

# Selmiye Alkan GÃ¼rnel

## List of Publications by Year in descending order

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101  
papers

2,749  
citations

147801

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102  
docs citations

102  
times ranked

2659  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and Characterization of Poly(methacryloyloxyethylpyridinoxy phosphazene)s and their Application as Proton Exchange Membranes. ChemistrySelect, 2022, 7, .	1.5	3
2	Nanofiber based hybrid sulfonated silica/P(VDF-TrFE) membranes for PEM fuel cells. International Journal of Hydrogen Energy, 2021, 46, 13583-13593.	7.1	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.	7.1	8
4	High stability graphene oxide aerogel supported ultrafine Fe <sub>3</sub> O <sub>4</sub> particles with superior performance as a Li-ion battery anode. Carbon, 2021, 174, 158-172.	10.3	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.	7.1	22
6	Unveiling the presence of mixed oxidation states of Europium in Li <sub>7</sub> Eu <sub>x</sub> La <sub>3-2x</sub> Zr <sub>2</sub> O <sub>12</sub> garnet and its impact on the Li-ion conductivity. Journal of the American Ceramic Society, 2021, 104, 4257-4271.	3.8	10
7	A glance at the influence of different dopant elements on Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> garnets. Ionics, 2021, 27, 3673-3698.	2.4	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.	7.1	11
9	CeO <sub>2</sub> nanorod decorated NrGO additives for boosting PEMFC performance. International Journal of Hydrogen Energy, 2021, 46, 32250-32260.	7.1	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.	5.5	11
11	Improved Lithium-Ion Transport Within the Li <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> Secondary Cathode Particles Through a Template-Assisted Synthesis Route. ACS Sustainable Chemistry and Engineering, 2021, 9, 12560-12574.	6.7	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.	5.1	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.	4.5	16
14	Pt-alloy decorated graphene as an efficient electrocatalyst for PEM fuel cell reactions. Journal of Supercritical Fluids, 2020, 165, 104962.	3.2	29
15	Nafion <sup>®</sup> -coated Li <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> ( <i>NCA</i> ) cathode preparation and its influence on the Li-ion battery cycle performance. Energy Storage, 2020, 2, e154.	4.3	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.	7.1	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.	8.9	37
18	A Continuous-flow Photocatalytic Reactor for the Precisely Controlled Deposition of Metallic Nanoparticles. Journal of Visualized Experiments, 2019, . .	0.3	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. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 14184-14192.	7.1	29
20	An effective electrocatalyst based on platinum nanoparticles supported with graphene nanoplatelets and carbon black hybrid for PEM fuel cells. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 14175-14183.	7.1	38
21	Homogeneous growth of TiO <sub>2</sub> -based nanotubes on nitrogen-doped reduced graphene oxide and its enhanced performance as a Li-ion battery anode. <i>Nanotechnology</i> , 2018, 29, 255402.	2.6	18
22	A facile synthesis and assembly of ultrasmall Pt nanoparticles on reduced graphene oxide-carbon black hybrid for enhanced performance in PEMFC. <i>Materials and Design</i> , 2018, 151, 29-36.	7.0	36
23	Scalable Synthesis of Sub-Nanosized Platinum-Reduced Graphene Oxide Composite by an Ultraprecise Photocatalytic Method. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 3773-3782.	6.7	26
24	Development of Efficient Copper-Based MOF-Derived Catalysts for the Reduction of Aromatic Nitro Compounds. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 1073-1079.	2.0	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. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 8088-8099.	7.1	11
26	Enhancing proton conductivity via sub-micron structures in proton conducting membranes originating from sulfonated PVDF powder by radiation-induced grafting. <i>Solid State Ionics</i> , 2018, 314, 66-73.	2.7	23
27	High performance electrocatalysts supported on graphene based hybrids for polymer electrolyte membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 23221-23230.	7.1	54
28	All-carbon hybrids for high performance supercapacitors. <i>International Journal of Energy Research</i> , 2018, 42, 3575-3587.	4.5	43
29	Polyvinylidene fluoride grafted poly(styrene sulfonic acid) as ionic polymer-metal composite actuator. <i>Sensors and Actuators A: Physical</i> , 2018, 279, 157-167.	4.1	15
30	Flexible carbon-cellulose fiber-based composite gas diffusion layer for polymer electrolyte membrane fuel cells. <i>Journal of Materials Science</i> , 2017, 52, 4968-4976.	3.7	17
31	Macroscopic assembly of flexible and strong green graphene fibres. <i>RSC Advances</i> , 2017, 7, 26735-26744.	3.6	7
32	Investigation of electrochemical actuation by polyaniline nanofibers. <i>Smart Materials and Structures</i> , 2017, 26, 095021.	3.5	8
33	Green Composite Papers via Use of Natural Binders and Graphene for PEM Fuel Cell Electrodes. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 8407-8415.	6.7	19
34	Thermodynamically controlled Pt deposition over graphene nanoplatelets: Effect of Pt loading on PEM fuel cell performance. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 19246-19256.	7.1	37
35	Electrosprayed catalyst layers based on graphene-carbon black hybrids for the next-generation fuel cell electrodes. <i>Journal of Materials Science</i> , 2017, 52, 2091-2102.	3.7	35
36	Engineered catalyst layer design with graphene-carbon black hybrid supports for enhanced platinum utilization in PEM fuel cell. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 1085-1092.	7.1	64

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37	Comparison of two different catalyst preparation methods for graphene nanoplatelets supported platinum catalysts. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 9755-9761.	7.1	40
38	Radiation-grafted materials for energy conversion and energy storage applications. <i>Progress in Polymer Science</i> , 2016, 63, 1-41.	24.7	64
39	PVA/PANI/rGO ternary electrospun mats as metal-free anti-bacterial substrates. <i>RSC Advances</i> , 2016, 6, 92434-92442.	3.6	18
40	Expansion of titanate nanotubes by the use of a surfactant and its improved performance as an anode in Li-ion batteries. <i>Electrochimica Acta</i> , 2016, 220, 453-464.	5.2	14
41	The effect of pH on the interlayer distances of elongated titanate nanotubes and their use as a Li-ion battery anode. <i>Nanotechnology</i> , 2016, 27, 015401.	2.6	10
42	Development of graphene supported platinum nanoparticles for polymer electrolyte membrane fuel cells: Effect of support type and impregnationâ€™reduction methods. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3414-3427.	7.1	71
43	Graphene-reinforced poly(vinyl alcohol) electrospun fibers as building blocks for high performance nanocomposites. <i>RSC Advances</i> , 2015, 5, 85009-85018.	3.6	30
44	Graphene-based technologies for energy applications, challenges and perspectives. <i>2D Materials</i> , 2015, 2, 030204.	4.4	74
45	Size and Dispersion Control of Pt Nanoparticles Grown Upon Graphite-Derived Nanosheets. <i>Chemical Engineering Communications</i> , 2015, 202, 1645-1656.	2.6	1
46	Water Free Operated Phosphoric Acid Doped Radiationâ€™Grafted Proton Conducting Membranes for High Temperature Polymer Electrolyte Membrane Fuel Cells. <i>Fuel Cells</i> , 2014, 14, 914-925.	2.4	16
47	Layer-by-Layer Polypyrrole Coated Graphite Oxide and Graphene Nanosheets as Catalyst Support Materials for Fuel Cells. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013, 21, 233-247.	2.1	27
48	Design and Modeling of High Temperature Water Free Proton Exchange Membranes in DEA PEMFC Operations. <i>ECS Transactions</i> , 2013, 58, 789-794.	0.5	0
49	Surface Modifications of Graphene-based Polymer Nanocomposites by Different Synthesis Techniques. <i>Materials Research Society Symposia Proceedings</i> , 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. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 12562-12571.	3.7	18
51	Preparation and Characterisation of Novel Composites Based on a Radiation Grafted Membrane for Fuel Cells. <i>Fuel Cells</i> , 2011, 11, 361-371.	2.4	4
52	Synthesis and characterization of novel graft copolymers by radiationâ€™induced grafting. <i>Journal of Applied Polymer Science</i> , 2011, 120, 2313-2323.	2.6	34
53	Facile synthesis of polypyrrole/graphene nanosheet-based nanocomposites as catalyst support for fuel cells. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1312, 1.	0.1	2
54	Influence of Radiationâ€™Induced Grafting Process on Mechanical Properties of ETFEâ€™Based Membranes for Fuel Cells. <i>Fuel Cells</i> , 2010, 10, 401-410.	2.4	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.	2.9	22
56	Fuel-Cell Performance of Multiply-Crosslinked Polymer Electrolyte Membranes Prepared by Two-Step Radiation Technique. ECS Transactions, 2009, 25, 1439-1450.	0.5	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.	4.7	37
58	Microstructured proton-conducting membranes by synchrotron-radiation-induced grafting. Journal of Membrane Science, 2008, 325, 658-664.	8.2	14
59	Structural characterization of radiation-grafted block copolymer films, using SANS technique. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1660-1668.	2.1	35
60	Thermal properties of proton-conducting radiation-grafted membranes. Journal of Applied Polymer Science, 2008, 108, 3577-3585.	2.6	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.	8.2	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.	4.8	28
64	Cross-Linker Effect in ETFE-Based Radiation-Grafted Proton-Conducting Membranes. Journal of the Electrochemical Society, 2008, 155, B921.	2.9	34
65	Publisher's Note: Cross-Linker Effect in ETFE-Based Radiation-Grafted Proton-Conducting Membranes. Journal of the Electrochemical Society, 2008, 155, S7.	2.9	0
66	Crosslinker Effect on Fuel Cell Performance Characteristics of ETFE Based Radiation Grafted Membranes. ECS Transactions, 2007, 11, 27-34.	0.5	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.	1.4	50
68	Influence of the solvent viscosity on surface graft-polymerization reactions. Polymer, 2007, 48, 4936-4942.	3.8	19
69	EUV lithographic radiation grafting of thermo-responsive hydrogel nanostructures. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 187-192.	1.4	10
70	Radiation-Grafted Membranes Using a Trifluorostyrene Derivative. Journal of the Electrochemical Society, 2006, 153, A1964.	2.9	24
71	Microstructured polymer films by X-ray lithographic exposure and grafting. Nuclear Instruments & Methods in Physics Research B, 2005, 236, 449-455.	1.4	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.	2.7	108

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73	Radiation Grafted Membranes for Polymer Electrolyte Fuel Cells. <i>Fuel Cells</i> , 2005, 5, 317-335.	2.4	227
74	Patterned grafting of polymer brushes onto flexible polymer substrates. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 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. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2004, 42, 2612-2624.	2.1	25
76	Characterisation of Fuel Cell Membranes as a Function of Drying by Means of Contact Angle Measurements. <i>Fuel Cells</i> , 2004, 4, 141-146.	2.4	25
77	Synthesis, Characterization, and Electrochromic Properties of Conducting Copolymers of 2-((3-thienylcarbonyl)oxy)ethyl 3-thiophene Carboxylate with Thiophene and Pyrrole. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2004, 41, 937-947.	2.2	3
78	Preparation of Micro- and Nanopatterns of Polymer Chains Grafted onto Flexible Polymer Substrates. <i>Journal of the American Chemical Society</i> , 2004, 126, 1004-1005.	13.7	64
79	Materials for Polymer Electrolyte Fuel Cells. <i>Chimia</i> , 2004, 58, 826-836.	0.6	27
80	High-Quality Electrochromic Polythiophenes via BF <sub>3</sub> ·Et <sub>2</sub> O Electropolymerization. <i>Advanced Functional Materials</i> , 2003, 13, 331-336.	14.9	131
81	Immobilization of invertase and glucose oxidase in conducting H-type polysiloxane/polypyrrole block copolymers. <i>Reactive and Functional Polymers</i> , 2003, 57, 57-65.	4.1	35
82	Immobilization of invertase and glucose oxidase in poly 2-methylbutyl-2-(3-thienyl) acetate/polypyrrole matrices. <i>European Polymer Journal</i> , 2003, 39, 2375-2381.	5.4	37
83	Immobilization of invertase in conducting copolymers of 3-methylthienyl methacrylate. <i>Bioelectrochemistry</i> , 2003, 59, 29-33.	4.6	42
84	Immobilization of cholesterol oxidase in a conducting copolymer of thiophene-3-yl acetic acid cholesteryl ester with pyrrole. <i>Designed Monomers and Polymers</i> , 2003, 6, 237-243.	1.6	11
85	Synthesis and Characterization of Conducting Copolymers of Menthyl Ester of 3-Thiophene Acetic Acid with Pyrrole. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2003, 40, 251-264.	2.2	4
86	IMMOBILIZATION OF YEAST CELLS IN SEVERAL CONDUCTING POLYMER MATRICES. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2002, 39, 183-197.	2.2	17
87	Immobilization of glucose oxidase in polypyrrole/polytetrahydrofuran graft copolymers. <i>International Journal of Biological Macromolecules</i> , 2002, 30, 81-87.	7.5	30
88	Conducting graft copolymers of poly(3-methylthienyl methacrylate) with pyrrole and thiophene. <i>Journal of Polymer Science Part A</i> , 2002, 40, 4131-4140.	2.3	51
89	Title is missing!. <i>Journal of Materials Science</i> , 2002, 37, 1767-1775.	3.7	20
90	Immobilization of urease in conducting thiophene-capped poly(methyl methacrylate)/pyrrole matrices. <i>Synthetic Metals</i> , 2001, 123, 95-99.	3.9	14

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91	Synthesis and characterization of conducting block copolymers of thiophene-ended polystyrene with polypyrrole. <i>Synthetic Metals</i> , 2001, 119, 133-134.	3.9	14
92	Synthesis and electroactivity of pyrrole end-functionalized poly(2-methyl-2-oxazoline). <i>European Polymer Journal</i> , 2001, 37, 2225-2229.	5.4	25
93	Immobilization of invertase in functionalized copolymer matrices. <i>Reactive and Functional Polymers</i> , 2000, 45, 227-233.	4.1	53
94	Trace elements in human bone determined by neutron activation analysis. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1999, 239, 79-86.	1.5	13
95	Block copolymers of thiophene-capped poly(methyl methacrylate) with pyrrole. <i>Journal of Polymer Science Part A</i> , 1999, 37, 4218-4225.	2.3	68
96	Immobilization of invertase in conducting thiophene-capped poly(methylmethacrylate)/polypyrrole matrices. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1999, 10, 1223-1235.	3.5	32
97	An Improved Technique for the Exfoliation of Graphene Nanosheets and Utilization of their Nanocomposites as Fuel Cell Electrodes. <i>Key Engineering Materials</i> , 0, 543, 9-12.	0.4	1
98	Radiation-Grafted Polymer Electrolyte Membranes for Fuel Cells. <i>Hacettepe Journal of Biology and Chemistry</i> , 0, , .	0.9	2
99	Arginine-glycine-aspartate ( RGD ) peptide-modified graphene as efficient support material for Pt electrocatalyst in proton exchange membrane fuel cells. <i>International Journal of Energy Research</i> , 0, , .	4.5	1
100	Pulsed-UV illumination on graphene oxide: A new strategy in photocatalytic synthesis of electrocatalysts to control the structural and electrochemical properties. <i>International Journal of Energy Research</i> , 0, , .	4.5	1
101	Titania-Based Freestanding Electronically Conductive Electrospun Anodes with Enhanced Performance for Li-Ion Batteries. <i>ACS Applied Energy Materials</i> , 0, , .	5.1	3