

Shotaro Hayashi

List of Publications by Year in descending order

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times ranked

1291
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical Waveguiding Charge-Transfer Cocrystals: Examining the Impact of Molecular Rotations on Their Photoluminescence. <i>Journal of the American Chemical Society</i> , 2025, 147, 8343-8349.	15.7	0
2	Mechanical Properties in Organic Molecular Crystals Toward Photonic Applications. , 2025, , 87-117.		0
3	Giant Seebeck effect over 0.1 Å^{-1} is this an intrinsic phenomenon in organic semiconductors?. <i>Faraday Discussions</i> , 2024, 250, 361-376.	2.7	2
4	Thiophenoanthracene-based conjugated polymers via direct arylation polycondensation. <i>Journal of Polymer Science</i> , 2024, 62, 1915-1921.	4.0	0
5	Light-induced E-Z isomerization of anthracene-appended p-methoxyphenyl acrylonitrile giving fluorescent crystals. <i>Journal of Crystal Growth</i> , 2024, 631, 127595.	2.0	0
6	Lasing in Low-Dimensional Crystals of a Fumaronitrile-Based Luminogen. <i>Journal of Physical Chemistry Letters</i> , 2024, 15, 3968-3974.	4.6	4
7	Iterative Click-Addition Process for Urethane-based 1st-5th Dendrons. <i>ACS Applied Polymer Materials</i> , 2024, 6, 7329-7337.	4.7	0
8	Preparation of intrinsically fragile bent crystals. <i>Chemical Science</i> , 2024, 15, 12258-12263.	7.5	2
9	Facile Wet-Process to Free-Standing Whispering Gallery Mode Resonators Mixed with Spherical Silica Gel and Conjugated Molecules. <i>Advanced Optical Materials</i> , 2024, 12, .	7.1	1
10	Unique 2D Face Topologies in Naphthyl-Appended Naphtho[k]fluoranthene-Based 3D Crystals for Optical Waveguide. <i>Advanced Optical Materials</i> , 2023, 11, .	7.1	5
11	Elastic and bright assembly-induced luminescent crystals of platinum(II) complexes with near-unity emission quantum yield. <i>Dalton Transactions</i> , 2023, 52, 8864-8872.	3.2	3
12	Flexible Förster resonance energy transfer-assisted optical waveguide based on elastic mixed molecular crystals. <i>Aggregate</i> , 2023, 4, .	12.8	19
13	Flexible and Red-Emissive Organic Single-Crystal Microresonator for Efficient Active Waveguides. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 6577-6582.	4.6	6
14	Non-Covalent Supramolecular 1D Alternating Copolymer in Crystal toward 2D Anisotropic Photon Transport. <i>Chemistry - A European Journal</i> , 2023, 29, .	3.5	5
15	Noninvasive Three-dimensional Assessment of Single Molecular Crystals Using Multiphoton Microscopic Observation and Their Deformation-induced Emission Characteristics. <i>Langmuir</i> , 2023, 39, 11646-11652.	3.8	2
16	Systematic Order-Made Synthesis of Sequence-Defined Polyurethanes with Length, Types, and Topologies. <i>ACS Macro Letters</i> , 2023, 12, 1264-1271.	5.1	6
17	Mechanically Flexible and Optically Tunable Organic Crystal Resonator. <i>Advanced Optical Materials</i> , 2022, 10, .	7.1	50
18	Synthesis of acrylonitrile side chain-appended π -conjugated polymers by a Suzuki cross-coupling polycondensation and a Knoevenagel condensation, and their optical properties. <i>Materials Advances</i> , 2022, 3, 3835-3841.	4.8	5

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19	Elastic Molecular Crystals: Their Deformation-Induced Reversible Unit Cell Changes with Specific Poisson Effect. <i>Bulletin of the Chemical Society of Japan</i> , 2022, 95, 721-727.	3.9	9
20	Structural Phase Transitions in Anthracene Crystals. <i>ChemPlusChem</i> , 2022, 87, .	2.8	10
21	Mesityl-appended 1,4-bis(2-acrylonitrile)-2,5-dimethoxybenzene: Blue and Green Fluorescent Crystals from a Soluble Donor-Acceptor Molecular System. <i>ChemistrySelect</i> , 2022, , .	1.7	0
22	Child Neglect and Its Impact on Children's Mental Health: A Systematic Review and Implications for Child Psychologists. , 2022, 4, .		0
23	Functional flexible molecular crystals: intrinsic and mechanoresponsive properties. <i>CrystEngComm</i> , 2021, 23, 5686-5696.	2.5	59
24	Curving deformation-induced photoluminescence changes and anisotropy analysis in elastic organic crystals. <i>CrystEngComm</i> , 2021, 23, 5763-5767.	2.5	14
25	Polymer Optical Microcavity Sensor for Volatile Organic Compounds with Distinct Selectivity toward Aromatic Hydrocarbons. <i>ACS Omega</i> , 2021, 6, 21066-21070.	4.4	23
26	Cyano-substituted oligo(<i>p</i> -phenylene-vinylene)s having linear and branched octyloxy groups: control of aggregation and emission properties via C8 alkyl chain difference. <i>Molecular Systems Design and Engineering</i> , 2021, 6, 503-507.	3.3	9
27	Thermotriggered Domino-like Single-Crystal-to-Single-Crystal Phase Transition from Face-to-Edge to Face-to-Face Packing of Anthracenes. <i>Chemistry - A European Journal</i> , 2021, 27, 17595-17600.	3.5	14
28	Anisotropic Poisson Effect and Deformation-Induced Fluorescence Change of Elastic 9,10-Dibromoanthracene Single Crystals. <i>Angewandte Chemie</i> , 2020, 132, 16329-16335.	1.5	16
29	Elastic Organic Crystals of π -Conjugated Molecules: New Concept for Materials Chemistry. <i>Symmetry</i> , 2020, 12, 2022.	2.2	22
30	Dipyridinoarsole: a new class of stable and modifiable heteroatom-bridged bipyridines. <i>Chemical Communications</i> , 2020, 56, 6035-6038.	4.2	14
31	Anisotropic Poisson Effect and Deformation-Induced Fluorescence Change of Elastic 9,10-Dibromoanthracene Single Crystals. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 16195-16201.	15.0	87
32	Donor-acceptor random regioregular π -conjugated copolymers based on poly(3-hexylthiophene) with unsymmetrical monothienoisindigo units. <i>RSC Advances</i> , 2020, 10, 19034-19040.	4.5	4
33	Highly crystalline and efficient red-emissive π -conjugated polymer film: tuning of macrostructure for light-emitting properties. <i>Materials Advances</i> , 2020, 1, 632-638.	4.8	19
34	Flexible and Densely Packed π -Figuration System: Creating Elastic Organic Crystals of π -Conjugated Molecules. <i>Yuki Goseki Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2020, 78, 962-970.	0.1	3
35	Direction-specific fluorescence of an engineered organic crystal and the appearance of a new face caused by mechanically induced shaping. <i>CrystEngComm</i> , 2019, 21, 5990-5994.	2.5	14
36	Synthesis of network polymer emitters: tunable detection of chemicals by geometric design. <i>Polymer Journal</i> , 2019, 51, 1055-1061.	2.6	9

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37	Elastic organic crystals of π -conjugated molecules: anisotropic densely packed supramolecular 3D polymers exhibit mechanical flexibility and shape tunability. <i>Polymer Journal</i> , 2019, 51, 813-823.	2.6	29
38	Facile synthesis of ortho-phenylene-based conjugated polymers through transformation of cross-conjugated poly(2,3-diaryl[2]dendralene)s and their optical properties. <i>Journal of Polymer Science Part A</i> , 2019, 57, 827-832.	2.4	6
39	2,5-Dimethoxybenzene-1,4-dicarboxaldehyde: An Emissive Organic Crystal and Highly Efficient Fluorescent Waveguide. <i>ChemPlusChem</i> , 2019, 84, 247-251.	2.8	32
40	A versatile scaffold for facile synthesis of fluorescent cyano-substituted stilbenes. <i>Tetrahedron</i> , 2019, 75, 1079-1084.	2.2	11
41	Optoelectronic Properties of Alternating Copolymers Based on 3,4-Ethylenedioxythiophene and Various Dibromoarenes and Organic Solar Cells Prepared Thereof. <i>Kobunshi Ronbunshu</i> , 2019, 76, 179-183.	0.0	0
42	Innentitelbild: Creating Elastic Organic Crystals of π -Conjugated Molecules with Bending Mechanofluorochromism and Flexible Optical Waveguide (<i>Angew. Chem.</i> 52/2018). <i>Angewandte Chemie</i> , 2018, 130, 17154-17154.	1.5	0
43	Creating Elastic Organic Crystals of π -Conjugated Molecules with Bending Mechanofluorochromism and Flexible Optical Waveguide. <i>Angewandte Chemie</i> , 2018, 130, 17248-17254.	1.5	37
44	Creating Elastic Organic Crystals of π -Conjugated Molecules with Bending Mechanofluorochromism and Flexible Optical Waveguide. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 17002-17008.	15.0	194
45	Study on Direct Arylation of Bithiophene with Dibromoxanthene: Detection of Polymer, Oligomeric and Cyclic Byproducts and Easy Separation of the Polymer. <i>Materials Today Communications</i> , 2018, 17, 259-265.	2.3	5
46	Electropolymerization of Dithieno[3,2- <i>b</i> :2',3'- <i>b'</i>]arsole. <i>ChemElectroChem</i> , 2018, 5, 3357-3360.	3.6	12
47	Solvent Control over Supramolecular Gel Formation and Fluorescence for a Highly Crystalline π -Conjugated Polymer. <i>Chemistry - an Asian Journal</i> , 2018, 13, 2014-2018.	3.1	23
48	Mechanically Induced Shaping of Organic Single Crystals: Facile Fabrication of Fluorescent and Elastic Crystal Fibers. <i>Chemistry - A European Journal</i> , 2018, 24, 8507-8512.	3.5	77
49	A Simple Route to Unsymmetric Cyano-substituted Oligo(<i>p</i> -phenylene-vinylene)s. <i>Chemistry Letters</i> , 2018, 47, 1003-1005.	1.1	18
50	Palladium on carbon-catalyzed direct C-H arylation polycondensation of 3,4-ethylenedioxythiophene with various dibromoarenes. <i>Journal of Polymer Science Part A</i> , 2017, 55, 1183-1188.	2.4	16
51	From propargylic biscarbonate to diaryl[n]dendralenes. <i>Tetrahedron Letters</i> , 2017, 58, 2429-2432.	1.5	10
52	Effects of molecular weight on the optical and electrochemical properties of EDOT-based π -conjugated polymers. <i>Scientific Reports</i> , 2017, 7, .	3.7	43
53	Direct arylation polycondensation of β^2 -unprotected chalcogen heteroles under phosphine-free conditions. <i>Polymer</i> , 2017, 113, 214-220.	4.2	18
54	Elastic Bending Flexibility of a Fluorescent Organic Single Crystal: New Aspects of the Commonly Used Building Block 4,7-Dibromo-2,1,3-benzothiadiazole. <i>Crystal Growth and Design</i> , 2017, 17, 6158-6162.	3.5	75

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55	Synthesis of π -conjugated network polymers based on fluoroarene and fluorescent units via direct arylation polycondensation and their porosity and fluorescent properties. <i>Journal of Polymer Science Part A</i> , 2017, 55, 3862-3867.	2.4	27
56	Fluorescent organic single crystals with elastic bending flexibility: 1,4-bis(thien-2-yl)-2,3,5,6-tetrafluorobenzene derivatives. <i>Scientific Reports</i> , 2017, 7, .	3.7	67
57	A Cyclic Compound based on Xanthene-linked π -Stacked Dimer via Direct Arylation. <i>Chemistry Letters</i> , 2017, 46, 200-203.	1.1	11
58	Direct Arylation for the Control of π -Conjugated Polymer Structure. <i>Kobunshi Ronbunshu</i> , 2017, 74, 375-395.	0.0	2
59	Palladium Immobilized on Thiol-Modified Silica Gel for Effective Direct C-H Arylation. <i>ChemPlusChem</i> , 2016, 81, 930-934.	2.8	21
60	Elastic Organic Crystals of a Fluorescent π -Conjugated Molecule. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2701-2704.	15.0	226
61	Direct arylation of fluoroarenes toward linear, bent-shaped and branched π -conjugated polymers: polycondensation post-polymerization approaches. <i>Polymer Chemistry</i> , 2016, 7, 5671-5686.	3.9	17
62	Elastic Organic Crystals of a Fluorescent π -Conjugated Molecule. <i>Angewandte Chemie</i> , 2016, 128, 2751-2754.	1.5	81
63	Synthesis of π -conjugated porous polymers via direct arylation of fluoroarenes with three-arm triazine. <i>Polymer</i> , 2016, 90, 187-192.	4.2	23
64	Chloride-promoted Pd-catalyzed direct C-H arylation for highly efficient phosphine-free synthesis of π -conjugated polymers. <i>Polymer Chemistry</i> , 2015, 6, 5036-5039.	3.9	45
65	Highly regioselective Pd/C-catalyzed direct arylation toward thiophene-based π -conjugated polymers. <i>Polymer Chemistry</i> , 2015, 6, 881-885.	3.9	64
66	Solubility switching of fluorescent polymer films via lewis acid-base vapor treatments. <i>Journal of Polymer Science Part A</i> , 2014, 52, 3142-3145.	2.4	8
67	Facile synthesis of a variety of triarylamine-based conjugated polymers and tuning of their optoelectronic properties. <i>Synthetic Metals</i> , 2014, 187, 81-85.	4.6	8
68	Trifluoroborate-modification of both pyridine and N-alkyldiarylamine-based π -conjugated polymer films: tuning the electronic communication and the mean conjugated length based on two types of nitrogen in the conjugated main segments. <i>RSC Advances</i> , 2013, 3, 7375.	4.5	18
69	Two Synthetic Approaches from 2,5-Di(2-thienyl)pyridine to a BF ₃ -modified Polymer Film. <i>Chemistry Letters</i> , 2012, 41, 979-981.	1.1	14
70	π -Conjugated alternating copolymer based on the 3,5-dinitro-9-fluorenone for electron-acceptor type materials. <i>Synthetic Metals</i> , 2012, 162, 1485-1489.	4.6	9
71	From a benzodiazaborole-based compound to donor-acceptor polymer via electropolymerization. <i>Polymer Chemistry</i> , 2012, 3, 613.	3.9	42
72	Palladium(0)-Catalyzed Synthesis of Cross-Conjugated Polymers: Transformation into Linear-Conjugated Polymers through the Diels-Alder Reaction. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 3682-3685.	15.0	25

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73	Modification of pyridine-based conjugated polymer films via Lewis acid: halochromism, characterization and macroscopic gradation patterning. <i>Polymer Chemistry</i> , 2011, 2, 2764.	3.9	39
74	Efficient electrochemical polymer halogenation using a thin-layered cell. <i>Polymer Chemistry</i> , 2011, 2, 1632.	3.9	21
75	Electrochemical Modification of a Fluorene-Carbazole Alternating Copolymer toward a Novel Donor-Acceptor Type Conjugated Polymer. <i>Electrochemistry</i> , 2010, 78, 114-117.	1.5	13
76	Macrostructural order and optical properties of polyfluorene-based polymer films. <i>Polymer Journal</i> , 2010, 42, 772-775.	2.6	17
77	Synthesis of 9-Substituted Fluorene Copolymers via Chemical and Electrochemical Polymer Reaction and Their Optoelectronic Properties. <i>Macromolecules</i> , 2009, 42, 3755-3760.	5.2	60
78	Post-functionalization of poly(3-hexylthiophene) via anodic chlorination. <i>Synthetic Metals</i> , 2009, 159, 1792-1795.	4.6	35