Chong Min Koo

List of Publications by Year
in descending order

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Version: 2024-02-01

90 papers	10,841 citations	81839 39 h-index	49868 87 g-index
97 all docs	97 docs citations	97 times ranked	9724 citing authors

#	Article	IF	Citations
1	Towards Watt-scale hydroelectric energy harvesting by Ti₃C₂T_x-based transpiration-driven electrokinetic power generators. Energy and Environmental Science, 2022, 15, 123-135.	15.6	70
2	Enhanced stability of Ti3C2Tx MXene enabled by continuous ZIF-8 coating. Carbon, 2022, 191, 593-599.	5.4	30
3	Binary hybrid filler composite formulations of surface modified Feâ€“Siâ€“Al alloys for multifunctional EMI shielding and thermal conduction. Materials Chemistry and Physics, 2022, 284, 126024.	2.0	3
4	Electromagnetic shielding of Optically-Transparent and Electrically-Insulating ionic solutions. Chemical Engineering Journal, 2022, 438, 135564.	6.6	12
5	Flexible and Transparent Electrode of Hybrid Ti₃C₂T_X MXeneâ€“Silver Nanowires for High-Performance Quantum Dot Light-Emitting Diodes. ACS Nano, 2022, 16, 9203-9213.	7.3	22
6	Improving oxidation stability of 2D MXenes: synthesis, storage media, and conditions. Nano Convergence, 2021, 8, 9.	6.3	194
7	Engineering Aggregationâ€Resistant MXene Nanosheets As Highly Conductive and Stable Inks for Allâ€Printed Electronics. Advanced Functional Materials, 2021, 31, 2010897.	7.8	35
8	Reduction of Electrochemically Exfoliated Graphene Films for High-Performance Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2021, 13, 15827-15836.	4.0	27
9	Polymer-Laminated Ti₃C₂T_X MXene Electrodes for Transparent and Flexible Field-Driven Electronics. ACS Nano, 2021, 15, 8940-8952.	7.3	63
10	Mechanism and Kinetics of Oxidation Reaction of Aqueous Ti₃C₂T_x Suspensions at Different pHs and Temperatures. ACS Applied Materials & Interfaces, 2021, 13, 22855-22865.	4.0	64
11	Multidimensional Ti₃C₂T_xMXene ArchitecturesviaInterfacial Electrochemical Self-Assembly. ACS Nano, 2021, 15, 10058-10066.	7.3	46
12	Enhanced absorption of electromagnetic waves in Ti3C2T MXene films with segregated polymer inclusions. Composites Science and Technology, 2021, 213, 108878.	3.8	41
13	Multispectral electromagnetic shielding using ultra-thin metal-metal oxide decorated hybrid nanofiber membranes. Communications Materials, 2021, 2, .	2.9	13
14	Core-shell architecture of Ni-Co MOF wrapped by a heterogeneous FeBTC@PPy layer for high-performance EMI shielding. Synthetic Metals, 2021, 281, 116929.	2.1	7
15	Metal-Ion-Intercalated MXene Nanosheet Films for NH₃ Gas Detection. ACS Applied Nano Materials, 2021, 4, 14249-14257.	2.4	26
16	Electromagnetic Interference Shielding: 2D MXenes for Electromagnetic Shielding: A Review (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	7.8	8
17	Anomalous absorption of electromagnetic waves by 2D transition metal carbonitride Ti ₃ CNT _x (MXene). Science, 2020, 369, 446-450.	6.0	844
18	Mussel Inspired Highly Aligned Ti₃C₂T_x MXene Film with Synergistic Enhancement of Mechanical Strength and Ambient Stability. ACS Nano, 2020, 14, 11722-11732.	7.3	212

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19	2D Transition Metal Carbides (MXenes): Applications as an Electrically Conducting Material. Advanced Materials, 2020, 32, e2002159.	11.1	201
20	Alternatingâ€Current MXene Polymer Lightâ€Emitting Diodes. Advanced Functional Materials, 2020, 30, 2001224.	7.8	30
21	Beyond Ti₃C₂T_x: MXenes for Electromagnetic Interference Shielding. ACS Nano, 2020, 14, 5008-5016.	7.3	489
22	Electromagnetic Interference Shielding: Electromagnetic Shielding of Monolayer MXene Assemblies (Adv. Mater. 9/2020). Advanced Materials, 2020, 32, 2070064.	11.1	16
23	Electromagnetic Shielding of Monolayer MXene Assemblies. Advanced Materials, 2020, 32, e1906769.	11.1	410
24	2D MXenes for Electromagnetic Shielding: A Review. Advanced Functional Materials, 2020, 30, 2000883.	7.8	443
25	Evolution of Ionâ€“Ion Interactions and Structures in Smectic Ionic Liquid Crystals. Journal of Physical Chemistry C, 2019, 123, 20547-20557.	1.5	8
26	Low percolation 3D Cu and Ag shell network composites for EMI shielding and thermal conduction. Composites Science and Technology, 2019, 182, 107778.	3.8	67
27	Nafion-stabilized two-dimensional transition metal carbide (Ti3C2Tx MXene) as a high-performance electrochemical sensor for neurotransmitter. Journal of Industrial and Engineering Chemistry, 2019, 79, 338-344.	2.9	117
28	Understanding the enhanced electrochemical performance of TEMPO derivatives in non-aqueous lithium ion redox flow batteries. Journal of Industrial and Engineering Chemistry, 2019, 80, 545-550.	2.9	18
29	Kinetically controlled low-temperature solution-processed mesoporous rutile TiO2 for high performance lithium-ion batteries. Journal of Industrial and Engineering Chemistry, 2019, 80, 667-676.	2.9	15
30	Ultralight and Mechanically Robust Ti₃C₂T_x Hybrid Aerogel Reinforced by Carbon Nanotubes for Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2019, 11, 38046-38054.	4.0	283
31	Precision Interface Engineering of an Atomic Layer in Bulk Bi₂Te₃ Alloys for High Thermoelectric Performance. ACS Nano, 2019, 13, 7146-7154.	7.3	66
32	Shape-Adaptable 2D Titanium Carbide (MXene) Heater. ACS Nano, 2019, 13, 6835-6844.	7.3	162
33	Anisotropic MXene Aerogels with a Mechanically Tunable Ratio of Electromagnetic Wave Reflection to Absorption. Advanced Optical Materials, 2019, 7, 1900267.	3.6	245
34	Nonpolar Organic Dispersion of 2D Ti₃C₂T_x MXene Flakes via Simultaneous Interfacial Chemical Grafting and Phase Transfer Method. ACS Nano, 2019, 13, 13818-13828.	7.3	131
35	Binder-less chemical grafting of SiO2 nanoparticles onto polyethylene separators for lithium-ion batteries. Journal of Membrane Science, 2019, 573, 621-627.	4.1	83
36	FeSiAl/metal core shell hybrid composite with high-performance electromagnetic interference shielding. Composites Science and Technology, 2019, 172, 66-73.	3.8	49

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37	Electromagnetic Interference Shielding Using MXenes and Their Composites. , 2019, , 399-416.		1
38	Highly enhanced electromechanical properties of PVDF-TrFE/SWCNT nanocomposites using an efficient polymer compatibilizer. Composites Science and Technology, 2018, 157, 21-29.	3.8	41
39	Enhanced Terahertz Shielding of MXenes with Nanoâ€Metamaterials. Advanced Optical Materials, 2018, 6, 1701076.	3.6	157
40	Segregated reduced graphene oxide polymer composite as a high performance electromagnetic interference shield. Research on Chemical Intermediates, 2018, 44, 4707-4719.	1.3	33
41	Styrenic block copolymer/sulfonated graphene oxide composite membranes for highly bendable ionic polymer actuators with large ion concentration gradient. Composites Science and Technology, 2018, 163, 63-70.	3.8	11
42	Multifunctional Mesoporous Ionic Gels and Scaffolds Derived from Polyhedral Oligomeric Silsesquioxanes. ACS Applied Materials & Interfaces, 2017, 9, 3616-3623.	4.0	31
43	Hybrid ionogels derived from polycationic polysilsesquioxanes for lithium ion batteries. Polymer, 2017, 117, 160-166.	1.8	16
44	Density-tunable lightweight polymer composites with dual-functional ability of efficient EMI shielding and heat dissipation. Nanoscale, 2017, 9, 13432-13440.	2.8	112
45	Hybrid Ionogel Electrolytes Derived from Polyhedral Oligomeric Silsesquioxane for Lithium Ion Batteries. Journal of Nanoscience and Nanotechnology, 2017, 17, 3101-3104.	0.9	2
46	Highly anisotropic Cu oblate ellipsoids incorporated polymer composites with excellent performance for broadband electromagnetic interference shielding. Composites Science and Technology, 2017, 144, 57-62.	3.8	47
47	Nonlinear Frameworks for Reversible and Pluripotent Wetting on Topographic Surfaces. Advanced Materials, 2017, 29, 1605078.	11.1	18
48	Shaping micro-clusters via inverse jamming and topographic close-packing of microbombs. Nature Communications, 2017, 8, 721.	5.8	8
49	Sulfonated Copper Phthalocyanine/Sulfonated Polysulfone Composite Membrane for Ionic Polymer Actuators with High Power Density and Fast Response Time. ACS Applied Materials & Interfaces, 2017, 9, 29063-29070.	4.0	9
50	UV-curable antibacterial ionic polysilsesquioxanes: Structure-property relationships investigating the effect of various cations and anions. European Polymer Journal, 2017, 95, 323-334.	2.6	5
51	Hybrid ionogel electrolytes with POSS epoxy networks for high temperature lithium ion capacitors. Solid State Ionics, 2017, 309, 27-32.	1.3	31
52	Synthesis of Multifunctional Electrically Tunable Fluorine-Doped Reduced Graphene Oxide at Low Temperatures. ACS Applied Materials & Interfaces, 2017, 9, 24179-24189.	4.0	50
53	Highly sensitive electrochemical sensor based on environmentally friendly biomass-derived sulfur-doped graphene for cancer biomarker detection. Sensors and Actuators B: Chemical, 2017, 241, 716-724.	4.0	82
54	Polyethylene Glycol-Functionalized Siloxane Hybrid Gel Polymer Electrolytes for Lithium Ion Batteries. Journal of Nanoscience and Nanotechnology, 2017, 17, 3016-3020.	0.9	1

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55	Control of hard block segments of methacrylate-based triblock copolymers for enhanced electromechanical performance. Polymer Chemistry, 2016, 7, 7391-7399.	1.9	17
56	High-voltage ionic liquid electrolytes based on ether functionalized pyrrolidinium for electric double-layer capacitors. Electrochimica Acta, 2016, 222, 1847-1852.	2.6	31
57	Lithium Dendrite Suppression with UV-Curable Polysilsesquioxane Separator Binders. ACS Applied Materials & Interfaces, 2016, 8, 12852-12858.	4.0	63
58	Facilitated Ion Transport in Smectic Ordered Ionic Liquid Crystals. Advanced Materials, 2016, 28, 9301-9307.	11.1	36
59	Electromagnetic interference shielding with 2D transition metal carbides (MXenes). Science, 2016, 353, 1137-1140.	6.0	3,688
60	Boronic ionogel electrolytes to improve lithium transport for Li-ion batteries. Electrochimica Acta, 2016, 215, 36-41.	2.6	19
61	Liquid Crystals: Facilitated Ion Transport in Smectic Ordered Ionic Liquid Crystals (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock 10	11.1	1
62	Biomass-Derived Thermally Annealed Interconnected Sulfur-Doped Graphene as a Shield against Electromagnetic Interference. ACS Applied Materials & Interfaces, 2016, 8, 9361-9369.	4.0	124
63	Lithium ion capacitors fabricated with polyethylene oxide-functionalized polysilsesquioxane hybrid ionogel electrolytes. Electrochimica Acta, 2016, 188, 582-588.	2.6	34
64	Ultrahigh electrically and thermally conductive self-aligned graphene/polymer composites using large-area reduced graphene oxides. Carbon, 2016, 101, 120-128.	5.4	208
65	Blue membranes: Sulfonated copper(II) phthalocyanine tetrasulfonic acid based composite membranes for DMFC and low relative humidity PEMFC. Journal of Membrane Science, 2016, 502, 1-10.	4.1	19
66	Continuous supercritical decrosslinking extrusion process for recycling of crosslinked polyethylene waste. Journal of Applied Polymer Science, 2015, 132, .	1.3	21
67	Reducing the environmental load of triacetyl cellulose film production using wood pulp. Journal of Applied Polymer Science, 2015, 132, .	1.3	0
68	Hybrid ionogel electrolytes for high temperature lithium batteries. Journal of Materials Chemistry A, 2015, 3, 2226-2233.	5.2	72
69	Large-area reduced graphene oxide thin film with excellent thermal conductivity and electromagnetic interference shielding effectiveness. Carbon, 2015, 94, 494-500.	5.4	386
70	High Through-Plane Thermal Conduction of Graphene Nanoflake Filled Polymer Composites Melt-Processed in an L-Shape Kinked Tube. ACS Applied Materials & Interfaces, 2015, 7, 15256-15262.	4.0	161
71	Ionic polymer actuator based on anion-conducting methylated ether-linked polybenzimidazole. Sensors and Actuators B: Chemical, 2015, 214, 43-49.	4.0	24
72	Ion conduction behaviour in chemically crosslinked hybrid ionogels: effect of free-dangling oligoethyleneoxides. RSC Advances, 2015, 5, 94241-94247.	1.7	15

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73	Sulfur doped graphene/polystyrene nanocomposites for electromagnetic interference shielding. Composite Structures, 2015, 133, 1267-1275.	3.1	121
74	Sulfur-doped graphene laminates for EMI shielding applications. Journal of Materials Chemistry C, 2015, 3, 9802-9810.	2.7	106
75	Flame retardancy and mechanical properties of polyamide 6 with melamine polyphosphate and ionic liquid surfactantâ€treated montmorillonite. Journal of Applied Polymer Science, 2014, 131, .	1.3	11
76	High-performance polymer ionomerâ€“ionic liquid membrane IPMC actuator. Research on Chemical Intermediates, 2014, 40, 41-48.	1.3	11
77	Novel polysilsesquioxane hybrid polymer electrolytes for lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 1277-1283.	5.2	58
78	Electroactive nanostructured polymer actuators fabricated using sulfonated styrenic pentablock copolymer/montmorillonite/ionic liquid nanocomposite membranes. Japanese Journal of Applied Physics, 2014, 53, 08NC03.	0.8	3
79	Mechanical, dielectric, and electromechanical properties of silicone dielectric elastomer actuators. Journal of Applied Polymer Science, 2014, 131, .	1.3	7
80	High-strain air-working soft transducers produced from nanostructured block copolymer ionomer/silicate/ionic liquid nanocomposite membranes. Journal of Materials Chemistry C, 2013, 1, 3784.	2.7	48
81	Thermal Annealing Effects on the Physical Properties of Styrenic Pentablock Ionomers and Their Electromechanical Responses. Journal of Nanoscience and Nanotechnology, 2013, 13, 3606-3610.	0.9	7
82	Electromechanical Properties of P(VDF-TrFE)/CNT and P(VDF-TrFE)/Gr Composites. Molecular Crystals and Liquid Crystals, 2012, 566, 141-146.	0.4	0
83	Electromechanical Strain Responses of SEBS/CB and SEBS/SWCNT Composites. Molecular Crystals and Liquid Crystals, 2012, 566, 135-140.	0.4	0
84	Tunable polymer actuators via a simple and versatile blending approach. Sensors and Actuators B: Chemical, 2012, 174, 547-554.	4.0	14
85	Foaming of recycled crosslinked polyethylenes via supercritical decrosslinking reaction. Journal of Applied Polymer Science, 2012, 126, E21.	1.3	8
86	Novel sulfonated styrenic pentablock copolymer/silicate nanocomposite membranes with controlled ion channels and their IPMC transducers. Sensors and Actuators B: Chemical, 2012, 162, 369-376.	4.0	42
87	Optimum compatibilization for the nonflammability of thermoplasticized crosslinked polyethylene/metal hydroxides composites with a compatibilizer. Journal of Applied Polymer Science, 2012, 124, 2814-2823.	1.3	11
88	Electric Actuation of Nanostructured Thermoplastic Elastomer Gels with Ultralarge Electrostriction Coefficients. Advanced Functional Materials, 2011, 21, 3242-3249.	7.8	55
89	Musselâ€Inspired Block Copolymer Lithography for Low Surface Energy Materials of Teflon, Graphene, and Gold. Advanced Materials, 2011, 23, 5618-5622.	11.1	188
90	Enhanced Electrical Properties of PVDF-TrFE Nanocomposite for Actuator Application. Key Engineering Materials, 0, 605, 335-339.	0.4	5