

# Boseok Kang

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/9238081/boseok-kang-publications-by-year.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

85  
papers

2,624  
citations

28  
h-index

49  
g-index

91  
ext. papers

2,957  
ext. citations

10.5  
avg, IF

5.23  
L-index

#	Paper	IF	Citations
85	Solutal-Marangoni-Flow-Mediated Growth of Patterned Highly Crystalline Organic Semiconductor Thin Film Via Gap-Controlled Bar Coating. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100196	15.6	9
84	Extended Thiazole-Containing Polymer Semiconductor for Balanced Charge-Carrier Mobilities. <i>Macromolecular Rapid Communications</i> , <b>2021</b> , 42, e2000741	4.8	3
83	Metal-Organic Framework as a Functional Analyte Channel of Organic-Transistor-Based Air Pollution Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 24005-24012	9.5	4
82	Organic small-molecule heterointerface for use in transistor-type non-volatile memory. <i>Organic Electronics</i> , <b>2021</b> , 93, 106107	3.5	3
81	Consideration of Azobenzene-Based Self-Assembled Monolayer Deposition Conditions for Maximizing Optoelectronic Switching Performances. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 5991-6002	9.6	2
80	Structural influence of a dichalcogenopheno-1,3,4-chalcogenodiazole comonomer on the optoelectronic properties of diketopyrrolopyrrole-based conjugated polymers. <i>Polymer Chemistry</i> , <b>2021</b> , 12, 1758-1767	4.9	
79	Charge Trapping in a Low-Crystalline High-Mobility Conjugated Polymer and Its Effects on the Operational Stability of Organic Field-Effect Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 16722-16731	9.5	7
78	Organic Semiconductors: Solutal-Marangoni-Flow-Mediated Growth of Patterned Highly Crystalline Organic Semiconductor Thin Film Via Gap-Controlled Bar Coating (Adv. Funct. Mater. 28/2021). <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2170200	15.6	1
77	Anisotropy of Charge Transport in a Uniaxially Aligned Fused Electron-Deficient Polymer Processed by Solution Shear Coating. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000063	24	18
76	Transparent and Colorless Polyimides Containing Multiple Trifluoromethyl Groups as Gate Insulators for Flexible Organic Transistors with Superior Electrical Stability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 18739-18747	9.5	27
75	Aqueous-Alcohol-Processable High-Mobility Semiconducting Copolymers with Engineered Oligo(ethylene glycol) Side Chains. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 1111-1119	9.6	15
74	Improved charge transport in fused-ring bridged hemi-isoidindigo-based small molecules by incorporating a thiophene unit for solution-processed organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 1398-1404	7.1	6
73	Formation of Large Crystalline Domains in a Semiconducting Polymer with Semi-fluorinated Alkyl Side Chains and Application to High-Performance Thin-Film Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 49886-49894	9.5	6
72	Recent Advances in the Bias Stress Stability of Organic Transistors. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1904590	15.6	32
71	Wafer-scale and patternable synthesis of NbS <sub>2</sub> for electrodes of organic transistors and logic gates. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 8599-8606	7.1	5
70	Universal Route to Impart Orthogonality to Polymer Semiconductors for Sub-Micrometer Tandem Electronics. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901400	24	12
69	Organic Soft Electronics: Heat-Assisted Photoacidic Oxidation Method for Tailoring the Surface Chemistry of Polymer Dielectrics for Low-Power Organic Soft Electronics (Adv. Funct. Mater. 11/2019). <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1970071	15.6	2

68	Electric-Field-Tunable Growth of Organic Semiconductor Crystals on Graphene. <i>Nano Letters</i> , <b>2019</b> , 19, 1758-1766	11.5	9
67	Organic Electronics: Universal Route to Impart Orthogonality to Polymer Semiconductors for Sub-Micrometer Tandem Electronics (Adv. Mater. 28/2019). <i>Advanced Materials</i> , <b>2019</b> , 31, 1970204	24	
66	Influence of Molecular Weight on the Solidification of a Semiconducting Polymer during Time-Controlled Spin-Coating. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 17102-17111	3.8	8
65	Fused Heptacyclic-Based Acceptor-Donor-Acceptor Small Molecules: N-Substitution toward High-Performance Solution-Processable Field-Effect Transistors. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2027-2035	8.6	25
64	Motion-Programmed Bar-Coating Method with Controlled Gap for High-Speed Scalable Preparation of Highly Crystalline Organic Semiconductor Thin Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 47153-47161	9.5	13
63	Heat-Assisted Photoacidic Oxidation Method for Tailoring the Surface Chemistry of Polymer Dielectrics for Low-Power Organic Soft Electronics. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1806030	15.6	10
62	Controllable Bipolar Doping of Graphene with 2D Molecular Dopants. <i>Small</i> , <b>2018</b> , 14, e1703697	11	2
61	Nanopatched Graphene with Molecular Self-Assembly Toward Graphene-Organic Hybrid Soft Electronics. <i>Advanced Materials</i> , <b>2018</b> , 30, e1706480	24	16
60	Effects of varying the lengths of the donor units in extended thienothiophene isoindigo-based polymer semiconductors. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 9972-9980	7.1	7
59	Stretchable Polymer Gate Dielectric with Segmented Elastomeric Network for Organic Soft Electronics. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6353-6360	9.6	19
58	Control of Concentration of Nonhydrogen-Bonded Hydroxyl Groups in Polymer Dielectrics for Organic Field-Effect Transistors with Operational Stability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 24055-24063	9.5	25
57	Precise Side-Chain Engineering of Thienylenevinylene-Benzotriazole-Based Conjugated Polymers with Coplanar Backbone for Organic Field Effect Transistors and CMOS-like Inverters. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 2758-2766	9.5	34
56	Surface-Mediated Solidification of a Semiconducting Polymer during Time-Controlled Spin-Coating. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 9871-9879	9.5	24
55	Bistable Solid-State Fluorescence Switching in Photoluminescent, Infinite Coordination Polymers. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 10017-10022	4.8	6
54	Effective Use of Electrically Insulating Units in Organic Semiconductor Thin Films for High-Performance Organic Transistors. <i>Advanced Electronic Materials</i> , <b>2017</b> , 3, 1600240	6.4	66
53	Singlet Exciton Delocalization in Gold Nanoparticle-Tethered Poly(3-hexylthiophene) Nanofibers with Enhanced Intrachain Ordering. <i>Macromolecules</i> , <b>2017</b> , 50, 8487-8496	5.5	7
52	Impact of side-chain fluorination on photovoltaic properties: fine tuning of the microstructure and energy levels of 2D-conjugated copolymers. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 16702-16711	13	16
51	Relationship between the dipole moment of self-assembled monolayers incorporated in graphene transistors and device electrical stabilities. <i>RSC Advances</i> , <b>2017</b> , 7, 27100-27104	3.7	21

50	Dicyanovinyl-substituted indolo[3,2-b]indole derivatives: low-band-gap $\pi$ -conjugated molecules for a single-component ambipolar organic field-effect transistor. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 9460-9468	7.1	11
49	Tailoring Morphology and Structure of Inkjet-Printed Liquid-Crystalline Semiconductor/Insulating Polymer Blends for High-Stability Organic Transistors. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 3003-3011	15.6	34
48	Liquid-Crystalline Semiconductors: Tailoring Morphology and Structure of Inkjet-Printed Liquid-Crystalline Semiconductor/Insulating Polymer Blends for High-Stability Organic Transistors (Adv. Funct. Mater. 18/2016). <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 3180-3180	15.6	
47	Low-Band-Gap Polymer-Based Ambipolar Transistors and Inverters Fabricated Using a Flow-Coating Method. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 13865-13872	3.8	13
46	Molecular Orientation-Dependent Bias Stress Stability in Bottom-Gate Organic Transistors Based on an n-Type Semiconducting Polymer. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1500380	6.4	11
45	Side-Chain-Induced Rigid Backbone Organization of Polymer Semiconductors through Semifluoroalkyl Side Chains. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 3679-86	16.4	202
44	Critical role of silk fibroin secondary structure on the dielectric performances of organic thin-film transistors. <i>RSC Advances</i> , <b>2016</b> , 6, 5907-5914	3.7	13
43	Design, Synthesis, and Versatile Processing of Indolo[3,2-b]indole-Based $\pi$ -Conjugated Molecules for High-Performance Organic Field-Effect Transistors. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2966-2973	15.6	41
42	Grain Boundary Induced Bias Instability in Soluble Acene-Based Thin-Film Transistors. <i>Scientific Reports</i> , <b>2016</b> , 6, 33224	4.9	21
41	Stretchable electronics: Stretchable and Transparent Organic Semiconducting Thin Film with Conjugated Polymer Nanowires Embedded in an Elastomeric Matrix (Adv. Electron. Mater. 1/2016). <i>Advanced Electronic Materials</i> , <b>2016</b> , 2,	6.4	2
40	Stretchable and Transparent Organic Semiconducting Thin Film with Conjugated Polymer Nanowires Embedded in an Elastomeric Matrix. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1500250	6.4	121
39	High performance of low band gap polymer-based ambipolar transistor using single-layer graphene electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 6002-12	9.5	24
38	Atomically-thin molecular layers for electrode modification of organic transistors. <i>Nanoscale</i> , <b>2015</b> , 7, 14100-8	7.7	8
37	Boosting Photon Harvesting in Organic Solar Cells with Highly Oriented Molecular Crystals via Graphene-Organic Heterointerface. <i>ACS Nano</i> , <b>2015</b> , 9, 8206-19	16.7	64
36	Surface-Order Mediated Assembly of $\pi$ -Conjugated Molecules on Self-Assembled Monolayers with Controlled Grain Structures. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 4669-4676	9.6	28
35	A Pseudo-Regular Alternating Conjugated Copolymer Using an Asymmetric Monomer: A High-Mobility Organic Transistor in Nonchlorinated Solvents. <i>Advanced Materials</i> , <b>2015</b> , 27, 3626-31	24	75
34	Clean Transfer of Wafer-Scale Graphene via Liquid Phase Removal of Polycyclic Aromatic Hydrocarbons. <i>ACS Nano</i> , <b>2015</b> , 9, 4726-33	16.7	54
33	Atomically thin epitaxial template for organic crystal growth using graphene with controlled surface wettability. <i>Nano Letters</i> , <b>2015</b> , 15, 2474-84	11.5	46

32	Oligo(ethylene glycol)-incorporated hybrid linear alkyl side chains for n-channel polymer semiconductors and their effect on the thin-film crystalline structure. <i>Chemical Communications</i> , <b>2015</b> , 51, 1524-7	5.8	37
31	Organic Transistors: A Pseudo-Regular Alternating Conjugated Copolymer Using an Asymmetric Monomer: A High-Mobility Organic Transistor in Nonchlorinated Solvents (Adv. Mater. 24/2015). <i>Advanced Materials</i> , <b>2015</b> , 27, 3707-3707	24	
30	Understanding Solidification of Polythiophene Thin Films during Spin-Coating: Effects of Spin-Coating Time and Processing Additives. <i>Scientific Reports</i> , <b>2015</b> , 5, 13288	4.9	91
29	Fully Drawn All-Organic Flexible Transistors Prepared by Capillary Pen Printing on Flexible Planar and Curvilinear Substrates. <i>Advanced Electronic Materials</i> , <b>2015</b> , 1, 1500301	6.4	20
28	65.2: Invited Paper: Bias-Stress-Induced Charge Trapping in Flexible Polymer Gate Dielectrics in Organic TFTs. <i>Digest of Technical Papers SID International Symposium</i> , <b>2015</b> , 46, 966-968	0.5	2
27	Graphene growth under Knudsen molecular flow on a confined catalytic metal coil. <i>Nanoscale</i> , <b>2015</b> , 7, 1314-24	7.7	16
26	Synthetic Tailoring of Solid-State Order in Diketopyrrolopyrrole-Based Copolymers via Intramolecular Noncovalent Interactions. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 829-838	9.6	107
25	pn-Heterojunction effects of perylene tetracarboxylic diimide derivatives on pentacene field-effect transistor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 2025-31	9.5	15
24	Side-Chain Engineering for Fine-Tuning of Energy Levels and Nanoscale Morphology in Polymer Solar Cells. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400087	21.8	65
23	A bis(2-oxoindolin-3-ylidene)-benzodifuran-dione containing copolymer for high-mobility ambipolar transistors. <i>Chemical Communications</i> , <b>2014</b> , 50, 3180-3	5.8	68
22	Built-in water resistance in organic transistors modified with self-assembled monolayers. <i>RSC Advances</i> , <b>2014</b> , 4, 45082-45087	3.7	6
21	Sequential solvent casting for improving the structural ordering and electrical characteristics of polythiophene thin films. <i>RSC Advances</i> , <b>2014</b> , 4, 41159-41163	3.7	18
20	Enhancing 2D growth of organic semiconductor thin films with macroporous structures via a small-molecule heterointerface. <i>Nature Communications</i> , <b>2014</b> , 5, 4752	17.4	110
19	Inverse transfer method using polymers with various functional groups for controllable graphene doping. <i>ACS Nano</i> , <b>2014</b> , 8, 7968-75	16.7	23
18	New Donor-Donor Type Copolymers with Rigid and Coplanar Structures for High-Mobility Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 6907-6910	9.6	44
17	Polymer Solar Cells: Side-Chain Engineering for Fine-Tuning of Energy Levels and Nanoscale Morphology in Polymer Solar Cells (Adv. Energy Mater. 10/2014). <i>Advanced Energy Materials</i> , <b>2014</b> , 4, n/a-n/a	21.8	2
16	Microstructural control over soluble pentacene deposited by capillary pen printing for organic electronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 7838-44	9.5	16
15	Self-stratified semiconductor/dielectric polymer blends: vertical phase separation for facile fabrication of organic transistors. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 3989	7.1	53

14	Cyanothiophene-based low band-gap polymer for organic solar cells. <i>RSC Advances</i> , <b>2013</b> , 3, 6799	3.7	7
13	Work-function-tuned reduced graphene oxide via direct surface functionalization as source/drain electrodes in bottom-contact organic transistors. <i>Advanced Materials</i> , <b>2013</b> , 25, 5856-62	24	82
12	Recent advances in organic transistor printing processes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 2302-15	9.5	278
11	Substrate-induced solvent intercalation for stable graphene doping. <i>ACS Nano</i> , <b>2013</b> , 7, 1155-62	16.7	46
10	Self-Organization of Inkjet-Printed Organic Semiconductor Films Prepared in Inkjet-Etched Microwells. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 5224-5231	15.6	47
9	Directly drawn organic transistors by capillary pen: a new facile patterning method using capillary action for soluble organic materials. <i>Advanced Materials</i> , <b>2013</b> , 25, 4117-22	24	40
8	Polyelectrolyte interlayer for ultra-sensitive organic transistor humidity sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 8591-6	9.5	39
7	Organic Field Effect Transistors: Directly Drawn Organic Transistors by Capillary Pen: A New Facile Patterning Method using Capillary Action for Soluble Organic Materials (Adv. Mater. 30/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 4062-4062	24	
6	Graphene oxide as a multi-functional p-dopant of transparent single-walled carbon nanotube films for optoelectronic devices. <i>Nanoscale</i> , <b>2012</b> , 4, 7735-42	7.7	34
5	Post-deposition dipping method for improving the electronic properties of a narrow bandgap conjugated polymer. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 11462		17
4	Inkjet-Printed Reduced Graphene Oxide/Poly(Vinyl Alcohol) Composite Electrodes for Flexible Transparent Organic Field-Effect Transistors. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 7520-7525	3.8	85
3	Organic thin-film transistors with a photo-patternable semiconducting polymer blend. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 15637		25
2	Unidirectional Macroscopic Alignment of Chlorobenzo[c]-[1,2,5]thiadiazole-Based Semiconducting Copolymers with Controlled Regiochemistry. <i>Advanced Electronic Materials</i> , 2100551	6.4	1
1	Novel Dithienopyrrole-Based Conjugated Copolymers: Importance of Backbone Planarity in Achieving High Electrical Conductivity and Thermoelectric Performance. <i>Macromolecular Rapid Communications</i> , 2200277	4.8	