# Tae-Ho Kim

List of Publications by Year
in descending order



| 59 | 2,039 | 201674 27 | 254184 43 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 61 | 61 | 61 | 1740 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Perfluorocyclobutyl-containing multiblock copolymers to induce enhanced hydrophilic/hydrophobic phase separation and high proton conductivity at low humidity. Journal of Membrane Science, 2022, 641, 119892. | 8.2 | 13 |
| 2 | Controlling hydrophilic channel alignment of perfluorinated sulfonic acid membranes via biaxial drawing for high performance and durable polymer electrolyte membrane water electrolysis. Journal of Power Sources, 2022, 518, 230772. | 7.8 | 11 |
| 3 | Highly selective porous separator with thin skin layer for alkaline water electrolysis. Journal of Power Sources, 2022, 524, 231059. | 7.8 | 27 |
| 4 | Oligomeric chain extender-derived anion conducting membrane materials with poly(p-phenylene)-based architecture for fuel cells and water electrolyzers. Journal of Materials Chemistry A, 2022, 10, 9693-9706. | 10.3 | 22 |
| 5 | Poly(ethylene-co-vinyl acetate)/polyimide/poly(ethylene-co-vinyl acetate) tri-layer porous separator with high conductivity and tailored thermal shutdown function for application in sodium-ion batteries. Journal of Power Sources, 2021, 482, 228907. | 7.8 | 19 |
| 6 | Alcohol-Treated Porous PTFE Substrate for the Penetration of PTFE-Incompatible Hydrocarbon-Based Ionomer Solutions. Langmuir, 2021, 37, 3694-3701. | 3.5 | 18 |
| 7 | Alkyl Spacer Grafted ABPBI Membranes with Enhanced Acid-Absorption Capabilities for Use in Vanadium Redox Flow Batteries. ACS Applied Energy Materials, 2021, 4, 4672-4685. | 5.1 | 13 |
| 8 | Cross-Linked Composite Gel Polymer Electrolyte Based on an H-Shaped Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (oxi Solid-State Supercapacitor Applications. ACS Omega, 2021, 6, 16924-16933. | 3.5 | 10 |
| 9 | Ion exchange capacity controlled biphenol-based sulfonated poly(arylene ether sulfone) for polymer electrolyte membrane water electrolyzers: Comparison of random and multi-block copolymers. Journal of Membrane Science, 2021, 634, 119370. | 8.2 | 37 |
| 10 | Simple and Effective Cross-Linking Technology for the Preparation of Cross-Linked Membranes Composed of Highly Sulfonated Poly(ether ether ketone) and Poly(arylene ether sulfone) for Fuel Cell Applications. ACS Applied Energy Materials, 2020, 3, 10495-10505. | 5.1 | 16 |
| 11 | Poly(carbazole)-based anion-conducting materials with high performance and durability for energy conversion devices. Energy and Environmental Science, 2020, 13, 3633-3645. | 30.8 | 162 |
| 12 | Simple and effective modification of absorbed glass mat separator through atmospheric plasma treatment for practical use in AGM lead-acid battery applications. Journal of Energy Storage, 2020, 28, 101187. | 8.1 | 9 |
| 13 | A Printable Metallic Current Collector for Allâ€Printed Highâ€Voltage Microâ€Supercapacitors: Instantaneous Surface Passivation by Flashâ€Lightâ€Sintering Reaction. Advanced Functional Materials, 2020, 30, 2000715. | 14.9 | 22 |
| 14 | Reprogrammable Three-Dimensional Configurations Using Ionomer Bilayers. ACS Applied Polymer Materials, 2019, 1, 2760-2767. | 4.4 | 5 |
| 15 | Reinforced anion exchange membrane based on thermal cross-linking method with outstanding cell performance for reverse electrodialysis. RSC Advances, 2019, 9, 27500-27509. | 3.6 | 23 |
| 16 | External reinforcement of hydrocarbon membranes by a three-dimensional interlocking interface for mechanically durable polymer electrolyte membrane fuel cells. Journal of Power Sources, 2019, 415, 44-49. | 7.8 | 13 |
| 17 | Cross-linked highly sulfonated poly(arylene ether sulfone) membranes prepared by in-situ casting and thiol-ene click reaction for fuel cell application. Journal of Membrane Science, 2019, 579, 70-78. | 8.2 | 60 |
| 18 | Nanofiber Celluloseâ€Incorporated Nanomesh Grapheneâ€“Carbon Nanotube Buckypaper and Ionic Liquidâ€Based Solid Polymer Electrolyte for Flexible Supercapacitors. Energy Technology, 2019, 7, 1900014. | 3.8 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Ether-free polymeric anion exchange materials with extremely low vanadium ion permeability and outstanding cell performance for vanadium redox flow battery (VRFB) application. Journal of Power Sources, 2019, 413, 158-166. | 7.8 | 34 |
| 20 | Multimodal porous and nitrogen-functionalized electrode based on graphite felt modified with carbonized porous polymer skin layer for all-vanadium redox flow battery. Materials Today Energy, 2019, 11, 159-165. | 4.7 | 25 |
| 21 | Water channel morphology of non-perfluorinated hydrocarbon proton exchange membrane under a low humidifying condition. International Journal of Hydrogen Energy, 2019, 44, 2340-2348. | 7.1 | 21 |
| 22 | Intrinsically microporous polymer-based hierarchical nanostructuring of electrodesvianonsolvent-induced phase separation for high-performance supercapacitors. Journal of Materials Chemistry A, 2018, 6, 8909-8915. | 10.3 | 23 |
| 23 | Electrocatalytic activity of nitrogen-doped CNT graphite felt hybrid for all-vanadium redox flow batteries. International Journal of Hydrogen Energy, 2018, 43, 1516-1522. | 7.1 | 41 |
| 24 | Comb-shaped polysulfones containing sulfonated polytriazole side chains for proton exchange membranes. Journal of Membrane Science, 2018, 554, 232-243. | 8.2 | 41 |
| 25 | Hydrocarbon membranes with high selectivity and enhanced stability for vanadium redox flow battery applications: Comparative study with sulfonated poly(ether sulfone)s and sulfonated poly(thioether) Tj ETQq1 1 0.784314 rgBT /Over | | |
| 26 | Hydrophilic Channel Alignment of Perfluoronated Sulfonic-Acid Ionomers for Vanadium Redox Flow Batteries. ACS Applied Materials & Interfaces, 2018, 10, 19689-19696. | 8.0 | 25 |
| 27 | Novel interfacial bonding layers with controlled gradient composition profile for hydrocarbon-based membrane electrode assemblies. Journal of Power Sources, 2018, 398, 1-8. | 7.8 | 9 |
| 28 | Polybenzimidazole/Nafion hybrid membrane with improved chemical stability for vanadium redox flow battery application. RSC Advances, 2018, 8, 25304-25312. | 3.6 | 43 |
| 29 | Preparation and characterization of crosslinked anion exchange membrane (AEM) materials with poly(phenylene ether)-based short hydrophilic block for use in electrochemical applications. Journal of Membrane Science, 2017, 530, 73-83. | 8.2 | 69 |
| 30 | Poly(p-phenylene)-based membrane materials with excellent cell efficiencies and durability for use in vanadium redox flow batteries. Journal of Materials Chemistry A, 2017, 5, 12285-12296. | 10.3 | 41 |
| 31 | Electrode-Impregnable and Cross-Linkable Poly(ethylene oxide)â€“Poly(propylene oxide)â€“Poly(ethylene) Tj ETQq1 1 0.784314 rgBT Flexible Solid-State Supercapacitors. ACS Applied Materials & Interfaces, 2017, 9, 33913-33924. | 8.0 | 23 |
| 32 | Crosslinked anion exchange membranes with primary diamine-based crosslinkers for vanadium redox flow battery application. Journal of Power Sources, 2017, 363, 78-86. | 7.8 | 76 |
| 33 | Threeâ€Dimensional Interlocking Interface: Mechanical Nanofastener for High Interfacial Robustness of Polymer Electrolyte Membrane Fuel Cells. Advanced Materials, 2017, 29, 1603056. | 21.0 | 36 |
| 34 | Synthesis of mesoporous reduced graphene oxide by Zn particles for electrodes of supercapacitor in ionic liquid electrolyte. Journal of Industrial and Engineering Chemistry, 2017, 45, 105-110. | 5.8 | 32 |
| 35 | Synthesis and properties of bonding layer containing flexible and fluorinated moieties for hydrocarbon-based membrane electrode assemblies. International Journal of Hydrogen Energy, 2016, 41, 10884-10895. | 7.1 | 10 |
| 36 | Highly proton conductive, dense polybenzimidazole membranes with low permeability to vanadium and enhanced H<sub>2</sub>SO<sub>4</sub>absorption capability for use in vanadium redox flow batteries. Journal of Materials Chemistry A, 2016, 4, 14342-14355. | 10.3 | 108 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Synthesis and investigation of random-structured ionomers with highly sulfonated multi-phenyl pendants for electrochemical applications. Journal of Membrane Science, 2016, 510, 326-337. | 8.2 | 29 |
| 38 | Multiblock copolymers based on poly(p-phenylene)-co-poly(arylene ether sulfone ketone) with sulfonated multiphenyl pendant groups for polymer electrolyte fuel cell (PEMFC) application. European Polymer Journal, 2015, 66, 1-11. | 5.4 | 27 |
| 39 | Edge protection using polyacrylonitrile thin-films for hydrocarbon-based membrane electrode assemblies. Journal of Industrial and Engineering Chemistry, 2015, 28, 190-196. | 5.8 | 7 |
| 40 | Multi-block copolymers based on poly(p-phenylene)s with excellent durability and fuel cell performance. Journal of Membrane Science, 2015, 492, 209-219. | 8.2 | 50 |
| 41 | Thin bonding layer using sulfonated poly(arylene ether sulfone)/PVdF blends for hydrocarbon-based membrane electrode assemblies. Electrochimica Acta, 2015, 173, 268-275. | 5.2 | 17 |
| 42 | Interlocking Membrane/Catalyst Layer Interface for High Mechanical Robustness of Hydrocarbonâ€Membraneâ€Based Polymer Electrolyte Membrane Fuel Cells. Advanced Materials, 2015, 27, 2974-2980. | 21.0 | 39 |
| 43 | Sulfonated poly(arylene ether sulfone) composite membranes having poly(2,5-benzimidazole)-grafted graphene oxide for fuel cell applications. Journal of Materials Chemistry A, 2015, 3, 20595-20606. | 10.3 | 100 |
| 44 | Effect of sulfonated poly(arylene ether sulfone) binder on the performance of polymer electrolyte membrane fuel cells. Journal of Industrial and Engineering Chemistry, 2015, 23, 316-320. | 5.8 | 16 |
| 45 | Poly(amide-co-imide)-poly(trimellitic anhydride chloride-co-4,4â€²-methylenedianiline) nonwoven/sulfonated poly(arylene ether sulfone) composite membrane for proton exchange membrane fuel cells. Macromolecular Research, 2014, 22, 79-84. | 2.4 | 7 |
| 46 | Sulfonated poly(arylene sulfone) multiblock copolymers for proton exchange membrane fuel cells. Journal of Membrane Science, 2014, 459, 72-85. | 8.2 | 71 |
| 47 | Preparation and properties of sulfonated poly(arylene ether sulfone)/hydrophilic oligomer-g-CNT composite membranes for PEMFC. Macromolecular Research, 2013, 21, 1138-1144. | 2.4 | 9 |
| 48 | Sulfonated poly(arylene ether sulfone)/sulfonated zeolite composite membrane for high temperature proton exchange membrane fuel cells. Solid State Ionics, 2013, 233, 55-61. | 2.7 | 54 |
| 49 | Properties of sulfonated poly(arylene ether sulfone)/electrospun nonwoven polyacrylonitrile composite membrane for proton exchange membrane fuel cells. Journal of Membrane Science, 2013, 446, 212-219. | 8.2 | 48 |
| 50 | Modification of hydrocarbon structure for polymer electrolyte membrane fuel cell binder application. International Journal of Hydrogen Energy, 2012, 37, 13452-13461. | 7.1 | 9 |
| 51 | Sulfonated poly(arylene ether sulfone)/disulfonated silsesquioxane hybrid proton conductors for proton exchange membrane fuel cell application. International Journal of Hydrogen Energy, 2012, 37, 18981-18988. | 7.1 | 11 |
| 52 | Fabrication and Properties of Reinforced Membranes Based on Sulfonated Poly(arylene ether sulfone) Copolymers for Protonâ€Exchange Membrane Fuel Cells. Macromolecular Chemistry and Physics, 2012, 213, 839-846. | 2.2 | 19 |
| 53 | Crosslinked sulfonated poly(arylene ether sulfone) membranes for fuel cell application. International Journal of Hydrogen Energy, 2012, 37, 2603-2613. | 7.1 | 50 |
| 54 | Low temperature decal transfer method for hydrocarbon membrane based membrane electrode assemblies in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2011, 196, 9800-9809. | 7.8 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | 4â€Alkylphenoxymethylâ€Substituted Polystyrenes for Liquid Crystal Alignment Layers. Macromolecular Chemistry and Physics, 2009, 210, 926-935. | 2.2 | 26 |
| 56 | Polybenzimidazole containing benzimidazole side groups for high-temperature fuel cell applications. Polymer, 2009, 50, 3495-3502. | 3.8 | 81 |
| 57 | Copolymers of Poly(2,5â€benzimidazole) and Poly[2,2â€²â€(pâ€phenylene)â€5,5â€²â€bibenzimidazole] for Highâ€Temperature Fuel Cell Applications. Macromolecular Materials and Engineering, 2008, 293, 914-921. | 3.6 | 22 |
| 58 | Protonâ€Conducting Zirconium Pyrophosphate/Poly(2,5â€benzimidazole) Composite Membranes Prepared by a PPA Direct Casting Method. Macromolecular Chemistry and Physics, 2007, 208, 2293-2302. | 2.2 | 36 |
| 59 | High-temperature fuel cell membranes based on mechanically stable para-ordered polybenzimidazole prepared by direct casting. Journal of Power Sources, 2007, 172, 172-179. | 7.8 | 86 |