium Salts and Electrochemical Immobilization onto Glassy Carbon and Gold Surfaces. Langmuir, 2012, 28, 16828-16833.	3.5	12
61	Elucidation of the mechanism of surfaceâ€initiated atom transfer radical polymerization from a diazoniumâ€based initiator layer. Journal of Polymer Science Part A, 2012, 50, 4465-4475.	2.3	17
62	Using Timeâ€Resolved Electrochemical Patterning to Gain Fundamental Insight into Arylâ€Radical Surface Modification. ChemPhysChem, 2012, 13, 3303-3307.	2.1	7
63	On Surface-Initiated Atom Transfer Radical Polymerization Using Diazonium Chemistry To Introduce the Initiator Layer. Langmuir, 2011, 27, 1070-1078.	3.5	50
64	Combining Aryltriazenes and Electrogenerated Acids To Create Well-Defined Aryl-Tethered Films and Patterns on Surfaces. Journal of the American Chemical Society, 2011, 133, 3788-3791.	13.7	36
65	Using a Mediating Effect in the Electroreduction of Aryldiazonium Salts To Prepare Conducting Organic Films of High Thickness. Chemistry of Materials, 2011, 23, 1551-1557.	6.7	78
66	Grafting of Thin Organic Films by Electrooxidation of Arylhydrazines. Journal of Physical Chemistry C, 2011, 115, 13343-13352.	3.1	16
67	On the electrografting of stainless steel from para-substituted aryldiazonium salts and the thermal stability of the grafted layer. Surface and Coatings Technology, 2010, 205, 820-827.	4.8	23
68	Are Reactions Between Metal Cyanides and Aryl Diazonium Ions Really Outer-Sphere Electron Transfer Processes?. Journal of Physical Chemistry A, 2010, 114, 6575-6585.	2.5	5
69	Synthesis and Application of a Triazeneâˆ'Ferrocene Modifier for Immobilization and Characterization of Oligonucleotides at Electrodes. Journal of Organic Chemistry, 2010, 75, 2474-2481.	3.2	39
70	Nitrophenyl Groups in Diazonium-Generated Multilayered Films: Which are Electrochemically Responsive?. Langmuir, 2010, 26, 10812-10821.	3.5	56
71	General Approach for Monolayer Formation of Covalently Attached Aryl Groups Through Electrografting of Arylhydrazines. Journal of the American Chemical Society, 2009, 131, 13926-13927.	13.7	40
72	Versatile Transformations of Alkylamine-Derivatized Glassy Carbon Electrodes using Aryl Isocyanates. Langmuir, 2009, 25, 12160-12168.	3.5	7

#	Article	IF	Citations
73	Using a Hydrazone-Protected Benzenediazonium Salt to Introduce a Near-Monolayer of Benzaldehyde on Glassy Carbon Surfaces. Journal of the American Chemical Society, 2009, 131, 4928-4936.	13.7	83
74	Electrochemical modification of chromium surfaces using 4-nitro- and 4-fluorobenzenediazonium salts. New Journal of Chemistry, 2009, 33, 2405.	2.8	19
75	Electrochemical Surface Derivatization of Glassy Carbon by the Reduction of Triaryl- and Alkyldiphenylsulfonium Salts. Langmuir, 2008, 24, 182-188.	3.5	55
76	Covalent Sidewall Functionalization of Carbon Nanotubes by a â€œFormationâ˘'Degradationâ€•Approach. Chemistry of Materials, 2008, 20, 6068-6075.	6.7	39
77	Covalent Grafting of Glassy Carbon Electrodes with Diaryliodonium Salts:Â New Aspects. Langmuir, 2007, 23, 3786-3793.	3.5	93
78	Electrochemical Approach for Constructing a Monolayer of Thiophenolates from Grafted Multilayers of Diaryl Disulfides. Journal of the American Chemical Society, 2007, 129, 1888-1889.	13.7	105
79	Evaluation of various strategies to formation of pH responsive hydroquinone-terminated films on carbon electrodes. Electrochimica Acta, 2007, 53, 1680-1688.	5.2	25
80	Versatile electrochemically based preparation of unusual Grignard reagents containing electrophilic substituents. Electrochimica Acta, 2005, 51, 655-664.	5.2	11
81	Nucleophilic and electrophilic displacements on covalently modified carbon: introducing 4,4â€²-bipyridinium on grafted glassy carbon electrodes. New Journal of Chemistry, 2005, 29, 659.	2.8	38
82	Immobilization of Aryl and Alkynyl Groups onto Glassy Carbon Surfaces by Electrochemical Reduction of Iodonium Salts. Langmuir, 2005, 21, 8085-8089.	3.5	78
83	Study of the coupling reactions between electrochemically generated aromatic radical anions and methyl, alkyl and benzyl radicals. Electrochimica Acta, 2003, 48, 1807-1816.	5.2	18
84	Characterizing the Behavior and Properties of an Excited Electronic State: Electron-Transfer Mediated Quenching of Fluorescence. Journal of Chemical Education, 2003, 80, 819.	2.3	8
85	Gas-phase absorption properties of a green fluorescent protein-mutant chromophore: The W7 clone. Journal of Chemical Physics, 2003, 119, 338-345.	3.0	22
86	Activation parameters for the competing electron transfer and SN2 pathways of the reaction of anthracene radical anion with cyclopropylmethyl bromide. Perkin Transactions II RSC, 2002, , 1423.	1.1	5
87	On the Determination and Use of Reduction Potentials of Short-Lived Radicals. A Review. Collection of Czechoslovak Chemical Communications, 2000, 65, 829-843.	1.0	6
88	Stepwise versus Concerted Electron Transfer-Bond Fragmentation in the Reduction of Phenyl Triphenylmethyl Sulfides. Journal of Physical Chemistry A, 1999, 103, 4141-4143.	2.5	40
89	A Comparative Product Investigation between Grignard Reactions of Benzophenone and Coupling Reactions of Electrogenerated Benzophenone Radical Anions and Alkyl Radicals in THF.. Acta Chemica Scandinavica, 1999, 53, 932-937.	0.7	8
90	Systematic Ranking of Nucleophiles as Electron Donors.. Acta Chemica Scandinavica, 1999, 53, 938-948.	0.7	9

#	Article	IF	Citations
91	New methods for the accurate determination of extinction and diffusion coefficients of aromatic and heteroaromatic radical anions in N,N-dimethylformamide. Journal of Electroanalytical Chemistry, 1998, 454, 123-143.	3.8	79
92	Electron transfer in some nucleophilic reactions. Macromolecular Symposia, 1998, 134, 73-82.	0.7	5
93	Kinetic Studies of the Homogeneous Coupling Reaction between Electrochemically Generated Aromatic Radical Anions and Alkyl Radicals.. Acta Chemica Scandinavica, 1998, 52, 657-671.	0.7	35
94	EPR-Spectroscopic Investigation of the Self-Exchange Electron Transfer Rate Constants and Reorganization Energies for some Electrochemically Generated Radicals.. Acta Chemica Scandinavica, 1997, 51, 767-772.	0.7	11
95	Calculations of Intramolecular Reorganization Energies for Electron-Transfer Reactions Involving Organic Systems. The Journal of Physical Chemistry, 1996, 100, 7411-7417.	2.9	42
96	Rate and Mechanism of the Reductions of Iron Pentacarbonyl and Chromium Hexacarbonyl to Their Metalate Complexes. Organometallics, 1995, 14, 640-649.	2.3	26
97	On Electron Transfer in Aliphatic Nucleophilic Substitution. Accounts of Chemical Research, 1995, 28, 313-319.	15.6	110
98	The influence of diffusion coefficients in a catalytic electron transfer mechanism on linear sweep voltammetric and potential step chronoamperometric measurements. Journal of Electroanalytical Chemistry, 1994, 369, 39-52.	3.8	12
99	Measurements of standard potentials for nucleophiles by fast cyclic voltammetry. Journal of Electroanalytical Chemistry, 1993, 362, 109-118.	3.8	11
100	Self-exchange electron transfer rate constants and reorganization energies for some aromatic compounds in N,N-dimethylformamide determined by elect. Journal of Electroanalytical Chemistry, 1992, 331, 971-983.	3.8	32
101	A new and rigorous method for calculating intramolecular reorganization energies for electron-transfer reactions: applied for self-exchange reactions involving alkyl and benzyl radicals. The Journal of Physical Chemistry, 1991, 95, 8892-8899.	2.9	25
102	Homogeneous Rate Constants for Coupling between Electrochemically Generated Aromatic Anion Radicals and Alkyl Radicals.. Acta Chemica Scandinavica, 1991, 45, 397-402.	0.7	26
103	On the Occurrence of Electron Transfer in Aliphatic Nucleophilic Substitution.. Acta Chemica Scandinavica, 1991, 45, 424-430.	0.7	41
104	A Method for Estimating Reduction and Standard Potentials of Unconjugated Alkyl Radicals.. Acta Chemica Scandinavica, 1990, 44, 715-719.	0.7	41
105	Ultra-microelectrodes for Electrochemical Monitoring of Homogeneous Reactions.. Acta Chemica Scandinavica, 1989, 43, 301-303.	0.7	15
106	Potential Dependence of Coupling vs. Reduction in the Reaction between Benzyl Halides and Anion Radicals.. Acta Chemica Scandinavica, 1989, 43, 803-806.	0.7	41
107	Electrochemical Measurements of Rate Constants for the Electron Transfer Reaction to Sterically Hindered Alkyl Halides.. Acta Chemica Scandinavica, 1989, 43, 876-881.	0.7	24
108	Electrochemical Methods for Determination of Rate Constants. III. Homogeneous Electron Transfer Followed by Elimination Induced by the Substrate Anion.. Acta Chemica Scandinavica, 1988, 42b, 11-22.	0.7	8

#	Article	IF	Citations
109	Electrochemical Reduction of Some Benzotriazoles in Protic and Aprotic Media.. Acta Chemica Scandinavica, 1988, 42b, 319-323.	0.7	9
110	Simulated Data for Simple Electrochemical Determination of Rate Constants for Homogeneous Electron Transfer (SET) Reactions and Competition Parameter for Second-Order Follow-up Reactions. II. Coupling and Second SET Reaction between Mediator and Reduced Form of the Substrate.. Acta Chemica Scandinavica, 1987, 41a, 391-402.	0.7	12
111	Indirect Electrochemical Reduction of meso- and d,l-1,2-Dichloro-1,2-diphenylethane.. Acta Chemica Scandinavica, 1987, 41b, 285-290.	0.7	14
112	Stereochemistry of the Electrochemical Hydrodimerization Reaction of Benzylidenemalononitrile. Dependence on Different Parameters.. Acta Chemica Scandinavica, 1987, 41b, 336-343.	0.7	3
113	Simulated Data for Electrochemical Determination of Rate Constants for Homogeneous Electron Transfer Reactions with a Second Order Homogeneous Follow-up Reaction. I: Coupling between Mediator and Reduced Form of the Substrate.. Acta Chemica Scandinavica, 1986, 40a, 607-614.	0.7	19