

Seok Ju Kang

List of Publications by Year in descending order

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papers

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87723

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all docs

116
docs citations

116
times ranked

7056
citing authors

#	ARTICLE	IF	CITATIONS
1	6,12-Diarylindeno[1,2-b]fluorenes: Syntheses, Photophysics, and Ambipolar OFETs. <i>Journal of the American Chemical Society</i> , 2012, 134, 10349-10352.	6.6	295
2	Reactive boride infusion stabilizes Ni-rich cathodes for lithium-ion batteries. <i>Nature Energy</i> , 2021, 6, 362-371.	19.8	274
3	Printable Ferroelectric PVDF/PMMA Blend Films with Ultralow Roughness for Low Voltage Non-volatile Polymer Memory. <i>Advanced Functional Materials</i> , 2009, 19, 2812-2818.	7.8	239
4	Unsymmetrical fluorinated malonateborate as an amphoteric additive for high-energy-density lithium-ion batteries. <i>Energy and Environmental Science</i> , 2018, 11, 1552-1562.	15.6	154
5	Atomically dispersed Pt ^{IV} sites as efficient and selective electrocatalysts for the chlorine evolution reaction. <i>Nature Communications</i> , 2020, 11, 412.	5.8	154
6	Spin cast ferroelectric beta poly(vinylidene fluoride) thin films via rapid thermal annealing. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	141
7	Supersized contorted aromatics. <i>Chemical Science</i> , 2013, 4, 2018.	3.7	141
8	Non-volatile Ferroelectric Poly(vinylidene fluoride-co-trifluoroethylene) Memory Based on a Single-Crystalline Triisopropylsilylethynyl Pentacene Field-Effect Transistor. <i>Advanced Functional Materials</i> , 2009, 19, 1609-1616.	7.8	139
9	Hierarchical Chitin Fibers with Aligned Nanofibrillar Architectures: A Nonwoven-Mat Separator for Lithium Metal Batteries. <i>ACS Nano</i> , 2017, 11, 6114-6121.	7.3	133
10	Fluoroethylene Carbonate-Based Electrolyte with 1 M Sodium Bis(fluorosulfonyl)imide Enables High-Performance Sodium Metal Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15270-15280.	4.0	133
11	Using Self-Organization To Control Morphology in Molecular Photovoltaics. <i>Journal of the American Chemical Society</i> , 2013, 135, 2207-2212.	6.6	126
12	Nonvolatile Polymer Memory with Nanoconfinement of Ferroelectric Crystals. <i>Nano Letters</i> , 2011, 11, 138-144.	4.5	122
13	Epitaxial Growth of Molecular Crystals on van der Waals Substrates for High-Performance Organic Electronics. <i>Advanced Materials</i> , 2014, 26, 2812-2817.	11.1	120
14	Epitaxial Growth of Thin Ferroelectric Polymer Films on Graphene Layer for Fully Transparent and Flexible Nonvolatile Memory. <i>Nano Letters</i> , 2016, 16, 334-340.	4.5	117
15	Control of thin ferroelectric polymer films for non-volatile memory applications. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2010, 17, 1135-1163.	1.8	113
16	Cold Isostatically Pressured Silver Nanowire Electrodes for Flexible Organic Solar Cells via Room-Temperature Processes. <i>Advanced Materials</i> , 2017, 29, 1701479.	11.1	111
17	Irreversible extinction of ferroelectric polarization in P(VDF-TrFE) thin films upon melting and recrystallization. <i>Applied Physics Letters</i> , 2006, 88, 242908.	1.5	107
18	Unveiling Nickel Chemistry in Stabilizing High-Voltage Cobalt-Rich Cathodes for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1907903.	7.8	107

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19	Ordered Ferroelectric PVDF-TrFE Thin Films by High Throughput Epitaxy for Nonvolatile Polymer Memory. <i>Macromolecules</i> , 2008, 41, 8648-8654.	2.2	105
20	Biodegradable, electro-active chitin nanofiber films for flexible piezoelectric transducers. <i>Nano Energy</i> , 2018, 48, 275-283.	8.2	101
21	Localized Pressure-Induced Ferroelectric Pattern Arrays of Semicrystalline Poly(vinylidene fluoride) by Microimprinting. <i>Advanced Materials</i> , 2007, 19, 581-586.	11.1	100
22	Inking Elastomeric Stamps with Micro-Patterned, Single Layer Graphene to Create High-Performance OFETs. <i>Advanced Materials</i> , 2011, 23, 3531-3535.	11.1	100
23	Coupling structural evolution and oxygen-redox electrochemistry in layered transition metal oxides. <i>Nature Materials</i> , 2022, 21, 664-672.	13.3	89
24	A Supramolecular Complex in Small-Molecule Solar Cells based on Contorted Aromatic Molecules. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8594-8597.	7.2	82
25	Deactivation of carbon electrode for elimination of carbon dioxide evolution from rechargeable lithium-oxygen cells. <i>Nature Communications</i> , 2014, 5, 3937.	5.8	76
26	AC Field-Induced Polymer Electroluminescence with Single Wall Carbon Nanotubes. <i>Nano Letters</i> , 2011, 11, 966-972.	4.5	68
27	Tailored Single Crystals of Triisopropylsilylethynyl Pentacene by Selective Contact Evaporation Printing. <i>Advanced Materials</i> , 2011, 23, 3398-3402.	11.1	67
28	Organic Field Effect Transistors Based on Graphene and Hexagonal Boron Nitride Heterostructures. <i>Advanced Functional Materials</i> , 2014, 24, 5157-5163.	7.8	64
29	Water-Repellent Ionic Liquid Skinny Gels Customized for Aqueous Zn-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2021, 31, 2103850.	7.8	63
30	Significance of ferroelectric polarization in poly (vinylidene difluoride) binder for high-rate Li-ion diffusion. <i>Nano Energy</i> , 2017, 32, 255-262.	8.2	61
31	Critical Role of Cations in Lithium Sites on Extended Electrochemical Reversibility of Co-Rich Layered Oxide. <i>Advanced Materials</i> , 2017, 29, 1605578.	11.1	57
32	Molecular and Crystalline Microstructure of Ferroelectric Poly(vinylidene fluoride) on Au Substrates. <i>Macromolecules</i> , 2008, 41, 109-119.	2.2	50
33	An Antiaging Electrolyte Additive for High-Energy-Density Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000563.	10.2	50
34	Shear-Induced Ordering of Ferroelectric Crystals in Spin-Coated Thin Poly(vinylidene fluoride) Films on Au Substrates. <i>Macromolecules</i> , 2008, 41, 109-119.	2.2	49
35	Improved cycle efficiency of lithium metal electrodes in Li-O ₂ batteries by a two-dimensionally ordered nanoporous separator. <i>Journal of Materials Chemistry A</i> , 2014, 2, 9970.	5.2	45
36	Chemically Cross-Linked Thin Poly(vinylidene fluoride-co-trifluoroethylene) Films for Nonvolatile Ferroelectric Polymer Memory. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 582-589.	4.0	43

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37	Fabrication of micropatterned ferroelectric gamma poly(vinylidene fluoride) film for non-volatile polymer memory. <i>Journal of Materials Chemistry</i> , 2011, 21, 3619.	6.7	41
38	Deterministic growth of a sodium metal anode on a pre-patterned current collector for highly rechargeable seawater batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9773-9781.	5.2	41
39	Polymeric gate dielectric interlayer of cross-linkable poly(styrene- <i>r</i> -methylmethacrylate) copolymer for ferroelectric PVDF-TrFE field effect transistor memory. <i>Organic Electronics</i> , 2009, 10, 849-856.	1.4	40
40	Ordered Mesoporous Carbons with Graphitic Tubular Frameworks by Dual Templating for Efficient Electrocatalysis and Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1441-1449.	7.2	40
41	Synergistic effect of quinary molten salts and ruthenium catalyst for high-power-density lithium-carbon dioxide cell. <i>Nature Communications</i> , 2020, 11, 456.	5.8	39
42	Controlled Doping in Thin-Film Transistors of Large Contorted Aromatic Compounds. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4558-4562.	7.2	38
43	Tailored Poly(vinylidene fluoride-co-trifluoroethylene) Crystal Orientation for a Triboelectric Nanogenerator through Epitaxial Growth on a Chitin Nanofiber Film. <i>Nano Letters</i> , 2020, 20, 6651-6659.	4.5	38
44	Enhancing the conductivity of PEDOT:PSS films for biomedical applications via hydrothermal treatment. <i>Biosensors and Bioelectronics</i> , 2021, 171, 112717.	5.3	37
45	Capacitive Organic Anode Based on Fluorinated Contorted Hexabenzocoronene: Applicable to Lithium-Ion and Sodium-Ion Storage Cells. <i>Advanced Science</i> , 2018, 5, 1801365.	5.6	35
46	Superoxide stability for reversible Na-O ₂ electrochemistry. <i>Scientific Reports</i> , 2017, 7, 17635.	1.6	34
47	Wafer-Scale Arrays of Nonvolatile Polymer Memories with Microprinted Semiconducting Small Molecule/Polymer Blends. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10696-10704.	4.0	33
48	Highly Stable Upconverting Nanocrystal-Polydiacetylenes Nanoplates for Orthogonal Dual Signaling-Based Detection of Cyanide. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 4934-4943.	4.0	33
49	Reliable seawater battery anode: controlled sodium nucleation via deactivation of the current collector surface. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19672-19680.	5.2	30
50	First-Principles Study of the Role of O ₂ and H ₂ O in the Decoupling of Graphene on Cu(111). <i>Journal of the American Chemical Society</i> , 2016, 138, 10986-10994.	6.6	29
51	Biomimetic Superoxide Disproportionation Catalyst for Anti-Aging Lithium-Oxygen Batteries. <i>ACS Nano</i> , 2019, 13, 9190-9197.	7.3	29
52	Unveiling 79-Year-Old Ixene and Its BN-Doped Derivative. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14891-14895.	7.2	29
53	Non-volatile memory characteristics of epitaxially grown PVDF-TrFE thin films and their printed micropattern application. <i>Current Applied Physics</i> , 2011, 11, e30-e34.	1.1	27
54	Wire-Shaped 3D-Hybrid Supercapacitors as Substitutes for Batteries. <i>Nano-Micro Letters</i> , 2020, 12, 28.	14.4	26

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55	Facile control of nanoporosity in Cellulose Acetate using Nickel(II) nitrate additive and water pressure treatment for highly efficient battery gel separators. <i>Scientific Reports</i> , 2017, 7, 1287.	1.6	25
56	Epitaxially Self-Assembled Alkane Layers for Graphene Electronics. <i>Advanced Materials</i> , 2017, 29, 1603925.	11.1	24
57	Critical work of adhesion for economical patterning of silver nanowire-based transparent electrodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14536-14544.	5.2	24
58	Sodium Biphenyl as Anolyte for Sodium-Seawater Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2001249.	7.8	24
59	Recovery of remanent polarization of poly(vinylidene fluoride-co-trifluoroethylene) thin film after high temperature annealing using topographically nanostructured aluminium bottom electrode. <i>Applied Physics Letters</i> , 2007, 90, 222903.	1.5	23
60	Control of Current Hysteresis of Networked Single-Walled Carbon Nanotube Transistors by a Ferroelectric Polymer Gate Insulator. <i>Advanced Functional Materials</i> , 2013, 23, 1120-1128.	7.8	23
61	Tetraruthenium Polyoxometalate as an Atom-Efficient Bifunctional Oxygen Evolution Reaction/Oxygen Reduction Reaction Catalyst and Its Application in Seawater Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32689-32697.	4.0	23
62	Co-solvent induced piezoelectric β -phase nylon-11 separator for sodium metal battery. <i>Nano Energy</i> , 2020, 70, 104501.	8.2	23
63	Organic ferroelectric field-effect transistor with P(VDF-TrFE)/PMMA blend thin films for non-volatile memory applications. <i>Current Applied Physics</i> , 2010, 10, e54-e57.	1.1	22
64	Contorted polycyclic aromatic hydrocarbon: promising Li insertion organic anode. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12589-12597.	5.2	21
65	Pyridinic-Nitrogen-Containing Carbon Cathode: Efficient Electrocatalyst for Seawater Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 1602-1608.	2.5	21
66	Malonic-acid-functionalized fullerene enables the interfacial stabilization of Ni-rich cathodes in lithium-ion batteries. <i>Journal of Power Sources</i> , 2022, 521, 230923.	4.0	21
67	Identifying the mechanism and impact of parasitic reactions occurring in carbonaceous seawater battery cathodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9185-9193.	5.2	20
68	Epitaxially Grown Ferroelectric PVDF-TrFE Film on Shape-Tailored Semiconducting Rubrene Single Crystal. <i>Small</i> , 2018, 14, e1704024.	5.2	19
69	Organic Semiconductor Cocrystal for Highly Conductive Lithium Host Electrode. <i>Advanced Functional Materials</i> , 2019, 29, 1902888.	7.8	19
70	Water-in-salt and NASICON Electrolyte-Based Na-CO ₂ Battery. <i>Energy Storage Materials</i> , 2021, 37, 424-432.	9.5	19
71	Ultrathin Electronic Composite Sheets of Metallic/Semiconducting Carbon Nanotubes Embedded in Conjugated Block Copolymers. <i>Advanced Functional Materials</i> , 2010, 20, 4305-4313.	7.8	17
72	Redox-Active Functional Electrolyte for High-Performance Seawater Batteries. <i>ChemSusChem</i> , 2020, 13, 2220-2224.	3.6	17

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73	Compression of Cross-Linked Poly(vinylidene fluoride-co-trifluoro ethylene) Films for Facile Ferroelectric Polarization. ACS Applied Materials & Interfaces, 2011, 3, 4736-4743.	4.0	14
74	Thin ferroelectric poly(vinylidene fluoride-chlorotrifluoro ethylene) films for thermal history independent non-volatile polymer memory. Organic Electronics, 2012, 13, 491-497.	1.4	14
75	Multi-Color Luminescence Transition of Upconversion Nanocrystals via Crystal Phase Control with SiO ₂ for High Temperature Thermal Labels. Advanced Science, 2020, 7, 2000104.	5.6	14
76	Polymeric tandem organic light-emitting diodes using a self-organized interfacial layer. Applied Physics Letters, 2008, 92, .	1.5	13
77	Laser-Induced Nondestructive Patterning of a Thin Ferroelectric Polymer Film with Controlled Crystals using Ge ₈ Sb ₂ Te ₁₁ Alloy Layer for Nonvolatile Memory. ACS Applied Materials & Interfaces, 2014, 6, 15171-15178.	4.0	13
78	Polarization retention of thin ferroelectric capacitors. Applied Physics Letters, 2009, 95, .	1.5	12
79	Ligand chemistry of titania precursor affects transient photovoltaic behavior in inverted organic solar cells. Applied Physics Letters, 2013, 102, 103302.	1.5	12
80	Dual Functionalization of Hexagonal Boron Nitride Nanosheets Using Pyrene-Tethered Poly(4-vinylpyridine) for Stable Dispersion and Facile Device Incorporation. ACS Applied Nano Materials, 2020, 3, 7633-7642.	2.4	12
81	Chemically impregnated NiO catalyst for molten electrolyte based gas-tank-free Li O ₂ battery. Journal of Power Sources, 2018, 402, 68-74.	4.0	11
82	Engineering crystal phase of Nylon-11 films for ferroelectric device and piezoelectric sensor. Nano Energy, 2021, 88, 106244.	8.2	11
83	Carbothermal shock-induced bifunctional Pt-Co alloy electrocatalysts for high-performance seawater batteries. Energy Storage Materials, 2022, 45, 281-290.	9.5	11
84	Self assembled block copolymer gate insulators with cylindrical nanostructures for pentacene thin film transistor. Macromolecular Research, 2010, 18, 777-786.	1.0	10
85	Investigation of Li ⁺ O ₂ Battery Performance Integrated with RuO ₂ Inverse Opal Cathodes in DMSO. ACS Applied Energy Materials, 2019, 2, 5109-5115.	2.5	10
86	A dismutase-biomimetic bifunctional mobile catalyst for anti-aging lithium ⁺ oxygen batteries. Journal of Power Sources, 2021, 492, 229633.	4.0	10
87	Strong interfacial energetics between catalysts and current collectors in aqueous sodium ⁺ air batteries. Journal of Materials Chemistry A, 2022, 10, 4601-4610.	5.2	10
88	Metal-Ion Chelating Gel Polymer Electrolyte for Ni-Rich Layered Cathode Materials at a High Voltage and an Elevated Temperature. ACS Applied Materials & Interfaces, 2021, 13, 9965-9974.	4.0	9
89	Nitrate Molten Salt Electrolytes with Iron Oxide Catalysts for Open and Sealed Li ⁺ O ₂ Batteries. ACS Applied Materials & Interfaces, 2021, 13, 47740-47748.	4.0	9
90	One-step micropatterning of highly-ordered semi-crystalline poly(vinylidene) fluoride-co-trifluoro ethylene films for ferroelectric device. Organic Electronics, 2011, 12, 98-107.	1.4	8

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91	Synthesis of α,β -unsaturated ketones through nickel-catalysed aldehyde-free hydroacylation of alkynes. <i>Communications Chemistry</i> , 2022, 5, .	2.0	8
92	Unveiling 79-year-old Ixene and Its BN-Doped Derivative. <i>Angewandte Chemie</i> , 2020, 132, 15001-15005.	1.6	7
93	Water-Repellent Ionic Liquid Skinny Gels Customized for Aqueous Zn-Ion Battery Anodes (<i>Adv. Funct. Mater.</i>)	1.1	0.784314
94	Vertically grown nanowire crystals of dibenzotetrathienocoronene (DBTTC) on large-area graphene. <i>RSC Advances</i> , 2016, 6, 59582-59589.	1.7	6
95	Contact Angle Analysis for the Prediction of Defect States of Graphene Grafted with Functional Groups. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800166.	1.9	6
96	Alkali-Metal-Mediated Reversible Chemical Hydrogen Storage Using Seawater. <i>Jacs Au</i> , 2021, 1, 2339-2348.	3.6	6
97	Rapid access to polycyclic N-heteroarenes from unactivated, simple azines via a base-promoted Minisci-type annulation. <i>Nature Communications</i> , 2022, 13, 2421.	5.8	6
98	Ordered Mesoporous Carbons with Graphitic Tubular Frameworks by Dual Templating for Efficient Electrocatalysis and Energy Storage. <i>Angewandte Chemie</i> , 2021, 133, 1461-1469.	1.6	5
99	Crystalline chlorinated contorted hexabenzocoronene: a universal organic anode for advanced alkali-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20607-20614.	5.2	5
100	Solid solution of semiconducting contorted small molecules for high-performance Li/Na-ion host electrodes. <i>Energy Storage Materials</i> , 2021, 36, 123-131.	9.5	3
101	Contact Angle Analysis: Contact Angle Analysis for the Prediction of Defect States of Graphene Grafted with Functional Groups (<i>Adv. Mater. Interfaces</i> 19/2018). <i>Advanced Materials Interfaces</i> , 2018, 5, 1870093.	1.9	1
102	Critical Void Dimension of Carbon Frameworks to Accommodate Insoluble Products of Lithium-Oxygen Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 492-501.	4.0	1
103	High throughput epitaxy of ferroelectric PVDF-TrFE thin films on molecularly ordered PTFE surface for non-volatile polymer memory. , 2008, , .		0
104	Ultrathin Electronic Composite Sheets of Metallic/Semiconducting Carbon Nanotubes Embedded in Conjugated Block Copolymers. <i>Advanced Functional Materials</i> , 2010, 20, 4304-4304.	7.8	0