

# Thein Kyu

## List of Publications by Year in descending order

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118  
papers

3,316  
citations

126907

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120  
docs citations

120  
times ranked

3109  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental and Theoretical Investigations of Porous Structure Formation in Electrospun Fibers. <i>Macromolecules</i> , 2007, 40, 7689-7694.	4.8	169
2	Effect of Plasticization on Ionic Conductivity Enhancement in Relation to Glass Transition Temperature of Crosslinked Polymer Electrolyte Membranes. <i>Macromolecules</i> , 2016, 49, 5637-5648.	4.8	149
3	Spinodals in a polymer dispersed liquid crystal. <i>Journal of Chemical Physics</i> , 1995, 102, 556-562.	3.0	142
4	Effect of carbon nanotubes on phase transitions of nematic liquid crystals. <i>Liquid Crystals</i> , 2005, 32, 815-821.	2.2	135
5	Porous fiber formation in polymer-solvent system undergoing solvent evaporation. <i>Journal of Applied Physics</i> , 2006, 100, 043512.	2.5	104
6	Highly conductive solvent-free polymer electrolyte membrane for lithium-ion batteries: Effect of prepolymer molecular weight. <i>Journal of Membrane Science</i> , 2016, 498, 208-217.	8.2	103
7	Ionic Conductivity in Relation to Ternary Phase Diagram of Poly(ethylene oxide), Succinonitrile, and Lithium Bis(trifluoromethane)sulfonimide Blends. <i>Macromolecules</i> , 2012, 45, 6068-6077.	4.8	95
8	Equilibrium phase behavior of nematic mixtures. <i>Journal of Chemical Physics</i> , 1995, 103, 7471-7481.	3.0	93
9	Nucleation Initiated Spinodal Decomposition in a Polymerizing System. <i>Physical Review Letters</i> , 1996, 76, 3746-3749.	7.8	84
10	Phase-field modeling on morphological landscape of isotactic polystyrene single crystals. <i>Physical Review E</i> , 2005, 72, 011804.	2.1	77
11	Dynamic mechanical studies of partially ionized and neutralized Nafion polymers. <i>Canadian Journal of Chemistry</i> , 1983, 61, 680-687.	1.1	71
12	Dynamics of Hollow Nanofiber Formation During Solidification Subjected to Solvent Evaporation. <i>Macromolecular Theory and Simulations</i> , 2006, 15, 87-93.	1.4	70
13	Spiral Crystal Growth in Blends of Poly(vinylidene fluoride) and Poly(vinyl acetate). <i>Macromolecules</i> , 1998, 31, 5823-5829.	4.8	61
14	Morphology development during polymerization-induced phase separation in a polymer dispersed liquid crystal. <i>Polymer</i> , 2001, 42, 9173-9185.	3.8	59
15	Highly conductive, completely amorphous polymer electrolyte membranes fabricated through photo-polymerization of poly(ethylene glycol diacrylate) in mixtures of solid plasticizer and lithium salt. <i>Solid State Ionics</i> , 2014, 254, 92-100.	2.7	56
16	Phase Diagram and Photopolymerization Behavior of Mixtures of UV-Curable Multifunctional Monomer and Low Molar Mass Nematic Liquid Crystal. <i>Macromolecules</i> , 1998, 31, 6806-6812.	4.8	54
17	Theoretical investigation on dynamics of photopolymerization-induced phase separation and morphology development in nematic liquid crystal/polymer mixtures. <i>Journal of Chemical Physics</i> , 2000, 113, 6429-6436.	3.0	54
18	Miscible Blends of Two Crystalline Polymers. 3. Liquid-Liquid Phase Separation in Blends of Poly(vinylidene fluoride)/Poly(butylene adipate). <i>Macromolecules</i> , 1996, 29, 91-96.	4.8	52

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19	Role of Crystal-Amorphous Interaction in Phase Equilibria of Crystal-Amorphous Polymer Blends. <i>Journal of Physical Chemistry B</i> , 2006, 110, 12728-12732.	2.6	48
20	Phase Diagrams of Binary Crystalline-Crystalline Polymer Blends. <i>Journal of Physical Chemistry B</i> , 2006, 110, 16059-16065.	2.6	47
21	Kinetics of photopolymerization-induced phase separation and morphology development in mixtures of a nematic liquid crystal and multifunctional acrylate. <i>Polymer</i> , 2008, 49, 534-545.	3.8	47
22	Crystalline-Amorphous Interaction in Relation to the Phase Diagrams of Binary Polymer Blends Containing a Crystalline Constituent. <i>Journal of Physical Chemistry B</i> , 2008, 112, 6460-6466.	2.6	47
23	Theoretical simulation of holographic polymer-dispersed liquid-crystal films via pattern photopolymerization-induced phase separation. <i>Physical Review E</i> , 2001, 63, 061802.	2.1	46
24	Electroresponsive Ionic Liquid Crystal Elastomers. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1900299.	3.9	45
25	Phase Behavior of Mixtures of Low Molar Mass Nematic Liquid Crystal and in Situ Photo-Cross-Linked Polymer Network. <i>Macromolecules</i> , 1999, 32, 664-674.	4.8	43
26	Morphology Development and Dynamics of Photopolymerization-Induced Phase Separation in Mixtures of a Nematic Liquid Crystal and Photocuratives. <i>Macromolecules</i> , 2000, 33, 1416-1424.	4.8	43
27	Holographic Photopolymerization-Induced Phase Separation in Reference to the Phase Diagram of a Mixture of Photocurable Monomer and Nematic Liquid Crystal. <i>Macromolecules</i> , 2005, 38, 4844-4854.	4.8	43
28	Phase Diagrams and Phase Separation Dynamics in Mixtures of Side-Chain Liquid Crystalline Polymers and Low Molar Mass Liquid Crystals. <i>Macromolecules</i> , 1996, 29, 1051-1058.	4.8	42
29	Influence of Photopolymerization Reaction Kinetics on Diffraction Efficiency of H-PDLC Undergoing Photopatterning Reaction in Mixtures of Acrylic Monomer/Nematic Liquid Crystals. <i>Macromolecules</i> , 2007, 40, 3190-3197.	4.8	41
30	Phase equilibria of a polymer-smectic-liquid-crystal mixture. <i>Physical Review E</i> , 1996, 53, 3618-3622.	2.1	37
31	Effect of Side-Chain Branching on Enhancement of Ionic Conductivity and Capacity Retention of a Solid Copolymer Electrolyte Membrane. <i>Langmuir</i> , 2017, 33, 13973-13981.	3.5	37
32	Spatiotemporal growth of faceted and curved single crystals. <i>Physical Review E</i> , 2000, 61, 4161-4170.	2.1	35
33	Simulations of Microlens Arrays Formed by Pattern-Photopolymerization-Induced Phase Separation of Liquid Crystal/Monomer Mixtures. <i>Macromolecules</i> , 2001, 34, 9168-9172.	4.8	35
34	Spatio-temporal growth of nematic domains in liquid crystal polymer mixtures. <i>Journal of Chemical Physics</i> , 1999, 110, 5998-6006.	3.0	34
35	Fire retardant, superionic solid state polymer electrolyte membranes for lithium ion batteries. <i>Current Opinion in Chemical Engineering</i> , 2017, 15, 68-75.	7.8	34
36	Scaling analysis in the phase separation of poly(p-phenylene benzobisthiazole)/Nylon 66 rigid-rod molecular composites. <i>Polymer</i> , 1989, 30, 1591-1595.	3.8	33

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37	Highly conductive solid polymer electrolyte membranes based on polyethylene glycol-bis-carbamate dimethacrylate networks. <i>Journal of Power Sources</i> , 2017, 359, 441-449.	7.8	32
38	Mechanical Relaxations in Perfluorosulfonate Ionomer Membranes. <i>ACS Symposium Series</i> , 1982, , 79-110.	0.5	30
39	In Vitro Evaluation of Antioxidant and Anti-Inflammatory Properties of Genistein-Modified Hemodialysis Membranes. <i>Biomacromolecules</i> , 2011, 12, 2447-2455.	5.4	29
40	Reaction induced phase separation in mixtures of multifunctional polybutadiene and epoxy. <i>Polymer</i> , 2005, 46, 12511-12522.	3.8	28
41	Phase diagrams of a binary smectic-A mixture. <i>Journal of Chemical Physics</i> , 1997, 107, 6859-6866.	3.0	27
42	Effect of thermal transport on spatiotemporal emergence of lamellar branching morphology during polymer spherulitic growth. <i>Journal of Chemical Physics</i> , 2005, 123, 124908.	3.0	27
43	Dynamics and morphology development in electrospun fibers driven by concentration sweeps. <i>Physics of Fluids</i> , 2007, 19, 107106.	4.0	27
44	Kinetics of phase separation by spinodal decomposition in a liquid-crystalline polymer solution. <i>Liquid Crystals</i> , 1988, 3, 631-644.	2.2	26
45	Flexoelectricity in Flexoionic Polymer Electrolyte Membranes: Effect of Thiosiloxane Modification on Poly(ethylene glycol) Diacrylate and Ionic Liquid Electrolyte Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 16978-16986.	8.0	26
46	Highly conductive, flexible polymer electrolyte membrane based on poly(ethylene glycol) diacrylate-co-thiosiloxane network. <i>Solid State Ionics</i> , 2018, 322, 61-68.	2.7	25
47	Phase transitions, structure evolution, and mechanical properties of blends of two crystalline polymers: poly(vinylidene fluoride) and poly(butylene adipate). <i>Polymer</i> , 1998, 39, 4599-4608.	3.8	24
48	Role of curvature elasticity in sectorization and ripple formation during melt crystallization of polymer single crystals. <i>Physical Review E</i> , 2004, 69, 061802.	2.1	24
49	<i>In vitro</i> investigation of antioxidant, anti-inflammatory, and antiplatelet adhesion properties of genistein-modified poly(ethersulfone)/poly(vinylpyrrolidone) hemodialysis membranes. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015, 103, 539-547.	3.4	23
50	Mechanoelectrical Transduction of Polymer Electrolyte Membranes: Effect of Branched Networks. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 7518-7528.	8.0	23
51	Chemical and electrochemical stability enhancement of lithium bis(oxalato)borate (LiBOB)-modified solid polymer electrolyte membrane in lithium ion half-cells. <i>Electrochimica Acta</i> , 2017, 246, 123-134.	5.2	22
52	Fully flexible lithium ion battery based on a flame retardant, solid-state polymer electrolyte membrane. <i>Solid State Ionics</i> , 2018, 320, 310-315.	2.7	21
53	Phase equilibria of a nematic and smectic-A mixture. <i>Journal of Chemical Physics</i> , 1998, 108, 3249-3255.	3.0	20
54	Genistein-Modified Poly(ethylene oxide)/Poly(D,L-lactic acid) Electrospun Mats with Improved Antioxidant and Anti-inflammatory Properties. <i>Biomacromolecules</i> , 2013, 14, 1423-1433.	5.4	20

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55	Underwater stress relaxation studies of nafion (perfluorosulfonate) ionomer membranes. Journal of Polymer Science, Polymer Symposia, 1984, 71, 203-219.	0.1	19
56	Conductive behavior in relation to domain morphology and phase diagram of Nafion/poly(vinylidene-co-trifluoroethylene) blends. Polymer, 2012, 53, 196-204.	3.8	19
57	Transport Controlled Pattern Photopolymerization in a Single-Component System. Macromolecules, 2004, 37, 3792-3798.	4.8	17
58	Hydrogen bonding interactions and miscibility studies of poly(amide)/poly(vinyl pyrrolidone) blends containing mangiferin. Polymer, 2009, 50, 2885-2892.	3.8	17
59	Incorporation of Hyperbranched Supramolecules into Nafion Ionic Domains via Impregnation and In-Situ Photopolymerization. Polymers, 2011, 3, 2018-2038.	4.5	17
60	Mechanoelectrical Conversion in Highly Ionic Conductive Solid-State Polymer Electrolyte Membranes. Macromolecular Materials and Engineering, 2019, 304, 1800777.	3.6	17
61	Role of dinitrile plasticizer chain lengths in electrochemical performance of highly conductive polymer electrolyte membrane for lithium ion battery. Electrochimica Acta, 2020, 330, 135320.	5.2	17
62	Morphology Development in Relation to the Ternary Phase Diagram of Biodegradable PDLLA/PCL/PEO Blends. Macromolecular Chemistry and Physics, 2011, 212, 1379-1391.	2.2	16
63	Breakup of spiral and concentric ringed spherulites in polymer crystallization. Physical Review E, 2006, 74, 011801.	2.1	14
64	Macrophase Separation in Styrene- <i>b</i> -Butadiene Block Copolymers Driven by Thermooxidative Reactions. Macromolecules, 2000, 33, 9568-9574.	4.8	13
65	Dynamics of spherulitic growth in blends of polypropylene isomers. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 2892-2899.	2.1	13
66	Morphology development of main-chain liquid crystalline polymer fibers during solvent evaporation. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 429-435.	2.1	13
67	Miscibility Characterization in Relation to Phase Morphology of Poly(ether sulfone)/Poly(vinyl Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.6	13
68	Swimming Photochromic Azobenzene Single Crystals in Triacrylate Solution. Journal of Physical Chemistry B, 2010, 114, 7791-7796.	2.6	13
69	Tuning Flexoelectric Effect in Polymer Electrolyte Membranes via Cation Selection for Potential Energy Harvesting Applications. ACS Applied Energy Materials, 2020, 3, 328-335.	5.1	12
70	Effect of <i>trans-cis</i> photoisomerization on phase equilibria and phase transition of liquid-crystalline azobenzene chromophore and its blends with reactive mesogenic diacrylate. Physical Review E, 2011, 83, 031702.	2.1	11
71	Solubilization of Genistein in Poly(oxyethylene) through Eutectic Crystal Melting. Journal of Physical Chemistry B, 2012, 116, 7795-7802.	2.6	11
72	Stabilization of epoxidized soybean oil-plasticized poly(vinyl chloride) blends via thermal curing with genistein. Journal of Applied Polymer Science, 2018, 135, 46472.	2.6	11

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73	Effects of Glucose on Cell Viability and Antioxidant and Anti-inflammatory Properties of Phytochemicals and Phytochemically Modified Membranes. <i>Journal of Physical Chemistry B</i> , 2014, 118, 11993-12001.	2.6	10
74	Ion conductive polymer electrolyte membranes based on star-branched poly(ethylene-glycol) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 T	2.7	10
75	Miscibility, phase behavior, and Curie transition in blends of vinylidene fluoride/trifluoroethylene copolymer and Poly(1,4-butylene adipate). <i>Polymer</i> , 1999, 40, 6125-6134.	3.8	9
76	Reaction Kinetics of Thermooxidative Degradation in a Styrene-b-butadiene Diblock Copolymer. <i>Macromolecules</i> , 2001, 34, 645-649.	4.8	9
77	Spatio-temporal growth of broken spiral and concentric ringed spherulites in blends of poly(vinylidene fluoride) and ethylene-vinylacetate copolymers. <i>Polymer</i> , 2004, 45, 8485-8490.	3.8	9
78	Effects of molecular complexation on phase equilibria in mixtures of urea/polyethylene glycol derivatives and electrochemical performance of urethane based polymer electrolyte membranes for solid-state lithium ion battery. <i>Polymer</i> , 2018, 159, 64-74.	3.8	9
79	Flexo-Ionic Effect of Ionic Liquid Crystal Elastomers. <i>Molecules</i> , 2021, 26, 4234.	3.8	9
80	Role of molecular complexation in solid-liquid phase diagram of poly-ethylene oxide/urea mixture. <i>Polymer</i> , 2017, 116, 350-356.	3.8	8
81	Effect of dangling side branching of polymer electrolyte membrane at the electrode interface on enhancement of ionic conductivity and capacity retention. <i>Current Opinion in Chemical Engineering</i> , 2018, 19, 124-130.	7.8	8
82	Effect of Chain Architectures of Star-shaped Poly(ethylene glycol) Macromonomers on Enhancement of Thermal, Mechanical, and Electrochemical Performance of Polymer Electrolyte Membranes. <i>Chemistry Letters</i> , 2018, 47, 587-590.	1.3	8
83	<i>In Situ</i> Polymerized Electrolytes with Fully Cross-Linked Networks Boosting High Ionic Conductivity and Capacity Retention for Lithium Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 14309-14322.	5.1	8
84	Effect of aromatic substitution on phase behavior of blends of halogenated polystyrene and conventional polystyrene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 1605-1615.	2.1	7
85	Three-dimensional switchable polymer photonic crystals via various optical wave interference techniques. <i>Liquid Crystals</i> , 2006, 33, 775-788.	2.2	7
86	Holographic polymer-dispersed liquid crystals and polymeric photonic crystals formed by holographic photolithography. <i>Macromolecular Research</i> , 2006, 14, 155-165.	2.4	7
87	Photopolymerization-induced crystallization and phase separation in poly(ethylene oxide)/triacylate blends. <i>Journal of Chemical Physics</i> , 2008, 129, 244901.	3.0	7
88	Theory and computation of photopolymerization-induced phase transition and morphology development in blends of crystalline polymer and photoreactive monomer. <i>Physical Review E</i> , 2009, 79, 031802.	2.1	7
89	Controlled Directional Crystallization of Oligothiophenes Using Zone Annealing of Preseeded Thin Films. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 23008-23014.	8.0	7
90	Role of Cationic Size and Valency in Mechanoelectrical Transduction of Ion-Containing Polymers. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 1837-1845.	6.7	7

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91	Collaborative studies of thermo-oxidative degradation of styrene- <i>b</i> -isoprene diblock copolymer. <i>Polymer</i> , 2005, 46, 5580-5587.	3.8	6
92	Photopolymerization-induced directional crystal growth in reactive mixtures. <i>Physical Review E</i> , 2007, 75, 051804.	2.1	6
93	Morphology Development in Polymer Fibers undergoing Solvent/Non-solvent Exchange. <i>Macromolecular Symposia</i> , 2007, 258, 170-178.	0.7	6
94	Photopolymerization-Induced Crystallization in Relation to Solid-Liquid Phase Diagram of Poly(ethylene oxide)/Diacrylate Monomer Blends. <i>Macromolecules</i> , 2009, 42, 1180-1188.	4.8	6
95	Membrane morphology and phase diagrams of mangiferin modified poly(amide)/poly(vinyl pyrrolidone) blends. <i>Journal of Membrane Science</i> , 2011, 367, 240-248.	8.2	6
96	Flexoelectricity of Multifunctional Polymer Electrolyte Membranes: Effect of Polymer Network Functionality. <i>ACS Applied Energy Materials</i> , 2021, 4, 12767-12779.	5.1	6
97	Spinodal phase separation and isothermal crystallization behavior in blends of VDF/TrFE(75/25) copolymer and poly(1,4-butylene adipate) (I). <i>Fibers and Polymers</i> , 2003, 4, 188-194.	2.1	5
98	Phase equilibria and phase separation dynamics in a polymer composite containing a main-chain liquid crystalline polymer. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 3621-3630.	2.1	5
99	Impregnation of waterwheel supramolecules as proton carriers in Nafion-perfluorinated ionomer membranes. <i>Journal of Materials Science</i> , 2012, 47, 7269-7279.	3.7	5
100	Effect of Chemical Modification on Macroscopic Phase Separation in Styrene- <i>b</i> -Isoprene Block Copolymer Driven by Thermooxidative Reactions. <i>Macromolecules</i> , 2004, 37, 1484-1491.	4.8	4
101	Theoretical Simulation on Dynamics of Macrophase Separation in Styrene-block-butadiene Copolymer Driven by Thermooxidative Reactions. <i>Macromolecules</i> , 2001, 34, 3790-3797.	4.8	3
102	Theoretical Modeling of the Phase Separation Dynamics in Blends of Reactive Monomers. <i>Macromolecular Theory and Simulations</i> , 2005, 14, 312-324.	1.4	3
103	Effects of photointensity gradient on directional crystal growth in blends of crystalline polymer and photoreactive monomer undergoing photopolymerization-induced phase transformation. <i>Journal of Chemical Physics</i> , 2009, 130, 174904.	3.0	3
104	Eutectic Mesophase Transitions and Induced Crystalline Phase in Mixtures of Hexagonal Columnar Liquid Crystal and Mesogenic Diacrylate. <i>Journal of Physical Chemistry B</i> , 2010, 114, 13031-13041.	2.6	3
105	Phase equilibria and photopolymerisation-induced phase transitions of mesogenic diacrylate monomer and low molecular mass liquid crystal mixture. <i>Liquid Crystals</i> , 2012, 39, 745-754.	2.2	3
106	Crystal nucleation and motion in an undercooled binary solution. <i>Current Opinion in Chemical Engineering</i> , 2015, 7, 1-5.	7.8	3
107	Morphology and immunological activities of genistein-modified poly(ethylene glycol) diacrylate networks. <i>Polymer</i> , 2016, 105, 104-112.	3.8	3
108	Toughening of silane modified bisphenol-A epoxides. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	3

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109	Influence of Acrylate Arm Topology on Phase Diagrams of Mixtures of Multiarm Acrylate Photocurable Monomers and Nematic Liquid Crystals. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5116-5123.	2.6	2
110	Supramolecules impregnated proton electrolyte membranes. <i>Current Opinion in Chemical Engineering</i> , 2013, 2, 132-138.	7.8	2
111	Electrorheological effects in ionomer membranes. I. The nafion polymers. <i>Journal of Polymer Science, Polymer Letters Edition</i> , 1983, 21, 589-592.	0.4	1
112	Theoretical simulation of thermally induced phase separation in a main-chain liquid-crystalline polymer solution. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003, 41, 913-926.	2.1	1
113	Formation of Microporous Films via Pattern Photo-Polymerization Induced Phase Separation. <i>Materials Research Society Symposia Proceedings</i> , 2001, 709, 1.	0.1	0
114	Template Crystallization of Ultrahigh Molecular Weight Polypropylene Induced by Chain Orientation of Cocrystallized Ultrahigh Molecular Weight Polyethylene. , 0, , 577-595.		0
115	Morphological Phase Diagrams of Blends of Polypropylene Isomers with Poly(Ethylene- <i>Octene</i> ) Copolymer. , 0, , 157-197.		0
116	Phase Field Approach to Thermodynamics and Dynamics of Phase Separation and Crystallization of Polypropylene Isomers and Ethylene- <i>Propylene</i> - <i>Diene</i> Terpolymer Blends. , 0, , 473-497.		0
117	Polymer Electrolytes as Energy-Harvesting Materials to Capture Electrical Energy from Dynamic Mechanical Deformations. <i>Macromolecular Rapid Communications</i> , 2021, , 2100204.	3.9	0
118	Hierarchical Organization of Single Crystal Polymorphs of Azobenzene Chromophore in Anisotropic Media Subjected to Local Thermal Gradients upon Cold Spraying. <i>Macromolecular Rapid Communications</i> , 2022, , 2200044.	3.9	0