Peter G Pickup

List of Publications by Year
in descending order

139 papers	6,094 citations	70961 41 h-index	76769 74 g-index
140 all docs	140 docs citations	140 times ranked	5833 citing authors

#	Article	IF	Citations
1	Recent advances in direct formic acid fuel cells (DFAFC). Journal of Power Sources, 2008, 182, 124-132.	4.0	1,006
2	Ionic Conductivity of PEMFC Electrodes. Journal of the Electrochemical Society, 2003, 150, C745.	1.3	239
3	Ion transport in polypyrrole and a polypyrrole/polyanion composite. The Journal of Physical Chemistry, 1993, 97, 5356-5362.	2.9	194
4	Conjugated metallopolymers. Redox polymers with interacting metal based redox sites. Journal of Materials Chemistry, 1999, 9, 1641-1653.	6.7	150
5	An asymmetric anthraquinone-modified carbon/ruthenium oxide supercapacitor. Journal of Power Sources, 2009, 187, 640-643.	4.0	145
6	Chemical Synthesis, Characterization, and Electrochemical Studies of Poly(3,4-ethylenedioxythiophene)/Poly(styrene-4-sulfonate) Composites. Chemistry of Materials, 1999, 11, 262-268.	3.2	142
7	Anthraquinone modified carbon fabric supercapacitors with improved energy and power densities. Journal of Power Sources, 2008, 181, 182-185.	4.0	127
8	An asymmetric supercapacitor with anthraquinone and dihydroxybenzene modified carbon fabric electrodes. Electrochemistry Communications, 2011, 13, 147-149.	2.3	120
9	In situ measurement of the conductivity of polypyrrole and poly[1-methyl-3-(pyrrol-1-ylmethyl)pyridinium]+ as a function of potential by mediated voltammetry. Redox conduction or electronic conduction?. Journal of the American Chemical Society, 1990, 112, 1776-1782.	6.6	112
10	Mechanistic study of the deactivation of carbon supported Pd during formic acid oxidation. Electrochemistry Communications, 2009, 11, 2012-2014.	2.3	101
11	Measurement of single electrode potentials and impedances in hydrogen and direct methanol PEM fuel cells. Electrochimica Acta, 2004, 49, 4119-4126.	2.6	99
12	An electrochemical impedance spectroscopy study of fuel cell electrodes. Electrochimica Acta, 2005, 50, 2469-2474.	2.6	99
13	Dynamic Electrochemistry:Â Methodology and Application. Analytical Chemistry, 1996, 68, 379-444.	3.2	94
14	Modification of carbon supported catalysts to improve performance in gas diffusion electrodes. Electrochimica Acta, 2001, 46, 2863-2869.	2.6	90
15	Ru oxide supercapacitors with high loadings and high power and energy densities. Journal of Power Sources, 2008, 176, 410-416.	4.0	87
16	Coupling of ion and electron transport during impedance measurements on a conducting polymer with similar ionic and electronic conductivities. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 321.	1.7	85
17	Alternating current impedance study of a polypyrrole-based anion-exchange polymer. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 3631.	1.7	84
18	Deactivation/reactivation of a Pd/C catalyst in a direct formic acid fuel cell (DFAFC): Use of array membrane electrode assemblies. Journal of Power Sources, 2009, 187, 493-499.	4.0	83

#	Article	IF	Citations
19	Electrochemically Induced Substitution of Polythiophenes and Polypyrrole. Chemistry of Materials, 1996, 8, 701-707.	3.2	78
20	A Donorâ"Acceptor Conducting Copolymer with a Very Low Band Gap and High Intrinsic Conductivity. Chemistry of Materials, 1998, 10, 2212-2216.	3.2	77
21	Enhanced ionic conductivity of polypyrrole due to incorporation of excess electrolyte during potential cycling. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 1417.	1.7	73
22	Ion transport in poly(3,4-ethylenedioxythiophene)â€"poly(styrene-4-sulfonate) composites. Physical Chemistry Chemical Physics, 2000, 2, 1255-1260.	1.3	73
23	Electronically Conducting Proton Exchange Polymers as Catalyst Supports for Proton Exchange Membrane Fuel Cells. Electrocatalysis of Oxygen Reduction, Hydrogen Oxidation, and Methanol Oxidation. Journal of the Electrochemical Society, 1999, 146, 2054-2058.	1.3	72
24	Ionic and Electronic Conductivity of Polyâ€(3â€methylpyrroleâ€4â€carboxylic Acid). Journal of the Electrochemical Society, 1992, 139, 2097-2105.	1.3	71
25	Analysis of performance losses of direct ethanol fuel cells with the aid of a reference electrode. Journal of Power Sources, 2006, 161, 256-263.	4.0	70
26	The promoting effect of Pb on carbon supported Pt and Pt/Ru catalysts for electro-oxidation of ethanol. Electrochimica Acta, 2006, 52, 1033-1037.	2.6	67
27	Characteristics of Polypyrrole/Nafion Composite Membranes in a Direct Methanol Fuel Cell. Journal of the Electrochemical Society, 2003, 150, C735.	1.3	63
28	The Influence of the Aqueous Growth Medium on the Growth Rate, Composition, and Structure of Hydrous Iridium Oxide Films. Journal of the Electrochemical Society, 1988, 135, 126-133.	1.3	62
29	Characterization of polymer supported catalysts by cyclic voltammetry and rotating disk voltammetry. Electrochimica Acta, 2000, 46, 119-125.	2.6	61
30	Conducting Copolymers of Pyridine with Thiophene, N-Methylpyrrole, and Selenophene. Chemistry of Materials, 1996, 8, 2444-2450.	3.2	60
31	Impedance measurements of ionic conductivity as a probe of structure in electrochemically deposited polypyrrole films. Journal of Electroanalytical Chemistry, 1995, 396, 359-364.	1.9	59
32	Ru oxide/carbon nanotube composites for supercapacitors prepared by spontaneous reduction of Ru(VI) and Ru(VII). Electrochimica Acta, 2009, 54, 7141-7147.	2.6	59
33	Novel Pdâ€"Pb/C bimetallic catalysts for direct formic acid fuel cells. Journal of Power Sources, 2009, 192, 279-284.	4.0	59
34	Size Control of Polypyrrole Particles. Chemistry of Materials, 1997, 9, 2934-2939.	3.2	57
35	Effects of crossover on product yields measured for direct ethanol fuel cells. Electrochimica Acta, 2010, 55, 3824-3829.	2.6	57
36	Pb and Sb modified Pt/C catalysts for direct formic acid fuel cells. Electrochimica Acta, 2010, 55, 7354-7361.	2.6	52

#	Article	IF	Citations
37	Decoration of carbon-supported Pt catalysts with Sn to promote electro-oxidation of ethanol. Journal of Power Sources, 2007, 173, 121-129.	4.0	51
38	Simulation and analysis of the impedance behaviour of electroactive layers with non-uniform conductivity and capacitance profiles. Electrochimica Acta, 2001, 46, 4177-4183.	2.6	46
39	Chemical Modification of Proton Exchange Membrane Fuel Cell Catalysts with a Sulfonated Silane. Electrochemical and Solid-State Letters, 2001, 4, A59.	2.2	45
40	The origin of the discrepancy between the low frequency AC capacitances and voltammetric capacitances of conducting polymers. Journal of Electroanalytical Chemistry, 1994, 372, 289-291.	1.9	43
41	Voltammetric quantification of the spontaneous chemical modification of carbon black by diazonium coupling. Electrochimica Acta, 2009, 54, 2305-2311.	2.6	43
42	Metalâ^'Metal Interactions in a Novel Hybrid Metallopolymer. Journal of the American Chemical Society, 1999, 121, 11773-11779.	6.6	42
43	Impedance spectroscopy of polypyrrole/poly(styrenesulphonate) composites. Simultaneous anion and cation transport. Electrochimica Acta, 1996, 41, 1877-1882.	2.6	41
44	Optimisation of polypyrrole/Nafion composite membranes for direct methanol fuel cells. Electrochimica Acta, 2006, 51, 4052-4060.	2.6	41
45	Ion transport in pyrrole-based polymer films. Faraday Discussions of the Chemical Society, 1989, 88, 165.	2.2	40
46	Ion Transport in a Chemically Prepared Polypyrrole/Poly(styrene-4-sulfonate) Composite. Journal of Physical Chemistry B, 1999, 103, 10143-10148.	1.2	39
47	Mo oxide modified catalysts for direct methanol, formaldehyde and formic acid fuel cells. Journal of Applied Electrochemistry, 2006, 36, 339-345.	1.5	36
48	Carbon supported PtBi catalysts for direct formic acid fuel cells. Electrochimica Acta, 2011, 56, 4037-4043.	2.6	36
49	Permselectivity of polypyrrole in acetonitrile. The Journal of Physical Chemistry, 1991, 95, 9634-9635.	2.9	35
50	X-ray emission analysis of thin poly(3-methylthiophene) and poly{(3-methylthiophene)-co-[1-methyl-3-(pyrrol-1-ylmethyl)pyridinium]} films. Composition, oxidation level, and overoxidation. Analytical Chemistry, 1993, 65, 696-703.	3.2	35
51	Bithiopheneâ€“bithiazole copolymers and their metal complexes. Journal of Materials Chemistry, 2001, 11, 1357-1363.	6.7	35
52	Electrocatalysis of CO2 reduction by ruthenium benzothiazole and bithiazole complexes. Electrochemistry Communications, 2007, 9, 2525-2528.	2.3	35
53	Electron Transport in a Conjugated Metallopolymer Containing Binuclear Osmium Centers with Strong Electronic Communication. Journal of the American Chemical Society, 1999, 121, 7710-7711.	6.6	34
54	Pt and PtRu catalyst bilayers increase efficiencies for ethanol oxidation in proton exchange membrane electrolysis and fuel cells. Journal of Power Sources, 2017, 366, 27-32.	4.0	34

#	Article	IF	Citations
55	Electron Transport in Ru and Os Polybenzimidazole-Based Metallopolymers. Journal of Physical Chemistry B, 2001, 105, 8838-8844.	1.2	33
56	Product Distributions and Efficiencies for Ethanol Oxidation in a Proton Exchange Membrane Electrolysis Cell. Journal of the Electrochemical Society, 2017, 164, F861-F865.	1.3	33
57	A low band gap conjugated metallopolymer with nickel bis(dithiolene) crosslinks. Chemical Communications, 2001, , 815-816.	2.2	32
58	Deactivation resistant PdSb/C catalysts for direct formic acid fuel cells. Electrochemistry Communications, 2010, 12, 800-803.	2.3	32
59	Product distributions and efficiencies for ethanol oxidation at PtNi octahedra. Journal of Power Sources, 2018, 400, 369-376.	4.0	31
60	Support effects on the oxidation of ethanol at Pt nanoparticles. Electrochimica Acta, 2012, 65, 210-215.	2.6	30
61	Thiophene-substituted nickel dithiolene complexes. Precursors for low band gap conjugated metallopolymers. Journal of Materials Chemistry, 2002, 12, 2949-2956.	6.7	28
62	Partitioning and Polymerization of Pyrrole into Perfluorosulfonic Acid (Nafion) Membranes. Journal of Physical Chemistry B, 2003, 107, 2480-2484.	1.2	28
63	Determination of the efficiency of ethanol oxidation in a proton exchange membrane electrolysis cell. Journal of Power Sources, 2017, 351, 106-114.	4.0	28
64	Impedance of polypyrrole perchlorate/polypyrrole poly(styrenesulfonate) bilayers. The Journal of Physical Chemistry, 1993, 97, 3941-3943.	2.9	27
65	Partitioning and Polymerization of Pyrrole into Perfluorosulfonate (Nafion) Membranes under Neutral Conditions. Journal of Physical Chemistry B, 2003, 107, 8412-8415.	1.2	27
66	Online analysis of carbon dioxide from a direct ethanol fuel cell. Journal of Power Sources, 2009, 194, 286-290.	4.0	27
67	Support effects on the oxidation of methanol at platinum nanoparticles. Electrochemistry Communications, 2011, 13, 704-706.	2.3	26
68	Novel electroactive surface functionality from the coupling of an aryl diamine to carbon black. Electrochemistry Communications, 2009, 11, 10-13.	2.3	25
69	Online analysis of products from a direct ethanol fuel cell. Electrochemistry Communications, 2009, 11, 1877-1880.	2.3	25
70	Electrochemistry and electron transport properties of copolymers of electron deficient fluorenes with thiophene. Electrochimica Acta, 2007, 52, 4685-4690.	2.6	24
71	Continuous monitoring of CO2 yields from electrochemical oxidation of ethanol: Catalyst, current density and temperature effects. Journal of Power Sources, 2008, 177, 71-76.	4.0	24
72	Efficient electrochemical oxidation of ethanol to carbon dioxide in a fuel cell at ambient temperature. Journal of Power Sources, 2008, 179, 280-285.	4.0	24

#	Article	IF	Citations
73	Codeposited PtSb/C catalysts for direct formic acid fuel cells. Journal of Power Sources, 2011, 196, 7951-7956.	4.0	24
74	Charge trapping in poly(1-amino-anthraquinone) films. Electrochimica Acta, 2013, 93, 87-92.	2.6	24
75	Determination of the efficiency of methanol oxidation in a direct methanol fuel cell. Electrochimica Acta, 2016, 199, 210-217.	2.6	24
76	Evaluation of ethanol oxidation catalysts by rotating disc voltammetry. Electrochimica Acta, 2016, 215, 84-92.	2.6	23
77	Nitrogen-rich polymers for the electrocatalytic reduction of CO2. Electrochemistry Communications, 2010, 12, 1749-1751.	2.3	22
78	Electrochemical impedance study of the polymerization of pyrrole on high surface area carbon electrodes. Physical Chemistry Chemical Physics, 2010, 12, 4733.	1.3	22
79	Screening of PdM and PtM catalysts in a multi-anode direct formic acid fuel cell. Journal of Applied Electrochemistry, 2011, 41, 589-597.	1.5	21
80	PdBi/C and PtPb/C Bimetallic Catalysts for Direct Formic Acid Fuel Cells. International Journal of Green Energy, 2009, 6, 571-582.	2.1	20
81	Ru oxide/carbon fabric composites for supercapacitors. Journal of Solid State Electrochemistry, 2010, 14, 231-240.	1.2	20
82	Formic acid oxidation at spontaneously deposited palladium on polyaniline modified carbon fibre paper. Electrochimica Acta, 2011, 56, 7666-7672.	2.6	20
83	Dependence of Electrode Overpotentials in PEM Fuel Cells on the Placement of the Reference Electrode. Electrochemical and Solid-State Letters, 2006, 9, A249.	2.2	19
84	Carbon Fabric Supported Manganese and Ruthenium Oxide Thin Films for Supercapacitors. Journal of the Electrochemical Society, 2011, 158, A241.	1.3	19
85	Controlling the morphology of electrochemically deposited poly(3-methylthiophene) films by electrode rotation. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 3097.	1.7	17
86	Influence of Electrode Rotation on the Growth and Impedance of a Low Band Gap Conducting Polymer. Langmuir, 2006, 22, 10612-10618.	1.6	17
87	Formic Acid Oxidation at Ru@Pt Core-Shell Nanoparticles. Electrocatalysis, 2016, 7, 477-485.	1.5	17
88	Carbon monoxide and formic acid oxidation at Rh@Pt nanoparticles. Electrochimica Acta, 2019, 302, 234-240.	2.6	17
89	Kinetics and Stoichiometry of Methanol and Ethanol Oxidation in Multi-Anode Proton Exchange Membrane Cells. Journal of the Electrochemical Society, 2017, 164, F1172-F1178.	1.3	16
90	Measurement of carbon dioxide yields for ethanol oxidation by operation of a direct ethanol fuel cell in crossover mode. Electrochimica Acta, 2012, 78, 274-278.	2.6	15

#	Article	IF	Citations
91	Oxidation of formic acid at polycarbazole-supported Pt nanoparticles. Electrochimica Acta, 2013, 97, 326-332.	2.6	15
92	Electrochemistry of fluoren-9-one based conjugated copolymers. Electrochimica Acta, 2006, 52, 15-23.	2.6	14
93	Evaluation of methanol oxidation catalysts by rotating disc voltammetry. Electrochimica Acta, 2016, 199, 12-17.	2.6	13
94	Electron transport in conjugated metallopolymers. Macromolecular Symposia, 2003, 196, 165-171.	0.4	12
95	Ion exchange and ion transport properties of sulfonated organically modified silica hydrogels. Journal of Solid State Electrochemistry, 2004, 8, 742.	1.2	12
96	Determination of the average number of electrons released during the oxidation of ethanol in a direct ethanol fuel cell. Electrochimica Acta, 2015, 182, 856-860.	2.6	12
97	Improvement of bark pyrolysis oil and value added chemical recovery by pervaporation. Fuel Processing Technology, 2020, 199, 106292.	3.7	12
98	Electrochemical Oxidation of Methanol and Ethanol at Rh@Pt and Ru@Pt Catalysts. Journal of the Electrochemical Society, 2020, 167, 106507.	1.3	12
99	Anion and cation transport in composite films of polypyrrole with a sulphonated silica (ormosil) hydrogel. Electrochimica Acta, 2007, 52, 6275-6281.	2.6	11
100	The Effects of Conducting Polymers on Formic Acid Oxidation at Pt Nanoparticles. Electrochimica Acta, 2015, 162, 230-236.	2.6	11
101	Ruthenium-Tin Oxide/Carbon Supported Platinum Catalysts for Electrochemical Oxidation of Ethanol in Direct Ethanol Fuel Cells. Journal of the Electrochemical Society, 2018, 165, F215-F219.	1.3	11
102	Composition Dependence of Ethanol Oxidation at Ruthenium-Tin Oxide/Carbon Supported Platinum Catalysts. Journal of the Electrochemical Society, 2018, 165, J3019-J3025.	1.3	11
103	Pt/Ruâ€“Sn Oxide/Carbon Catalysts for Ethanol Oxidation. Journal of the Electrochemical Society, 2020, 167, 054518.	1.3	11
104	Oxygen-Modified Poly(4-dicyanomethylene-4H-cyclopenta[2,1-b;3,4-bâ€˜]dithiophene):â€‰ A Tunable Low Band Gap Polymer. Chemistry of Materials, 1999, 11, 1541-1545.	3.2	10
105	Support Effects on the Oxidation of Formic Acid at Pd Nanoparticles. Electrocatalysis, 2011, 2, 159-162.	1.5	10
106	Recent Advances in Electrocatalysis of Formic Acid Oxidation. Lecture Notes in Energy, 2013, , 69-87.	0.2	10
107	Influences of aniline, carbazole, indole, and pyrrole monomers and polymers on formic acid oxidation at Pt electrodes. Electrochimica Acta, 2013, 107, 225-230.	2.6	10
108	Performance and low temperature behaviour of hydrous ruthenium oxide supercapacitors with improved power densities. Energy and Environmental Science, 2008, , .	15.6	8

#	Article	IF	Citations
109	Mechanistic studies of formic acid oxidation at polycarbazole supported Pt nanoparticles. Electrochimica Acta, 2013, 111, 823-829.	2.6	8
110	Improving carbon dioxide yields and cell efficiencies for ethanol oxidation by potential scanning. Journal of Power Sources, 2014, 269, 173-179.	4.0	8
111	Ionâ€“polymer interactions in polypyrrole films. Canadian Journal of Chemistry, 1997, 75, 1518-1522.	0.6	6
112	An electrochemical impedance study of thin polycarbazole films. Electrochimica Acta, 2014, 130, 577-582.	2.6	6
113	Sinusoidal potential cycling operation of a direct ethanol fuel cell toÂimproving carbon dioxide yields. Journal of Power Sources, 2014, 268, 439-442.	4.0	6
114	Formic acid oxidation at palladium nanoparticles supported on polyaniline modified carbon fibre paper. Journal of Solid State Electrochemistry, 2015, 19, 2843-2848.	1.2	6
115	Conducting Polymer-Supported Fuel Cell Catalysts. ACS Symposium Series, 2002, , 166-183.	0.5	5
116	Ion-exchange and ion-transport in silica and sulphonated-silica (ormosil) hydrogels. Electrochimica Acta, 2008, 53, 3897-3902.	2.6	5
117	Factors affecting the spontaneous adsorption of Bi(III) onto Pt and PtRu nanoparticles. Applied Surface Science, 2016, 364, 308-314.	3.1	5
118	Determination of the Stoichiometry of Ethanol Oxidation from the Flow Rate Dependence of the Current in a Proton Exchange Membrane Electrolysis Cell. Journal of the Electrochemical Society, 2018, 165, F479-F483.	1.3	5
119	Screening of Catalysts for the Electrochemical Oxidation of Organic Fuels in A Multi-Anode Proton Exchange Membrane Cell. Journal of the Electrochemical Society, 2019, 166, F942-F948.	1.3	5
120	Electrolysis of Ethanol and Methanol at PtRu@Pt Catalysts. Journal of the Electrochemical Society, 2022, 169, 034523.	1.3	5
121	Separation of kinetic and mass transport effects in the electrolysis of formic acid in a flow-through cell. Electrochimica Acta, 2019, 294, 110-116.	2.6	4
122	Effects of iron-tetrasulfophthalocyanine on the catalytic activities of Pt/C, PtRu/C, and Pd/C catalysts in a multi-anode direct formic acid fuel cell. Journal of Applied Electrochemistry, 2010, 40, 799-807.	1.5	3
123	Electrolysis of pyrolysis oil distillates and permeates in a multi-anode proton exchange membrane cell. Applied Catalysis B: Environmental, 2019, 256, 117892.	10.8	3
124	Electrochemical oxidation of formic acid at carbon supported Pt coated rotating disk electrodes. Russian Journal of Electrochemistry, 2017, 53, 1054-1060.	0.3	2
125	Influence of counterion charge on the electrochemistry and impedance of polypyrrole. Journal of Solid State Electrochemistry, 2020, 24, 2741-2749.	1.2	2
126	Incorporation of ferrocene into polypyrrole films via an ionic adduct with boron trifluoride. Journal of Solid State Electrochemistry, 2012, 16, 3769-3775.	1.2	1

#	Article	IF	Citations
127	Electrochemical n-doping of polyfluorenone films. Synthetic Metals, 2019, 254, 128-133.	2.1	1
128	PtNix/C Catalysts for Improved Performance in Ethanol Fuel Cells. ECS Transactions, 2020, 97, 893-900.	0.3	1
129	(Invited) Pt/Metal Oxide/Ti and Pt/Metal Oxide/Carbon Composite Films for Ethanol Oxidation. ECS Transactions, 2020, 97, 837-844.	0.3	1
130	Hydrodynamic Studies of Ethanol Oxidation at Pt and PtRu Catalysts at Elevated Temperatures. ECS Transactions, 2020, 97, 869-875.	0.3	1
131	A Study of the Ethanol Oxidation Kinetics and Product Distribution using a Pt/TOMS Electrocatalyst. Journal of the Electrochemical Society, 2022, 169, 034505.	1.3	1
132	Oxidation of Formic Acid, Methanol, and Ethanol at Surface-Modified Pt/C Catalysts. ECS Transactions, 2020, 97, 939-948.	0.3	0
133	Ethanol Oxidation at Pt Nanoparticles Supported on Titanium Modified by Thermal Decomposition of Tin and Ruthenium Acetylacetonate Complexes. Journal of the Electrochemical Society, 2021, 168, 106503.	1.3	0
134	(Invited) Pt/Metal Oxide/Ti and Pt/Metal Oxide/Carbon Composite Films for Ethanol Oxidation. ECS Meeting Abstracts, 2020, MA2020-01, 2775-2775.	0.0	0
135	Electrochemical Oxidation of Organic Fuels at Rotating and Flow through Electrodes. ECS Meeting Abstracts, 2020, MA2020-01, 2859-2859.	0.0	0
136	Ptni/C Catalysts for Improved Selectivity and Performance in Ethanol Fuel Cells. ECS Meeting Abstracts, 2020, MA2020-01, 2915-2915.	0.0	0
137	Modification of Carbon Black by Thermal Decomposition of Lead Acetylacetonate to Improve Activities for Ethanol Oxidation at Supported Pt Catalysts. ECS Meeting Abstracts, 2020, MA2020-01, 2917-2917.	0.0	0
138	Characterization of Formic Acid Oxidation at Surface-Modified Pt/C Catalysts. ECS Meeting Abstracts, 2020, MA2020-01, 2922-2922.	0.0	0
139	Modification of Carbon Black by Thermal Decomposition of Lead Acetylacetonate to Improve Activities for Ethanol Oxidation at Supported Pt Catalysts. ECS Transactions, 2020, 97, 929-938.	0.3	0