

Associa€profã€dr Steen U Pedersen

List of Publications by Year in descending order

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113
papers

3,682
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126907

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4031
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#	ARTICLE	IF	CITATIONS
1	Enhanced Catalytic Activity of Cobalt Porphyrin in CO ₂ Electroreduction upon Immobilization on Carbon Materials. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6468-6472.	13.8	305
2	Selective CO ₂ Reduction to CO in Water using Earth-Abundant Metal and Nitrogen-Doped Carbon Electrocatalysts. <i>ACS Catalysis</i> , 2018, 8, 6255-6264.	11.2	267
3	Bipolar electrochemistry—A wireless approach for electrode reactions. <i>Current Opinion in Electrochemistry</i> , 2017, 2, 13-17.	4.8	116
4	Superhydrophilic Polyelectrolyte Brush Layers with Imparted Anti-Icing Properties: Effect of Counter ions. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 6487-6496.	8.0	115
5	Ligand-Controlled Product Selectivity in Electrochemical Carbon Dioxide Reduction Using Manganese Bipyridine Catalysts. <i>Journal of the American Chemical Society</i> , 2020, 142, 4265-4275.	13.7	114
6	On Electron Transfer in Aliphatic Nucleophilic Substitution. <i>Accounts of Chemical Research</i> , 1995, 28, 313-319.	15.6	110
7	Electrochemical Approach for Constructing a Monolayer of Thiophenolates from Grafted Multilayers of Diaryl Disulfides. <i>Journal of the American Chemical Society</i> , 2007, 129, 1888-1889.	13.7	105
8	Covalent Grafting of Glassy Carbon Electrodes with Diaryliodonium Salts: A New Aspects. <i>Langmuir</i> , 2007, 23, 3786-3793.	3.5	93
9	Using a Hydrazone-Protected Benzenediazonium Salt to Introduce a Near-Monolayer of Benzaldehyde on Glassy Carbon Surfaces. <i>Journal of the American Chemical Society</i> , 2009, 131, 4928-4936.	13.7	83
10	New methods for the accurate determination of extinction and diffusion coefficients of aromatic and heteroaromatic radical anions in N,N-dimethylformamide. <i>Journal of Electroanalytical Chemistry</i> , 1998, 454, 123-143.	3.8	79
11	Immobilization of Aryl and Alkynyl Groups onto Glassy Carbon Surfaces by Electrochemical Reduction of Iodonium Salts. <i>Langmuir</i> , 2005, 21, 8085-8089.	3.5	78
12	Using a Mediating Effect in the Electroreduction of Aryldiazonium Salts To Prepare Conducting Organic Films of High Thickness. <i>Chemistry of Materials</i> , 2011, 23, 1551-1557.	6.7	78
13	Enhanced Catalytic Activity of Cobalt Porphyrin in CO ₂ Electroreduction upon Immobilization on Carbon Materials. <i>Angewandte Chemie</i> , 2017, 129, 6568-6572.	2.0	62
14	Nitrophenyl Groups in Diazonium-Generated Multilayered Films: Which are Electrochemically Responsive?. <i>Langmuir</i> , 2010, 26, 10812-10821.	3.5	56
15	Electrochemical Surface Derivatization of Glassy Carbon by the Reduction of Triaryl- and Alkyldiphenylsulfonium Salts. <i>Langmuir</i> , 2008, 24, 182-188.	3.5	55
16	Scalable carbon dioxide electroreduction coupled to carbonylation chemistry. <i>Nature Communications</i> , 2017, 8, 489.	12.8	54
17	Surface-Attached Poly(glycidyl methacrylate) as a Versatile Platform for Creating Dual-Functional Polymer Brushes. <i>Macromolecules</i> , 2014, 47, 5081-5088.	4.8	52
18	On Surface-Initiated Atom Transfer Radical Polymerization Using Diazonium Chemistry To Introduce the Initiator Layer. <i>Langmuir</i> , 2011, 27, 1070-1078.	3.5	50

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19	A practical electromediated ipso-hydroxylation of aryl and alkyl boronic acids under an air atmosphere. <i>Chemical Communications</i> , 2012, 48, 7203.	4.1	48
20	Controlled electropolymerisation of a carbazole-functionalised iron porphyrin electrocatalyst for CO ₂ reduction. <i>Chemical Communications</i> , 2016, 52, 5864-5867.	4.1	48
21	Redox Grafting of Diazotated Anthraquinone as a Means of Forming Thick Conducting Organic Films. <i>Langmuir</i> , 2012, 28, 1267-1275.	3.5	43
22	Calculations of Intramolecular Reorganization Energies for Electron-Transfer Reactions Involving Organic Systems. <i>The Journal of Physical Chemistry</i> , 1996, 100, 7411-7417.	2.9	42
23	Potential Dependence of Coupling vs. Reduction in the Reaction between Benzyl Halides and Anion Radicals.. <i>Acta Chemica Scandinavica</i> , 1989, 43, 803-806.	0.7	41
24	A Method for Estimating Reduction and Standard Potentials of Unconjugated Alkyl Radicals.. <i>Acta Chemica Scandinavica</i> , 1990, 44, 715-719.	0.7	41
25	On the Occurrence of Electron Transfer in Aliphatic Nucleophilic Substitution.. <i>Acta Chemica Scandinavica</i> , 1991, 45, 424-430.	0.7	41
26	Stepwise versus Concerted Electron Transfer-Bond Fragmentation in the Reduction of Phenyl Triphenylmethyl Sulfides. <i>Journal of Physical Chemistry A</i> , 1999, 103, 4141-4143.	2.5	40
27	General Approach for Monolayer Formation of Covalently Attached Aryl Groups Through Electrografting of Arylhydrazines. <i>Journal of the American Chemical Society</i> , 2009, 131, 13926-13927.	13.7	40
28	Supported molecular catalysts for the heterogeneous CO ₂ electroreduction. <i>Current Opinion in Electrochemistry</i> , 2019, 15, 148-154.	4.8	40
29	Covalent Sidewall Functionalization of Carbon Nanotubes by a "Formation" Degradation Approach. <i>Chemistry of Materials</i> , 2008, 20, 6068-6075.	6.7	39
30	Synthesis and Application of a Triazene-Ferrocene Modifier for Immobilization and Characterization of Oligonucleotides at Electrodes. <i>Journal of Organic Chemistry</i> , 2010, 75, 2474-2481.	3.2	39
31	Nucleophilic and electrophilic displacements on covalently modified carbon: introducing 4,4'-bipyridinium on grafted glassy carbon electrodes. <i>New Journal of Chemistry</i> , 2005, 29, 659.	2.8	38
32	Combining Aryltriazenes and Electrogenerated Acids To Create Well-Defined Aryl-Tethered Films and Patterns on Surfaces. <i>Journal of the American Chemical Society</i> , 2011, 133, 3788-3791.	13.7	36
33	Kinetic Studies of the Homogeneous Coupling Reaction between Electrochemically Generated Aromatic Radical Anions and Alkyl Radicals.. <i>Acta Chemica Scandinavica</i> , 1998, 52, 657-671.	0.7	35
34	Self-exchange electron transfer rate constants and reorganization energies for some aromatic compounds in N,N-dimethylformamide determined by elect. <i>Journal of Electroanalytical Chemistry</i> , 1992, 331, 971-983.	3.8	32
35	Improved Adhesion Between PMMA and Stainless Steel Modified with PMMA Brushes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 21308-21315.	8.0	31
36	Grafting of Aryl Diazonium, Iodonium, and Sulfonium Salts in Unusual Patterns by Exploiting the Potential Gradient in Bipolar Electrochemistry. <i>ChemElectroChem</i> , 2016, 3, 495-501.	3.4	31

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37	Evaluation of the Electrocatalytic Reduction of Carbon Dioxide using Rhenium and Ruthenium Bipyridine Catalysts Bearing Pendant Amines in the Secondary Coordination Sphere. <i>Organometallics</i> , 2020, 39, 1480-1490.	2.3	30
38	Electron Transport through a Diazonium-Based Initiator Layer to Covalently Attached Polymer Brushes of Ferrocenylmethyl Methacrylate. <i>Langmuir</i> , 2013, 29, 13595-13604.	3.5	29
39	Electrochemical Behaviour of HOPG and CVD-Grown Graphene Electrodes Modified with Thick Anthraquinone Films by Diazonium Reduction. <i>Electroanalysis</i> , 2014, 26, 2619-2630.	2.9	29
40	Surface grafted glycopolymer brushes to enhance selective adhesion of HepG2 cells. <i>Journal of Colloid and Interface Science</i> , 2013, 404, 207-214.	9.4	28
41	Durability of PEEK adhesive to stainless steel modified with aryldiazonium salts. <i>International Journal of Adhesion and Adhesives</i> , 2014, 51, 1-12.	2.9	27
42	Dual-Responsive Material Based on Catechol-Modified Self-Immobilative Poly(Disulfide) Backbones. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21543-21549.	13.8	27
43	Rate and Mechanism of the Reductions of Iron Pentacarbonyl and Chromium Hexacarbonyl to Their Metalate Complexes. <i>Organometallics</i> , 1995, 14, 640-649.	2.3	26
44	Covalent Modification of Glassy Carbon Surfaces by Electrochemical Grafting of Aryl Iodides. <i>Langmuir</i> , 2017, 33, 3217-3222.	3.5	26
45	Homogeneous Rate Constants for Coupling between Electrochemically Generated Aromatic Anion Radicals and Alkyl Radicals. <i>Acta Chemica Scandinavica</i> , 1991, 45, 397-402.	0.7	26
46	A new and rigorous method for calculating intramolecular reorganization energies for electron-transfer reactions: applied for self-exchange reactions involving alkyl and benzyl radicals. <i>The Journal of Physical Chemistry</i> , 1991, 95, 8892-8899.	2.9	25
47	Evaluation of various strategies to formation of pH responsive hydroquinone-terminated films on carbon electrodes. <i>Electrochimica Acta</i> , 2007, 53, 1680-1688.	5.2	25
48	Electrochemical Measurements of Rate Constants for the Electron Transfer Reaction to Sterically Hindered Alkyl Halides. <i>Acta Chemica Scandinavica</i> , 1989, 43, 876-881.	0.7	24
49	Promoting Selective Generation of Formic Acid from CO ₂ Using Mn(bpy)(CO) ₃ Br as Electrocatalyst and Triethylamine/Isopropanol as Additives. <i>Journal of the American Chemical Society</i> , 2021, 143, 20491-20500.	13.7	24
50	On the electrografting of stainless steel from para-substituted aryldiazonium salts and the thermal stability of the grafted layer. <i>Surface and Coatings Technology</i> , 2010, 205, 820-827.	4.8	23
51	Elucidation of the Mechanism of Redox Grafting of Diazotated Anthraquinone. <i>Langmuir</i> , 2012, 28, 9573-9582.	3.5	23
52	High- versus Low-Quality Graphene: A Mechanistic Investigation of Electrografted Diazonium-Based Films for Growth of Polymer Brushes. <i>Small</i> , 2014, 10, 922-934.	10.0	23
53	Facile electrochemical transfer of large-area single crystal epitaxial graphene from Ir(111). <i>Journal Physics D: Applied Physics</i> , 2015, 48, 115306.	2.8	23
54	One-step preparation of bifunctionalized surfaces by bipolar electrografting. <i>RSC Advances</i> , 2016, 6, 3882-3887.	3.6	23

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55	Hierarchical MoS ₂ nanosheets on flexible carbon felt as an efficient flow-through electrode for dechlorination. <i>Environmental Science: Nano</i> , 2017, 4, 2286-2296.	4.3	23
56	Gas-phase absorption properties of a green fluorescent protein-mutant chromophore: The W7 clone. <i>Journal of Chemical Physics</i> , 2003, 119, 338-345.	3.0	22
57	Synthesis and Closed-Loop Recycling of Self-Immolative Poly(dithiothreitol). <i>Macromolecules</i> , 2020, 53, 4685-4691.	4.8	22
58	Controlled Electrochemical Carboxylation of Graphene To Create a Versatile Chemical Platform for Further Functionalization. <i>Langmuir</i> , 2014, 30, 6622-6628.	3.5	21
59	Facile Synthesis of Iron- and Nitrogen-Doped Porous Carbon for Selective CO ₂ Electroreduction. <i>ACS Applied Nano Materials</i> , 2018, 1, 3608-3615.	5.0	21
60	Efficient Graphene Production by Combined Bipolar Electrochemical Intercalation and High-Shear Exfoliation. <i>ACS Omega</i> , 2017, 2, 6492-6499.	3.5	20
61	Electrochemical modification of chromium surfaces using 4-nitro- and 4-fluorobenzenediazonium salts. <i>New Journal of Chemistry</i> , 2009, 33, 2405.	2.8	19
62	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.. <i>Acta Chemica Scandinavica</i> , 1986, 40a, 607-614.	0.7	19
63	Study of the coupling reactions between electrochemically generated aromatic radical anions and methyl, alkyl and benzyl radicals. <i>Electrochimica Acta</i> , 2003, 48, 1807-1816.	5.2	18
64	Hydrophilic Polymer Brush Layers on Stainless Steel Using Multilayered ATRP Initiator Layer. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 30616-30627.	8.0	18
65	Elucidation of the mechanism of surface-initiated atom transfer radical polymerization from a diazonium-based initiator layer. <i>Journal of Polymer Science Part A</i> , 2012, 50, 4465-4475.	2.3	17
66	Functionalizing Arrays of Transferred Monolayer Graphene on Insulating Surfaces by Bipolar Electrochemistry. <i>Langmuir</i> , 2016, 32, 6289-6296.	3.5	17
67	Mechanistic Elucidation of Dimer Formation and Strategies for Its Suppression in Electrochemical Reduction of $\text{[Mn(bpy)(CO)}_3\text{]}^+\text{Br}^-$. <i>ChemElectroChem</i> , 2021, 8, 2108-2114.	3.4	17
68	Grafting of Thin Organic Films by Electrooxidation of Arylhydrazines. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13343-13352.	3.1	16
69	Polymer Brush Coating and Adhesion Technology at Scale. <i>Polymers</i> , 2020, 12, 1475.	4.5	16
70	Ultra-microelectrodes for Electrochemical Monitoring of Homogeneous Reactions.. <i>Acta Chemica Scandinavica</i> , 1989, 43, 301-303.	0.7	15
71	Indirect Electrochemical Reduction of meso- and d,l-1,2-Dichloro-1,2-diphenylethane.. <i>Acta Chemica Scandinavica</i> , 1987, 41b, 285-290.	0.7	14
72	Graphene inclusion controlling conductivity and gas sorption of metal-organic framework. <i>RSC Advances</i> , 2018, 8, 13921-13932.	3.6	13

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73	The influence of diffusion coefficients in a catalytic electron transfer mechanism on linear sweep voltammetric and potential step chronoamperometric measurements. <i>Journal of Electroanalytical Chemistry</i> , 1994, 369, 39-52.	3.8	12
74	Synthesis of β -Cyclodextrin Diazonium Salts and Electrochemical Immobilization onto Glassy Carbon and Gold Surfaces. <i>Langmuir</i> , 2012, 28, 16828-16833.	3.5	12
75	On the Kinetic and Thermodynamic Properties of Aryl Radicals Using Electrochemical and Theoretical Approaches. <i>ChemElectroChem</i> , 2017, 4, 3212-3221.	3.4	12
76	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.. <i>Acta Chemica Scandinavica</i> , 1987, 41a, 391-402.	0.7	12
77	Measurements of standard potentials for nucleophiles by fast cyclic voltammetry. <i>Journal of Electroanalytical Chemistry</i> , 1993, 362, 109-118.	3.8	11
78	Versatile electrochemically based preparation of unusual Grignard reagents containing electrophilic substituents. <i>Electrochimica Acta</i> , 2005, 51, 655-664.	5.2	11
79	Attractive double-layer forces and charge regulation upon interaction between electrografted amine layers and silica. <i>Journal of Colloid and Interface Science</i> , 2012, 385, 225-234.	9.4	11
80	Efficient bonding of ethylene-propylene-diene M-class rubber to stainless steel using polymer brushes as a nanoscale adhesive. <i>International Journal of Adhesion and Adhesives</i> , 2018, 87, 31-41.	2.9	11
81	EPR-Spectroscopic Investigation of the Self-Exchange Electron Transfer Rate Constants and Reorganization Energies for some Electrochemically Generated Radicals.. <i>Acta Chemica Scandinavica</i> , 1997, 51, 767-772.	0.7	11
82	Conducting and ordered carbon films obtained by pyrolysis of covalently attached polyphenylene and polyanthracene layers on silicon substrates. <i>Journal of Materials Chemistry</i> , 2012, 22, 18172.	6.7	10
83	Electrochemically assisted grafting of asymmetric alkynyl(aryl)iodonium salts on glassy carbon with focus on the alkynyl/aryl grafting ratio. <i>Journal of Electroanalytical Chemistry</i> , 2013, 710, 41-47.	3.8	10
84	Electroinduced Intercalation of Tetraalkylammonium Ions at the Interface of Graphene Grown on Copper, Platinum, and Iridium. <i>ChemElectroChem</i> , 2016, 3, 2202-2211.	3.4	10
85	Highly Efficient Rubber-to-Stainless Steel Bonding by Nanometer-Thin Cross-linked Polymer Brushes. <i>ACS Omega</i> , 2018, 3, 17511-17519.	3.5	10
86	Patterned Carboxylation of Graphene Using Scanning Electrochemical Microscopy. <i>Langmuir</i> , 2015, 31, 4443-4452.	3.5	9
87	Stimuli-responsive degrafting of polymer brushes via addressable catecholato-metal attachments. <i>Polymer Chemistry</i> , 2020, 11, 5572-5577.	3.9	9
88	Electrochemical Reduction of Some Benzotriazoles in Protic and Aprotic Media.. <i>Acta Chemica Scandinavica</i> , 1988, 42b, 319-323.	0.7	9
89	Systematic Ranking of Nucleophiles as Electron Donors.. <i>Acta Chemica Scandinavica</i> , 1999, 53, 938-948.	0.7	9
90	Characterizing the Behavior and Properties of an Excited Electronic State: Electron-Transfer Mediated Quenching of Fluorescence. <i>Journal of Chemical Education</i> , 2003, 80, 819.	2.3	8

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91	Electrochemical Polymerization of Allylamine Copolymers. <i>Langmuir</i> , 2013, 29, 3791-3796.	3.5	8
92	Achieving Near-Unity CO Selectivity for CO ₂ Electroreduction on an Iron-Decorated Carbon Material. <i>ChemSusChem</i> , 2020, 13, 6360-6369.	6.8	8
93	Facile Access to Disulfide/Thiol Containing Poly(glycidyl methacrylate) Brushes as Potential Rubber Adhesive Layers. <i>ACS Applied Polymer Materials</i> , 2020, 2, 2380-2388.	4.4	8
94	A novel approach toward attachment of graphene oxide on copper using electrochemical grafting of an organic interlayer with enhanced corrosion performance. <i>Progress in Organic Coatings</i> , 2021, 154, 106185.	3.9	8
95	Electrochemical Methods for Determination of Rate Constants. III. Homogeneous Electron Transfer Followed by Elimination Induced by the Substrate Anion.. <i>Acta Chemica Scandinavica</i> , 1988, 42b, 11-22.	0.7	8
96	A Comparative Product Investigation between Grignard Reactions of Benzophenone and Coupling Reactions of Electrogenerated Benzophenone Radical Anions and Alkyl Radicals in THF.. <i>Acta Chemica Scandinavica</i> , 1999, 53, 932-937.	0.7	8
97	Versatile Transformations of Alkylamine-Derivatized Glassy Carbon Electrodes using Aryl Isocyanates. <i>Langmuir</i> , 2009, 25, 12160-12168.	3.5	7
98	Using Time-Resolved Electrochemical Patterning to Gain Fundamental Insight into Aryl Radical Surface Modification. <i>ChemPhysChem</i> , 2012, 13, 3303-3307.	2.1	7
99	Two-phase bipolar electrografting. <i>Electrochimica Acta</i> , 2019, 317, 61-69.	5.2	7
100	On the Determination and Use of Reduction Potentials of Short-Lived Radicals. A Review. <i>Collection of Czechoslovak Chemical Communications</i> , 2000, 65, 829-843.	1.0	6
101	Electrochemical grafting of heterocyclic molecules on glassy carbon and platinum using heteroaromatic iodonium salts or iodo-substituted heteroaromatics. <i>Electrochimica Acta</i> , 2018, 261, 356-364.	5.2	6
102	Synthesis and depolymerization of self-immolative poly(disulfide)s with saturated aliphatic backbones. <i>Polymer Chemistry</i> , 2021, 13, 85-90.	3.9	6
103	Electron transfer in some nucleophilic reactions. <i>Macromolecular Symposia</i> , 1998, 134, 73-82.	0.7	5
104	Activation parameters for the competing electron transfer and SN2 pathways of the reaction of anthracene radical anion with cyclopropylmethyl bromide. <i>Perkin Transactions II RSC</i> , 2002, , 1423.	1.1	5
105	Are Reactions Between Metal Cyanides and Aryl Diazonium Ions Really Outer-Sphere Electron Transfer Processes?. <i>Journal of Physical Chemistry A</i> , 2010, 114, 6575-6585.	2.5	5
106	On Electrogenerated Acid-Facilitated Electrografting of Aryltriazenes to Create Well-Defined Aryl-Tethered Films. <i>Langmuir</i> , 2013, 29, 5181-5189.	3.5	5
107	Highly Scalable Conversion of Blood Protoporphyrin to Efficient Electrocatalyst for CO ₂ to CO Conversion. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100067.	3.7	4
108	Dual-Responsive Material Based on Catechol-Modified Self-Immolative Poly(Disulfide) Backbones. <i>Angewandte Chemie</i> , 2021, 133, 21713-21719.	2.0	4

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109	Electrochemical procedure for constructing poly(phenylene sulfide) brushes on glassy carbon and stainless steel. <i>Journal of Polymer Science Part A</i> , 2016, 54, 91-98.	2.3	3
110	Wohl-Ziegler Bromination of Electrografted Films for Optimizing Atom Transfer Radical Polymerization. <i>Electroanalysis</i> , 2016, 28, 2849-2854.	2.9	3
111	Hydrosilane-Modified Poly(2-Hydroxyethyl Methacrylate) Brush as a Nanoadhesive for Efficient Silicone Bonding. <i>ACS Omega</i> , 2019, 4, 12130-12135.	3.5	3
112	Stereochemistry of the Electrochemical Hydrodimerization Reaction of Benzylidenemalononitrile. Dependence on Different Parameters.. <i>Acta Chemica Scandinavica</i> , 1987, 41b, 336-343.	0.7	3
113	Postfunctionalization of Self-Immolative Poly(dithiothreitol) Using Steglich Esterification. <i>Macromolecules</i> , 2022, 55, 5788-5794.	4.8	2