Selmiye Alkan GÃ¼rsel

List of Publications by Year
in descending order

101 papers	2,749 citations	147566 31 h-index	223531 46 g-index
102 all docs	102 docs citations	102 times ranked	2659 citing authors

#	Article	IF	Citations
1	Synthesis and Characterization of Poly(mâ€tolyloxyâ€coâ€4â€pyridinoxy phosphazene)s and their Application as Proton Exchange Membranes. ChemistrySelect, 2022, 7, .	0.7	3
2	Nanofiber based hybrid sulfonated silica/P(VDF-TrFE) membranes for PEM fuel cells. International Journal of Hydrogen Energy, 2021, 46, 13583-13593.	3.8	16
3	One-step fabrication of new generation graphene-based electrodes for polymer electrolyte membrane fuel cells by a novel electrophoretic deposition. International Journal of Hydrogen Energy, 2021, 46, 5653-5663.	3.8	8
4	High stability graphene oxide aerogel supported ultrafine Fe3O4 particles with superior performance as a Li-ion battery anode. Carbon, 2021, 174, 158-172.	5.4	65
5	The influence of nitrogen doping on reduced graphene oxide as highly cyclable Li-ion battery anode with enhanced performance. International Journal of Hydrogen Energy, 2021, 46, 11865-11877.	3.8	22
6	Unveiling the presence of mixed oxidation states of Europium in Li_{7+Î´}Eu_xLa_{3â^'Î´}Zr_{2â^'Î´}O_{12â^'Î´} garnet and its impact on the Liâ€ion conductivity. Journal of the American Ceramic Society, 2021, 104, 4257-4271.	1.9	10
7	A glance at the influence of different dopant elements on Li7La3Zr2O12 garnets. Ionics, 2021, 27, 3673-3698.	1.2	7
8	Emergent hierarchical porosity by ZIF-8/GO nanocomposite increases oxygen electroreduction activity of Pt nanoparticles. International Journal of Hydrogen Energy, 2021, 46, 32858-32870.	3.8	11
9	CeO2 nanorod decorated NrGO additives for boosting PEMFC performance. International Journal of Hydrogen Energy, 2021, 46, 32250-32260.	3.8	4
10	Simultaneously deposited Pt-alloy nanoparticles over graphene nanoplatelets via supercritical carbon dioxide deposition for PEM fuel cells. Journal of Alloys and Compounds, 2021, 874, 159919.	2.8	11
11	Improved Lithium-Ion Transport Within the LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Secondary Cathode Particles Through a Template-Assisted Synthesis Route. ACS Sustainable Chemistry and Engineering, 2021, 9, 12560-12574.	3.2	4
12	Metal-Salt Enhanced Grafting of Vinylpyridine and Vinylimidazole Monomer Combinations in Radiation Grafted Membranes for High-Temperature PEM Fuel Cells. ACS Applied Energy Materials, 2020, 3, 532-540.	2.5	14
13	Platinum nanoparticles decorated carbon nanofiber hybrids as highly active electrocatalysts for polymer electrolyte membrane fuel cells. International Journal of Energy Research, 2020, 44, 10251-10261.	2.2	16
14	Pt-alloy decorated graphene as an efficient electrocatalyst for PEM fuel cell reactions. Journal of Supercritical Fluids, 2020, 165, 104962.	1.6	29
15	Nafionâ€coated <scp>LiNi₀</scp>_.<scp>₈₀Co₀</scp>_.<scp>₁₅Al₀ (<scp>NCA</scp>) cathode preparation and its influence on the Liâ€ion battery cycle performance. Energy Storage, 2020, 2, e154.	2.3	11
16	A simple spray assisted method to fabricate high performance layered graphene/silicon hybrid anodes for lithium-ion batteries. International Journal of Hydrogen Energy, 2019, 44, 20267-20277.	3.8	12
17	Graphene nanoplatelets-carbon black hybrids as an efficient catalyst support for Pt nanoparticles for polymer electrolyte membrane fuel cells. Renewable Energy, 2019, 139, 1099-1110.	4.3	37
18	A Continuous-flow Photocatalytic Reactor for the Precisely Controlled Deposition of Metallic Nanoparticles. Journal of Visualized Experiments, 2019, , .	0.2	3

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19	Binary CuPt alloy nanoparticles assembled on reduced graphene oxide-carbon black hybrid as efficient and cost-effective electrocatalyst for PEMFC. International Journal of Hydrogen Energy, 2019, 44, 14184-14192.	3.8	29
20	An effective electrocatalyst based on platinum nanoparticles supported with graphene nanoplatelets and carbon black hybrid for PEM fuel cells. International Journal of Hydrogen Energy, 2019, 44, 14175-14183.	3.8	38
21	Homogeneous growth of TiO₂-based nanotubes on nitrogen-doped reduced graphene oxide and its enhanced performance as a Li-ion battery anode. Nanotechnology, 2018, 29, 255402.	1.3	18
22	A facile synthesis and assembly of ultrasmall Pt nanoparticles on reduced graphene oxideâ€'carbon black hybrid for enhanced performance in PEMFC. Materials and Design, 2018, 151, 29-36.	3.3	36
23	Scalable Synthesis of Sub-Nanosized Platinum-Reduced Graphene Oxide Composite by an Ultraprecise Photocatalytic Method. ACS Sustainable Chemistry and Engineering, 2018, 6, 3773-3782.	3.2	26
24	Development of Efficient Copperâ€Based MOFâ€Derived Catalysts for the Reduction of Aromatic Nitro Compounds. European Journal of Inorganic Chemistry, 2018, 2018, 1073-1079.	1.0	36
25	Characterization and fuel cell performance of divinylbenzene crosslinked phosphoric acid doped membranes based on 4-vinylpyridine grafting onto poly(ethylene-co-tetrafluoroethylene) films. International Journal of Hydrogen Energy, 2018, 43, 8088-8099.	3.8	11
26	Enhancing proton conductivity via sub-micron structures in proton conducting membranes originating from sulfonated PVDF powder by radiation-induced grafting. Solid State Ionics, 2018, 314, 66-73.	1.3	23
27	High performance electrocatalysts supported on graphene based hybrids for polymer electrolyte membrane fuel cells. International Journal of Hydrogen Energy, 2018, 43, 23221-23230.	3.8	54
28	All-carbon hybrids for high performance supercapacitors. International Journal of Energy Research, 2018, 42, 3575-3587.	2.2	43
29	Polyvinylidene fluoride grafted poly(styrene sulfonic acid) as ionic polymer-metal composite actuator. Sensors and Actuators A: Physical, 2018, 279, 157-167.	2.0	15
30	Flexible carbonâ€"cellulose fiber-based composite gas diffusion layer for polymer electrolyte membrane fuel cells. Journal of Materials Science, 2017, 52, 4968-4976.	1.7	17
31	Macroscopic assembly of flexible and strong green graphene fibres. RSC Advances, 2017, 7, 26735-26744.	1.7	7
32	Investigation of electrochemical actuation by polyaniline nanofibers. Smart Materials and Structures, 2017, 26, 095021.	1.8	8
33	Green Composite Papers via Use of Natural Binders and Graphene for PEM Fuel Cell Electrodes. ACS Sustainable Chemistry and Engineering, 2017, 5, 8407-8415.	3.2	19
34	Thermodynamically controlled Pt deposition over graphene nanoplatelets: Effect of Pt loading on PEM fuel cell performance. International Journal of Hydrogen Energy, 2017, 42, 19246-19256.	3.8	37
35	Electrosprayed catalyst layers based on grapheneâ€"carbon black hybrids for the next-generation fuel cell electrodes. Journal of Materials Science, 2017, 52, 2091-2102.	1.7	35
36	Engineered catalyst layer design with graphene-carbon black hybrid supports for enhanced platinum utilization in PEM fuel cell. International Journal of Hydrogen Energy, 2017, 42, 1085-1092.	3.8	64

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37	Comparison of two different catalyst preparation methods for graphene nanoplatelets supported platinum catalysts. International Journal of Hydrogen Energy, 2016, 41, 9755-9761.	3.8	40
38	Radiation-grafted materials for energy conversion and energy storage applications. Progress in Polymer Science, 2016, 63, 1-41.	11.8	64
39	PVA/PANI/rGO ternary electrospun mats as metal-free anti-bacterial substrates. RSC Advances, 2016, 6, 92434-92442.	1.7	18
40	Expansion of titanate nanotubes by the use of a surfactant and its improved performance as an anode in Li-ion batteries. Electrochimica Acta, 2016, 220, 453-464.	2.6	14
41	The effect of pH on the interlayer distances of elongated titanate nanotubes and their use as a Li-ion battery anode. Nanotechnology, 2016, 27, 015401.	1.3	10
42	Development of graphene supported platinum nanoparticles for polymer electrolyte membrane fuel cells: Effect of support type and impregnationâ€“reduction methods. International Journal of Hydrogen Energy, 2016, 41, 3414-3427.	3.8	71
43	Graphene-reinforced poly(vinyl alcohol) electrospun fibers as building blocks for high performance nanocomposites. RSC Advances, 2015, 5, 85009-85018.	1.7	30
44	Graphene-based technologies for energy applications, challenges and perspectives. 2D Materials, 2015, 2, 030204.	2.0	74
45	Size and Dispersion Control of Pt Nanoparticles Grown Upon Graphite-Derived Nanosheets. Chemical Engineering Communications, 2015, 202, 1645-1656.	1.5	1
46	Water Free Operated Phosphoric Acid Doped Radiationâ€Grafted Proton Conducting Membranes for High Temperature Polymer Electrolyte Membrane Fuel Cells. Fuel Cells, 2014, 14, 914-925.	1.5	16
47	Layer-by-Layer Polypyrrole Coated Graphite Oxide and Graphene Nanosheets as Catalyst Support Materials for Fuel Cells. Fullerenes Nanotubes and Carbon Nanostructures, 2013, 21, 233-247.	1.0	27
48	Design and Modeling of High Temperature Water Free Proton Exchange Membranes in DEA PEMFC Operations. ECS Transactions, 2013, 58, 789-794.	0.3	0
49	Surface Modifications of Graphene-based Polymer Nanocomposites by Different Synthesis Techniques. Materials Research Society Symposia Proceedings, 2012, 1451, 131-136.	0.1	0
50	Polypyrrole Coated Thermally Exfoliated Graphite Nanoplatelets and the Effect of Oxygen Surface Groups on the Interaction of Platinum Catalysts with Graphene-Based Nanocomposites. Industrial & Engineering Chemistry Research, 2011, 50, 12562-12571.	1.8	18
51	Preparation and Characterisation of Novel Composites Based on a Radiation Grafted Membrane for Fuel Cells. Fuel Cells, 2011, 11, 361-371.	1.5	4
52	Synthesis and characterization of novel graft copolymers by radiationâ€induced grafting. Journal of Applied Polymer Science, 2011, 120, 2313-2323.	1.3	34
53	Facile synthesis of polypyrrole/graphene nanosheet-based nanocomposites as catalyst support for fuel cells. Materials Research Society Symposia Proceedings, 2011, 1312, 1.	0.1	2
54	Influence of Radiationâ€Induced Grafting Process on Mechanical Properties of ETFEâ€Based Membranes for Fuel Cells. Fuel Cells, 2010, 10, 401-410.	1.5	29

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55	Cross-Linker Effect in ETFE-Based Radiation-Grafted Proton-Conducting Membranes. Journal of the Electrochemical Society, 2009, 156, B532.	1.3	22
56	Fuel-Cell Performance of Multiply-Crosslinked Polymer Electrolyte Membranes Prepared by Two-Step Radiation Technique. ECS Transactions, 2009, 25, 1439-1450.	0.3	6
57	Novel ETFE based radiation grafted poly(styrene sulfonic acid-co-methacrylonitrile) proton conducting membranes with increased stability. Electrochemistry Communications, 2009, 11, 941-944.	2.3	37
58	Microstructured proton-conducting membranes by synchrotron-radiation-induced grafting. Journal of Membrane Science, 2008, 325, 658-664.	4.1	14
59	Structural characterization of radiationâ€grafted block copolymer films, using SANS technique. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1660-1668.	2.4	35
60	Thermal properties of protonâ€conducting radiationâ€grafted membranes. Journal of Applied Polymer Science, 2008, 108, 3577-3585.	1.3	37
61	The influence of crosslinker on the properties of radiation-grafted films and membranes based on ETFE. Journal of Membrane Science, 2008, 311, 208-215.	4.1	40
62	Radiation Grafted Membranes. , 2008, , 157-217.		21
63	Extreme UV Radiation Grafting of Glycidyl Methacrylate Nanostructures onto Fluoropolymer Foils by RAFT-Mediated Polymerization. Macromolecules, 2008, 41, 6309-6316.	2.2	28
64	Cross-Linker Effect in ETFE-Based Radiation-Grafted Proton-Conducting Membranes. Journal of the Electrochemical Society, 2008, 155, B921.	1.3	34
65	Publisher's Note: Cross-Linker Effect in ETFE-Based Radiation-Grafted Proton-Conducting Membranes. Journal of the Electrochemical Society, 2008, 155, S7.	1.3	0
66	Crosslinker Effect on Fuel Cell Performance Characteristics of ETFE Based Radiation Grafted Membranes. ECS Transactions, 2007, 11, 27-34.	0.3	3
67	Influence of reaction parameters on grafting of styrene into poly(ethylene-alt-tetrafluoroethylene) films. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 198-203.	0.6	50
68	Influence of the solvent viscosity on surface graft-polymerization reactions. Polymer, 2007, 48, 4936-4942.	1.8	19
69	EUV lithographic radiation grafting of thermo-responsive hydrogel nanostructures. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 187-192.	0.6	10
70	Radiation-Grafted Membranes Using a Trifluorostyrene Derivative. Journal of the Electrochemical Society, 2006, 153, A1964.	1.3	24
71	Microstructured polymer films by X-ray lithographic exposure and grafting. Nuclear Instruments & Methods in Physics Research B, 2005, 236, 449-455.	0.6	11
72	Proton exchange membranes prepared by radiation grafting of styrene/divinylbenzene onto poly(ethylene-alt-tetrafluoroethylene) for low temperature fuel cells. Solid State Ionics, 2005, 176, 2849-2860.	1.3	108

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73	Radiation Grafted Membranes for Polymer Electrolyte Fuel Cells. Fuel Cells, 2005, 5, 317-335.	1.5	227
74	Patterned grafting of polymer brushes onto flexible polymer substrates. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 3191.	1.6	23
75	Differential scanning calorimetry and thermogravimetric analysis investigation of the thermal properties and degradation of some radiation-grafted films and membranes. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 2612-2624.	2.4	25
76	Characterisation of Fuel Cell Membranes as a Function of Drying by Means of Contact Angle Measurements. Fuel Cells, 2004, 4, 141-146.	1.5	25
77	Synthesis, Characterization, and Electrochromic Properties of Conducting Copolymers of 2â€[(3â€Thienylcarbonyl)oxy]ethyl 3â€Thiophene Carboxylate with Thiophene and Pyrrole. Journal of Macromolecular Science - Pure and Applied Chemistry, 2004, 41, 937-947.	1.2	3
78	Preparation of Micro- and Nanopatterns of Polymer Chains Grafted onto Flexible Polymer Substrates. Journal of the American Chemical Society, 2004, 126, 1004-1005.	6.6	64
79	Materials for Polymer Electrolyte Fuel Cells. Chimia, 2004, 58, 826-836.	0.3	27
80	High-Quality Electrochromic Polythiophenes via BF3Â·Et2O Electropolymerization. Advanced Functional Materials, 2003, 13, 331-336.	7.8	131
81	Immobilization of invertase and glucose oxidase in conducting H-type polysiloxane/polypyrrole block copolymers. Reactive and Functional Polymers, 2003, 57, 57-65.	2.0	35
82	Immobilization of invertase and glucose oxidase in poly 2-methylbutyl-2-(3-thienyl) acetate/polypyrrole matrices. European Polymer Journal, 2003, 39, 2375-2381.	2.6	37
83	Immobilization of invertase in conducting copolymers of 3-methylthienyl methacrylate. Bioelectrochemistry, 2003, 59, 29-33.	2.4	42
84	Immobilization of cholesterol oxidase in a conducting copolymer of thiophene-3-yl acetic acid cholesteryl ester with pyrrole. Designed Monomers and Polymers, 2003, 6, 237-243.	0.7	11
85	Synthesis and Characterization of Conducting Copolymers of Menthyl Ester of 3-Thiophene Acetic Acid with Pyrrole. Journal of Macromolecular Science - Pure and Applied Chemistry, 2003, 40, 251-264.	1.2	4
86	IMMOBILIZATION OF YEAST CELLS IN SEVERAL CONDUCTING POLYMER MATRICES. Journal of Macromolecular Science - Pure and Applied Chemistry, 2002, 39, 183-197.	1.2	17
87	Immobilization of glucose oxidase in polypyrrole/polytetrahydrofuran graft copolymers. International Journal of Biological Macromolecules, 2002, 30, 81-87.	3.6	30
88	Conducting graft copolymers of poly(3-methylthienyl methacrylate) with pyrrole and thiophene. Journal of Polymer Science Part A, 2002, 40, 4131-4140.	2.5	51
89	Title is missing!. Journal of Materials Science, 2002, 37, 1767-1775.	1.7	20
90	Immobilization of urease in conducting thiophene-capped poly(methyl methacrylate)/pyrrole matrices. Synthetic Metals, 2001, 123, 95-99.	2.1	14

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91	Synthesis and characterization of conducting block copolymers of thiophene-ended polystyrene with polypyrrole. Synthetic Metals, 2001, 119, 133-134.	2.1	14
92	Synthesis and electroactivity of pyrrole end-functionalized poly(2-methyl-2-oxazoline). European Polymer Journal, 2001, 37, 2225-2229.	2.6	25
93	Immobilization of invertase in functionalized copolymer matrices. Reactive and Functional Polymers, 2000, 45, 227-233.	2.0	53
94	Trace elements in human bone determined by neutron activation analysis. Journal of Radioanalytical and Nuclear Chemistry, 1999, 239, 79-86.	0.7	13
95	Block copolymers of thiophene-capped poly(methyl methacrylate) with pyrrole. , 1999, 37, 4218-4225.		68
96	Immobilization of invertase in conducting thiophene-capped poly(methylmethacrylate)/polypyrrole matrices. Journal of Biomaterials Science, Polymer Edition, 1999, 10, 1223-1235.	1.9	32
97	An Improved Technique for the Exfoliation of Graphene Nanosheets and Utilization of their Nanocomposites as Fuel Cell Electrodes. Key Engineering Materials, 0, 543, 9-12.	0.4	1
98	Radiation-Grafted Polymer Electrolyte Membranes for Fuel Cells. Hacettepe Journal of Biology and Chemistry, 0, , .	0.3	2
99	Arginineâ€glycineâ€aspartate (RGD) peptideâ€modified graphene as efficient support material for Pt electrocatalyst in proton exchange membrane fuel cells. International Journal of Energy Research, 0, , .	2.2	1
100	Pulsedâ€UV illumination on graphene oxide: A new strategy in photocatalytic synthesis of electrocatalysts to control the structural and electrochemical properties. International Journal of Energy Research, 0, , .	2.2	1
101	Titania-Based Freestanding Electronically Conductive Electrospun Anodes with Enhanced Performance for Li-Ion Batteries. ACS Applied Energy Materials, 0, , .	2.5	3