# Yoichi Tominaga

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 114 papers | 3,080 citations | 196777 29 h-index | 206121 51 g-index |
| 118 all docs | 118 docs citations | 118 times ranked | 3042 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Glyme-based electrolytes: suitable solutions for next-generation lithium batteries. Green Chemistry, 2022, 24, 1021-1048. | 4.6 | 28 |
| 2 | Enhanced ionic conduction in composite polymer electrolytes filled with plant biomass â€œligninâ€. Chemical Communications, 2022, 58, 4504-4507. | 2.2 | 6 |
| 3 | Enhanced Performance of Allâ€Solidâ€State Li Metal Battery Based on Polyether Electrolytes with LiNO<sub>3</sub> Additive. Macromolecular Chemistry and Physics, 2022, 223, . | 1.1 | 4 |
| 4 | Polymer Electrolytes toward Nextâ€Generation Batteries. Macromolecular Chemistry and Physics, 2022, 223, . | 1.1 | 7 |
| 5 | Effect of plasticizer on the ion-conductive and dielectric behavior of poly(ethylene carbonate)-based Li electrolytes. Polymer Journal, 2021, 53, 149-155. | 1.3 | 29 |
| 6 | Phase Behavior, Ionic Conductivity, and Current-Voltage Response of Imogolite Gel Swelled in Ionic Liquid. Chemistry Letters, 2021, 50, 217-219. | 0.7 | 3 |
| 7 | Preparation and electrochemical characterization of magnesium gel electrolytes based on crosslinked Poly(tetrahydrofuran). Polymer, 2021, 224, 123743. | 1.8 | 6 |
| 8 | Ionic transport and mechanical properties of slide-ring gel swollen with Mg-ion electrolytes. Ionics, 2020, 26, 255-261. | 1.2 | 4 |
| 9 | An alternative composite polymer electrolyte for high performances lithium battery. Journal of Power Sources, 2020, 449, 227508. | 4.0 | 28 |
| 10 | Polymer heatproofing mechanism of lignin extracted by simultaneous enzymatic saccharification and comminution. Polymer Degradation and Stability, 2020, 179, 109273. | 2.7 | 5 |
| 11 | Towards a Highâ€Performance Lithiumâ€Metal Battery with Glyme Solution and an Olivine Cathode. ChemElectroChem, 2020, 7, 2344-2344. | 1.7 | 5 |
| 12 | Towards a Highâ€Performance Lithiumâ€Metal Battery with Glyme Solution and an Olivine Cathode. ChemElectroChem, 2020, 7, 2376-2388. | 1.7 | 11 |
| 13 | Effect of Li salt addition on electrochemical properties of poly(ethylene carbonate)-Mg salt electrolytes. Polymer Journal, 2019, 51, 61-67. | 1.3 | 5 |
| 14 | Mechanical and degradation properties in alkaline solution of poly(ethylene carbonate)/poly(lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 1.8 | 18 |
| 15 | Random copolymers of ethylene carbonate and ethylene oxide for Li-Ion conductive solid electrolytes. Electrochimica Acta, 2019, 312, 342-348. | 2.6 | 19 |
| 16 | A concentrated poly(ethylene carbonate)/poly(trimethylene carbonate) blend electrolyte for all-solid-state Li battery. Polymer Journal, 2019, 51, 753-760. | 1.3 | 18 |
| 17 | Glyme-based electrolytes for lithium metal batteries using insertion electrodes: An electrochemical study. Electrochimica Acta, 2019, 306, 85-95. | 2.6 | 14 |
| 18 | An end-capped poly(ethylene carbonate)-based concentrated electrolyte for stable cyclability of lithium battery. Electrochimica Acta, 2019, 302, 286-290. | 2.6 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Structural and physicochemical properties of melt-quenched poly(ethylene carbonate)/poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlock | 2.7 | 6 |
| 20 | Magnesium ion-conductive poly(ethylene carbonate) electrolytes. Ionics, 2018, 24, 3475-3481. | 1.2 | 31 |
| 21 | Preparation and characterization of poly(ethylene carbonate)/poly(lactic acid) blends. Journal of Polymer Research, 2018, 25, 1. | 1.2 | 10 |
| 22 | Composite poly(ethylene carbonate) electrolytes with electrospun silica nanofibers. Polymers for Advanced Technologies, 2018, 29, 820-824. | 1.6 | 12 |
| 23 | A small amount of nanoparticulated plant biomass, lignin, enhances the heat tolerance of poly(ethylene carbonate). Journal of Materials Chemistry A, 2018, 6, 837-839. | 5.2 | 22 |
| 24 | Tuneable shape-memory properties of composites based on nanoparticulated plant biomass, lignin, and poly(ethylene carbonate). Soft Matter, 2018, 14, 9227-9231. | 1.2 | 15 |
| 25 | Understanding Electrochemical Stability and Lithium Ionâ€Dominant Transport in Concentrated Poly(ethylene carbonate) Electrolyte. ChemElectroChem, 2018, 5, 4008-4014. | 1.7 | 37 |
| 26 | Ion-conductive, Thermal and Electrochemical Properties of Poly(ethylene carbonate)-Mg Electrolytes with Glyme Solution. Chemistry Letters, 2018, 47, 1258-1261. | 0.7 | 3 |
| 27 | Ionâ€Conductive and Thermal Properties of a Synergistic Poly(ethylene carbonate)/Poly(trimethylene) Tj ETQq1 1 0.784314 rgBT /Overlock | 2.0 | 19 |
| 28 | (Invited) Thixotropic Gel Electrolyte Consisting of Imogolite and Ionic Liquid. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 29 | Ion-Conductive and Elastic Slide-Ring Gel Li Electrolytes Swollen with Ionic Liquid. Electrochimica Acta, 2017, 229, 166-172. | 2.6 | 28 |
| 30 | Ion-Conductive Properties of a Polymer Electrolyte Based on Ethylene Carbonate/Ethylene Oxide Random Copolymer. Macromolecular Rapid Communications, 2017, 38, 1600652. | 2.0 | 61 |
| 31 | Ionic Liquid-Based Electrolytes Containing Surface-Functionalized Inorganic Nanofibers for Quasisolid Lithium Batteries. ACS Omega, 2017, 2, 835-841. | 1.6 | 19 |
| 32 | Ion-conductive polymer electrolytes based on poly(ethylene carbonate) and its derivatives. Polymer Journal, 2017, 49, 291-299. | 1.3 | 103 |
| 33 | Quasi-solid electrolyte: a thixotropic gel of imogolite and an ionic liquid. Chemical Communications, 2017, 53, 613-616. | 2.2 | 20 |
| 34 | Dielectric relaxation and ionic transport in poly(ethylene carbonate)â€based electrolytes. Polymers for Advanced Technologies, 2017, 28, 362-366. | 1.6 | 13 |
| 35 | Preparation and improvement in photovoltaic performance of dye-sensitized solar cells using carbon dioxide. Ionics, 2017, 23, 337-342. | 1.2 | 0 |
| 36 | Ionic Liquid-Containing Composite Poly(ethylene oxide) Electrolyte Reinforced by Electrospun Silica Nanofiber. Journal of the Electrochemical Society, 2017, 164, A3357-A3361. | 1.3 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Ion-Conductive Properties of Propylene Carbonate/Propylene Oxide Copolymers. Kobunshi Ronbunshu, 2017, 74, 577-583. | 0.2 | 1 |
| 38 | Dispersed Structure of Filler and Properties of Vulcanized Natural Rubber,Isoprene Rubber and Deproteinized Natural Rubber Filled with Carbon Black. Nippon Gomu Kyokaishi, 2017, 90, 470-474. | 0.0 | 0 |
| 39 | Development of Novel Conductive Rubber Rollers using NBR/Polyether Electrolyte Blends with Nanoscale Sea-Island Phase Separation. Nippon Gomu Kyokaishi, 2017, 90, 23-29. | 0.0 | 0 |
| 40 | Effect of oxyethylene side chains on ion-conductive properties of polycarbonate-based electrolytes. Polymer, 2016, 84, 21-26. | 1.8 | 60 |
| 41 | Highly concentrated polycarbonateâ€based solid polymer electrolytes having extraordinary electrochemical stability. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 2442-2447. | 2.4 | 48 |
| 42 | Correlation between Solvation Structure and Ion-Conductive Behavior of Concentrated Poly(ethylene carbonate)-Based Electrolytes. Journal of Physical Chemistry C, 2016, 120, 12385-12391. | 1.5 | 135 |
| 43 | A highly-concentrated poly(ethylene carbonate)-based electrolyte for all-solid-state Li battery working at room temperature. Electrochemistry Communications, 2016, 66, 46-48. | 2.3 | 152 |
| 44 | Title is missing!. Electrochemistry, 2016, 84, 998-1002. | 0.6 | 0 |
| 45 | Dielectric Relaxation Behavior of a Poly(ethylene carbonate)â€Lithium Bisâ€(trifluoromethanesulfonyl) Imide Electrolyte. Macromolecular Chemistry and Physics, 2015, 216, 1660-1665. | 1.1 | 45 |
| 46 | Electrochemical properties of a poly(ethylene carbonate)-LiTFSI electrolyte containing a pyrrolidinium-based ionic liquid. Ionics, 2015, 21, 895-900. | 1.2 | 49 |
| 47 | Effect of Anions on Lithium Ion Conduction in Poly(ethylene carbonate)-based Polymer Electrolytes. Journal of the Electrochemical Society, 2015, 162, A3133-A3136. | 1.3 | 110 |
| 48 | Ionic Conductivity and Mechanical Properties of Slide-Ring Gel Swollen with Electrolyte Solution Including Lithium Ions. Electrochimica Acta, 2015, 169, 433-439. | 2.6 | 11 |
| 49 | A QuaternaryPoly(ethylene carbonate)-Lithium Bis(trifluoromethanesulfonyl)imide-Ionic Liquid-Silica Fiber Composite Polymer Electrolyte for Lithium Batteries. Electrochimica Acta, 2015, 175, 134-140. | 2.6 | 73 |
| 50 | Effect of nitrile groups on conductivity and morphology of NBR/polyether-based electrolyte blends for antistatic materials. Materials Today Communications, 2015, 4, 124-129. | 0.9 | 8 |
| 51 | Flow-Orientation of Internal Structure and Anisotropic Properties on Hydrogels Consisted of Imogolite Hollow Nanofibers. Journal of Fiber Science and Technology, 2014, 70, 137-144. | 0.0 | 14 |
| 52 | Effect of Anions on Lithium Ion Conduction in Poly(ethylene carbonate)-based Polymer Electrolytes. ECS Transactions, 2014, 62, 151-157. | 0.3 | 3 |
| 53 | Fast Li-ion conduction in poly(ethylene carbonate)-based electrolytes and composites filled with TiO<sub>2</sub> nanoparticles. Chemical Communications, 2014, 50, 4448-4450. | 2.2 | 263 |
| 54 | Ion-conductive and mechanical properties of polyether/silica thin fiber composite electrolytes. Reactive and Functional Polymers, 2014, 81, 40-44. | 2.0 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Proton-conducting composite membranes based on polybenzimidazole and sulfonated mesoporous organosilicate. International Journal of Hydrogen Energy, 2014, 39, 2724-2730. | 3.8 | 19 |
| 56 | Ion-conductive properties of polyether-based composite electrolytes filled with mesoporous silica, alumina and titania. Electrochimica Acta, 2013, 113, 361-365. | 2.6 | 24 |
| 57 | Dielectric relaxations and conduction mechanisms in polyetherâ€“clay composite polymer electrolytes under high carbon dioxide pressure. Physical Chemistry Chemical Physics, 2013, 15, 16626. | 1.3 | 24 |
| 58 | Anisotropic ionic conduction in composite polymer electrolytes filled with clays oriented by a strong magnetic field. Polymer Journal, 2013, 45, 738-743. | 1.3 | 21 |
| 59 | Nano-Ordered Sea-Island Phase Separation of Ion-Conductive Elastomer Blends Based on NBR and Polyether Electrolytes. E-Journal of Soft Materials, 2013, 9, 9-13. | 2.0 | 2 |
| 60 | Synthesis and Fundamental Properties of Carbon Dioxide/Alkylene Oxide Copolymers as Ion-Conductive Polymers. Kobunshi Ronbunshu, 2013, 70, 23-28. | 0.2 | 8 |
| 61 | Blend and Composite Materials based on Solid Polymer Electrolytes. Nippon Gomu Kyokaishi, 2012, 85, 93-100. | 0.0 | 0 |
| 62 | Improvement in dispersion and ionic conductivity of polyether/freeze-dried clay composites using supercritical carbon dioxide as treatment medium. Ionics, 2012, 18, 845-851. | 1.2 | 5 |
| 63 | Ionic conduction in poly(ethylene carbonate)-based rubbery electrolytes including lithium salts. Polymer Journal, 2012, 44, 1155-1158. | 1.3 | 91 |
| 64 | Poly(ethylene-co-vinyl alcohol)/sulfonated mesoporous organosilicate composites as proton-conductive membranes. Journal of Power Sources, 2012, 203, 42-47. | 4.0 | 13 |
| 65 | Blend & Composite Materials Based on Solid Polymer Electrolytes. International Polymer Science and Technology, 2012, 39, 1-10. | 0.1 | 0 |
| 66 | Utilization of carbon dioxide for polymer electrolytes [II]: Synthesis of alternating copolymers with glycidyl ethers as novel ion-conductive polymers. Electrochimica Acta, 2011, 57, 36-39. | 2.6 | 61 |
| 67 | Utilization of carbon dioxide for polymer electrolytes [I]: Effect of supercritical treatment conditions on ionic conduction in amorphous polyether/salt mixtures. Electrochimica Acta, 2011, 57, 176-179. | 2.6 | 2 |
| 68 | Alternating copolymers of carbon dioxide with glycidyl ethers for novel ion-conductive polymer electrolytes. Polymer, 2010, 51, 4295-4298. | 1.8 | 105 |
| 69 | Enhanced Cationic Conduction in a Polyether/Clay Composite Electrolyte Treated with Supercritical CO<sub>2</sub>. Macromolecules, 2009, 42, 5422-5424. | 2.2 | 12 |
| 70 | Effect of Humidity on Ionic Conductivity of NBR/Polyether Electrolyte Blends with Microscale Sea-Island Phase Separation. Nippon Gomu Kyokaishi, 2009, 82, 499-506. | 0.0 | 6 |
| 71 | Hyperbranched-linear poly(ether sulfone) blend films for proton exchange membranes. Journal of Power Sources, 2008, 175, 120-126. | 4.0 | 28 |
| 72 | Ionic Conduction in Solid Polymer Electrolytes Using Carbon Dioxide as Solvent. Kobunshi Ronbunshu, 2008, 65, 525-535. | 0.2 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Coupling of Hyperbranched and Linear Poly(Ether Sulfone)s in the Solid State. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2007, 20, 193-196. | 0.1 | 1 |
| 74 | Relation between Ionic Conductivity and Solubility of CO2in Pressurized Solid Polymer Electrolytes. Macromolecules, 2007, 40, 3348-3354. | 2.2 | 8 |
| 75 | Proton conduction in Nafion composite membranes filled with mesoporous silica. Journal of Power Sources, 2007, 171, 530-534. | 4.0 | 96 |
| 76 | Miscibility and hydrolytic degradation in alkaline solution of poly(l-lactide) and poly(p-vinyl phenol) blends. Polymer Degradation and Stability, 2007, 92, 1626-1631. | 2.7 | 26 |
| 77 | Structure and properties of highly stereoregular isotactic poly(methyl methacrylate) and syndiotactic poly(methyl methacrylate) blends treated with supercritical CO2. Polymer, 2007, 48, 5116-5124. | 1.8 | 12 |
| 78 | The effect of high-pressure carbon dioxide treatment on the crystallization behavior and mechanical properties of poly(l-lactic acid)/poly(methyl methacrylate) blends. Polymer, 2006, 47, 3954-3960. | 1.8 | 35 |
| 79 | Miscibility and hydrolytic degradation in alkaline solution of poly(l-lactide) and poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf | 1.8 | 93 |
| 80 | Low-frequency sound absorption of organic hybrid comprised of chlorinated polyethylene andN,Nâ€²-dicyclohexyl-2-benzothiazolyl sulfenamide. Journal of Applied Polymer Science, 2006, 99, 2878-2884. | 1.3 | 0 |
| 81 | Poly(ethylene oxide)-Based Composite Electrolytes Filled with Periodic Mesoporous Silica for Solid State Ionics. E-Journal of Soft Materials, 2005, 1, 14-19. | 2.0 | 7 |
| 82 | A novel composite polymer electrolyte: Effect of mesoporous SiO2 on ionic conduction in poly(ethylene oxide)â€"LiCF3SO3 complex. Journal of Power Sources, 2005, 146, 402-406. | 4.0 | 97 |
| 83 | Ionic conductivity studies of poly(ethylene oxide)â€"lithium salt electrolytes in high-pressure carbon dioxide. Polymer, 2005, 46, 8113-8118. | 1.8 | 9 |
| 84 | Ion-conductive properties of mesoporous silica-filled composite polymer electrolytes. Electrochimica Acta, 2005, 50, 3949-3954. | 2.6 | 22 |
| 85 | Resistivity control in the semiconductive region for carbon-black-filled polymer composites. Colloid and Polymer Science, 2005, 283, 367-374. | 1.0 | 9 |
| 86 | Relationship between electrical resistivity and particle dispersion state for carbon black filled poly (ethylene-co-vinyl acetate)/poly (L-lactic acid) blend. Colloid and Polymer Science, 2005, 284, 134-141. | 1.0 | 50 |
| 87 | An approach to one-dimensional conductive polymer composites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 184-189. | 2.4 | 40 |
| 88 | A study on correlation between physical properties and interfacial characteristics in highly loaded graphite-polymer composites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2568-2577. | 2.4 | 31 |
| 89 | Specific ionic conduction in poly[oligo (oxyethylene glycol) methacrylate] (PMEO)-Li salt complexes under high-pressure CO2. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3151-3158. | 2.4 | 6 |
| 90 | Dielectric relaxation behavior of poly(methyl methacrylate) under high-pressure carbon dioxide. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2951-2962. | 2.4 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Viscoelasticity and morphology of an organic hybrid of chlorinated polyethylene and N,Nâ€²-dicyclohexyl-2-benzothiazolyl sulfenamide. Composite Interfaces, 2005, 12, 637-653. | 1.3 | 2 |
| 92 | Fast Ionic Conduction in PEO-Based Composite Electrolyte Filled with Ionic Liquid-Modified Mesoporous Silica. Electrochemical and Solid-State Letters, 2005, 8, A22. | 2.2 | 31 |
| 93 | Characterization of Higher-Order Structure of Poly(ethylene-2,6-naphthalate) Treated with Supercritical Carbon Dioxide. Macromolecules, 2005, 38, 6544-6550. | 2.2 | 27 |
| 94 | Interfacial behavior of epichlorohydrin-ethyleneoxide-allylglycidyl ether/fluorinated carbon black observed from mechanical and dielectrical properties. Journal of Applied Polymer Science, 2004, 91, 2928-2933. | 1.3 | 6 |
| 95 | Effect of reaction kinetics of polymer electrolyte on the ion-conductive behavior for poly(oligo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 | 1.3 | 2 |
| 96 | Dynamic percolation phenomenon of poly(methyl methacrylate)/surface fluorinated carbon black composite. Journal of Applied Polymer Science, 2003, 89, 1151-1155. | 1.3 | 25 |
| 97 | Improvement of the ionic conductivity for amorphous polyether electrolytes using supercritical CO2 treatment technology. Electrochimica Acta, 2003, 48, 1991-1995. | 2.6 | 14 |
| 98 | In situ study of ionic conductivity for polyetherâ€“LiCF3SO3 electrolytes with subcritical and supercritical CO2. Polymer, 2003, 44, 4769-4772. | 1.8 | 11 |
| 99 | AC complex impedance measurement of comb-like type polyether electrolytes under high-pressure carbon dioxide. Electrochimica Acta, 2003, 48, 4069-4075. | 2.6 | 11 |
| 100 | Effect of Supercritical Carbon Dioxide Processing on Ionic Association and Conduction in a Crystalline Poly(ethylene oxide)â˜LiCF3SO3Complex. Macromolecules, 2003, 36, 8766-8772. | 2.2 | 37 |
| 101 | The Effect of Supercritical CO2 on the Macromolecules Parallel Conformation and Its Relation to the Electrical Conductivity and Dielectric Behavior of Epichlorohydrin Terpolymer. Journal of Macromolecular Science - Physics, 2003, 42, 1021-1038. | 0.4 | 0 |
| 102 | Damping performance of polymer blend/organic filler hybrid materials with selective compatibility. Materials Letters, 2002, 52, 96-99. | 1.3 | 35 |
| 103 | Improvement of the ionic conductivity for PEOâ€“LiCF3SO3 complex by supercritical CO2 treatment. Materials Letters, 2002, 57, 777-780. | 1.3 | 13 |
| 104 | Characterization of the vibrational damping loss factor and viscoelastic properties of ethylene-propylene rubbers reinforced with micro-scale fillers. Journal of Applied Polymer Science, 2001, 82, 3058-3066. | 1.3 | 34 |
| 105 | Ionic conductivity of PPO-sulfonamide salt hybrids and their network polymers. Polymers for Advanced Technologies, 2000, 11, 524-528. | 1.6 | 16 |
| 106 | Lithium ion conduction in linear- and network-type polymers of PEO/sulfonamide salt hybrid. Electrochimica Acta, 2000, 45, 3081-3086. | 2.6 | 34 |
| 107 | Effect of added salt species on the ionic conductivity of PEO/sulfonamide salt hybrids. Electrochimica Acta, 2000, 45, 1285-1289. | 2.6 | 36 |
| 108 | High ionic conductivity of PEO/sulfonamide salt hybrids. Solid State Ionics, 1999, 124, 323-329. | 1.3 | 14 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 109 | Improved Ionic Conductivity of PEO/Sulfonamide Lithium Salt Hybrid by the Addition of LiTFSI. Chemistry Letters, 1998, 27, 955-956. | 0.7 | 12 |
| 110 | Polyether/salt hybrid: 6. Effect of sulfonamide ends having different alkyl groups on the bulk ionic conductivity. Polymer, 1997, 38, 1949-1951. | 1.8 | 32 |
| 111 | Polyether/salt hybrid (IV). Effect of benzenesulfonate group(s) and PEO molecular weight on the bulk ionic conductivity. Electrochimica Acta, 1997, 42, 1561-1570. | 2.6 | 52 |
| 112 | Effect of terminal groups on the ionic conductivity of Î±,Ï‰-dicharged poly(ethylene oxide) oligomers. Solid State Ionics, 1996, 86-88, 325-328. | 1.3 | 21 |
| 113 | Polymer heat-proofing using defibered plants obtained by wet-type bead milling of Japanese cedar. Polymer Journal, 0, , . | 1.3 | 4 |
| 114 | Thermal, Mechanical and Ionâ€Conductive Properties of Crosslinked Poly[(ethylene carbonate)â€•co â€(ethylene oxide)]â€Lithium Bis(fluorosulfonyl)Imide Electrolytes. Macromolecular Chemistry and Physics, 0, , 2100327. | 1.1 | 3 |